BEFORE THE HEARING BOARD OF THE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In The Matter Of

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT,

Petitioner,

vs.

CHIQUITA CANYON, LLC a Delaware Corporation,
[Facility ID No. 119219]

Respondent.

Case No. 6177-4

EXHIBIT C TO DECLARATION OF PATRICK SULLIVAN, BCES, CPP, REPA

Health and Safety Code § 41700, and District Rules 402, 431.1, 3002, 203, 1150

Hearing Date:	April 16 and 17, 2025
Hearing Time:	9:30 A.M.
Place:	Hearing Board South Coast Air Quality Management District, 21865 Copley Drive Diamond Bar, CA 91765

Chiquita Canyon Landfill
Castaic, California

Assessment of Air Emissions from Landfill Surfaces

Test Event 3

Report

January 2025

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1. Introduction

Background

The Chiquita Canyon Landfill (CCLF or Landfill) is a municipal solid waste (MSW) landfill located in northern Los Angeles County. An area of the Landfill is currently experiencing elevated gas temperatures and surface subsidence, with accompanying elevated gas generation, due to a subsurface reaction. This report is intended to provide an emissions assessment to determine landfill surface emissions of odor and other substances for both the area of the Landfill affected by the reaction and areas not affected by the reaction. The first test event for this emissions assessment was conducted on August 29-31, 2023. A second test event was conducted on March 19-21, 2024. The "Third Test Event," which is described in this report, was conducted on November 19-21, 2024.

Site Location

The test site is Chiquita Canyon Landfill, which is located at 29201 Henry Mayo Drive, Castaic, California, 91384.

Figure 1.1 Site Location Map.

Facility Description

At the time of the Third Test Event, Chiquita Canyon Landfill was an active MSW disposal facility.

Objective

The objective of this emissions assessment was to quantify, by field measurement, the air emissions of odors, fixed gases (including methane, carbon dioxide, hydrogen, and carbon monoxide), reduced sulfur compounds, and speciated volatile organic compounds (VOCs) from the area of the Landfill affected by the reaction and areas not affected by the reaction.

Methodology

The Landfill's air emissions were directly measured using the U.S. Environmental Protection Agency (USEPA) Surface Emission Isolation Flux Chamber (flux chamber) following the USEPA User's Guidance document (see Photo 1.1). Whole air samples were collected from the flux chamber using Summa® canister and Tedlar® bags with analysis by the following methods:

- American Society for Testing and Materials (ASTM) E-679 for olfactory odor;
- ASTM D-1945/USEPA Method 3C for fixed gases (including methane, carbon dioxide, hydrogen, and carbon monoxide);
- USEPA Method 3C for helium;
- South Coast Air Quality Management District (SCAQMD) Method 307-91 for hydrogen sulfide (H_2S)/organic reduced sulfur (ORS);
- USEPA Method TO-14 for speciated VOCs;
- USEPA Method TO-15 for speciated VOCs (including tentatively identified compounds); and
- USEPA Method TO-12 for total non-methane VOC with functional group/molecular weight distribution.

Flux from soil surfaces can either be diffusive (driven by molecular action), advective (driven by gas movement), or a combination of both. Given that it was expected that the landfill surface would have an advective flow at some or many locations, the flux chamber assessment included the use of a tracer (10% helium) in the chamber sweep air gas as per SCAQMD Rule 1133.3, Attachment A. The dilution of the tracer taken from the evacuated canister samples was used to calculate total flow in the flux chamber for the emissions assessment. Note that TO-12, TO-14, TO-15, USEPA Method 3C, and USEPA Method 3C samples were collected and analyzed from the same sample canister.

Photo 1.1 USEPA Flux Chamber Used in Testing Program.

Landfill Surface Nomenclature

For the purposes of this test, the Landfill surface was divided into the following areas:

Non-Reaction Area

This is the portion of the Landfill that is not affected by the landfill reaction and that did not exceed the SCAQMD Rule 1150.1 integrated data limit of 25 parts per million by volume (ppmv) on November 4-5, 2024, the dates of the site-wide SEM event whose data was used to select the test cells.

Reaction Area

This is the portion of the Landfill designated as being affected by the landfill reaction by SCS Engineers' (SCS) staff as set forth by the Reaction Committee, and that did not exceed the SCAQMD Rule 1150.1 integrated data limit on November 4-5, 2024 (Appendix 1). Note that SCS is the Landfill's gas collection and control system consultant.

Exceedance Area

This is the portion of the Landfill that was designated as being affected by the landfill reaction and that exceeded the SCAQMD Rule 1150.1 integrated data limit on November 4-5, 2024. This portion of the Landfill was considered separately to assess any impact of the grid cells that exceeded the Rule 1150.1 integrated data criteria would have on total site surface emissions. Note that these grid cells are subject to a strict remediation schedule, so elevated emissions from these cells would be a temporary phenomenon.

2. Sampling Scope

This study was focused on the assessment of air emissions from areas of the Landfill affected by the reaction and areas not affected by the reaction. Each landfill area was tested using the flux chamber technology. Flux chamber measurement data performed at representative locations within grid cells was used to estimate the following: odor; VOC; sulfur compound; toxic air contaminant (TAC); and fixed gases emissions from the Landfill.

The completed scope of work for the emissions assessment is given below in Table 2.1.

Table 2.1 Scope of Work for the Emissions Assessment.

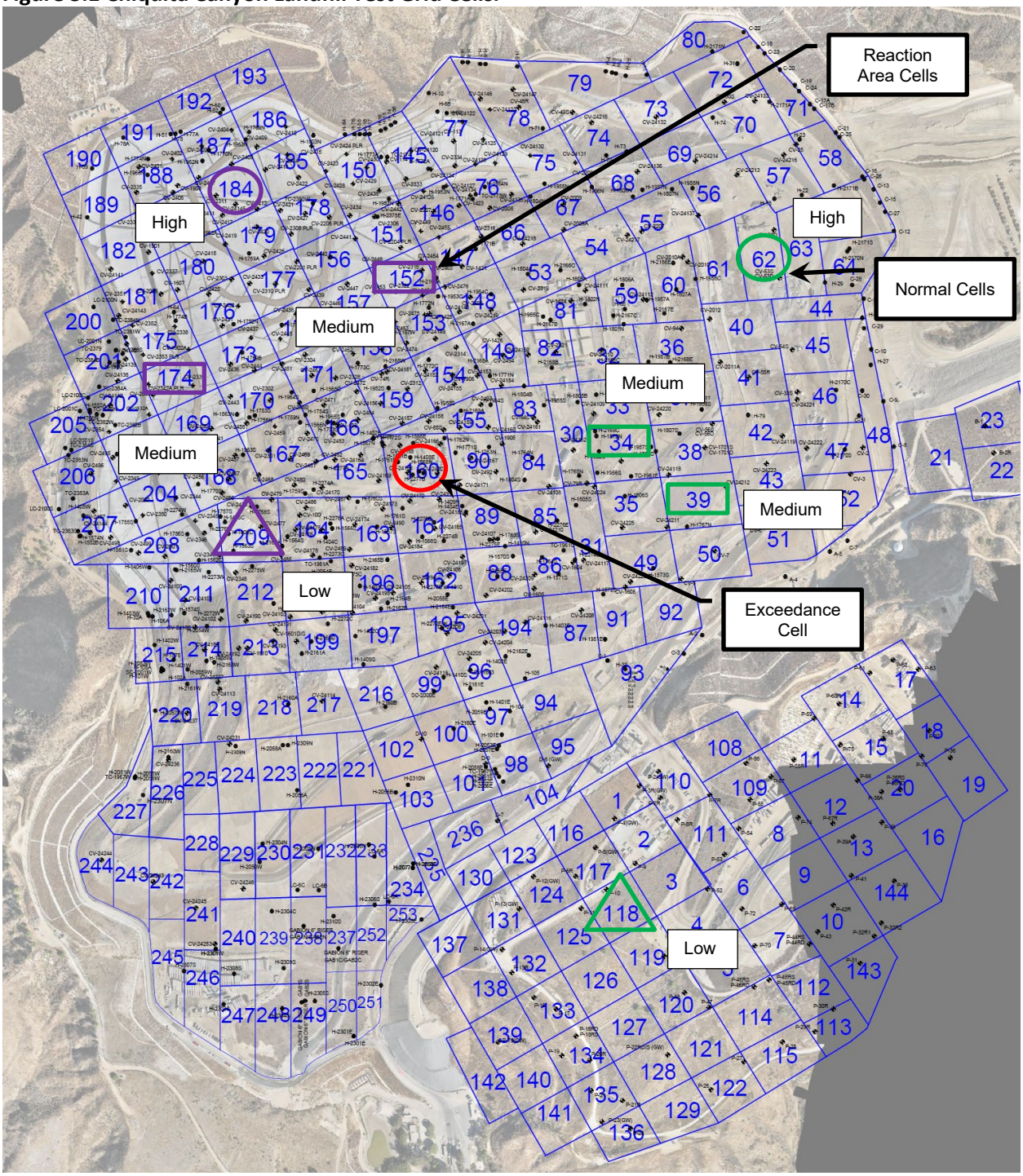
Source	Flux Chamber Tests	Odor/TAC/Fixed Gas/VOC Sampling	Comment
Non-Reaction Area Landfill Surfaces			
High Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Medium Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Second Medium Emission Category Grid Cell	4	4	Replicate cell for QA/QC
Low Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Reaction Area Landfill Surfaces (Footprint)			
High Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Medium Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Second Medium Emission Category Grid Cell	4	4	Replicate cell for QA/QC
Low Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Exceedance Area Surfaces			
Intent to quantify difference in grid testing	4	4	Samples taken at same or distributed within levels of emission potential within category of grid cell
Repeat Area Surfaces			
Intent to quantify difference in grid testing	4	4	Samples taken at initial, marked test locations within levels of emission potential within category of grid cell
QC Blank Samples		3	Minimum of 5% Blank Samples
QC Replicate Samples		3	Minimum of 5% Blank Samples
Total	40	46	

3. Sampling Strategy

Selection of Sampling Locations

Sampling locations were selected based on SEM data obtained under the SCAQMD Rule 1150.1 SEM program. The SEM program consists of surveying the Landfill surface on a track using a field portable, calibrated instrument sensitive to methane and total non-methane hydrocarbon (TNMHC). The Landfill grid pattern is shown in Figure 3.1. The grid cells over the areas of the Landfill affected by the reaction are highlighted. The grid cells that were sampled are enclosed in a geometric figure.

Figure 3.1 Chiquita Canyon Landfill Test Grid Cells.



Key: Normal Low, Normal Medium, Normal High, Reaction Low, Reaction Medium, Reaction High, Exceedance

Test Cell Selection Methodology

This emissions assessment was conducted by analyzing Rule 1150.1 SEM data and categorizing the Landfill areas based on surface emissions. At this site, SEM events are conducted as often as every two weeks.

The SEM events are conducted using an instrument fitted with a flame ionization detector (FID) along with global positioning system (GPS) location recording to map fugitive surface hydrocarbon concentrations following a pattern in each grid cell for the site. Instantaneous fugitive concentration data is determined by walking a serpentine path across each nominal 50,000 square foot (ft^2) Landfill grid cell. Integrated concentration data is determined by averaging the instrument readings obtained while traversing the serpentine path as illustrated in Figure 3.2.

Emissions concentration data and location information are collected and stored for the purpose of ranking grid cells on the Landfill by emissions concentration. The integrated concentration data was used to 'rank' the grid cells into categories of high emissions, medium emissions, and low emissions. The instantaneous fugitive concentration data was used to select representative locations for flux chamber testing where flux data for odors, VOCs, sulfur, and toxic air contaminants was collected. The flux from these representative locations was used to estimate air emissions from the entire surface of these cells.

Tables 3.1 through 3.3 show the sorted integrated SEM data for the non-reaction area cells during the period of October 15, 2024, through November 5, 2024. Table 3.4 shows the sorted integrated SEM data for the reaction area cells during the period of October 15, 2024, through November 5, 2024. Table 3.5 shows the sorted integrated SEM data for the exceedance area cells during the period of October 15, 2024, through November 5, 2024. The actual cell tested on each table is highlighted in yellow in Column 1.

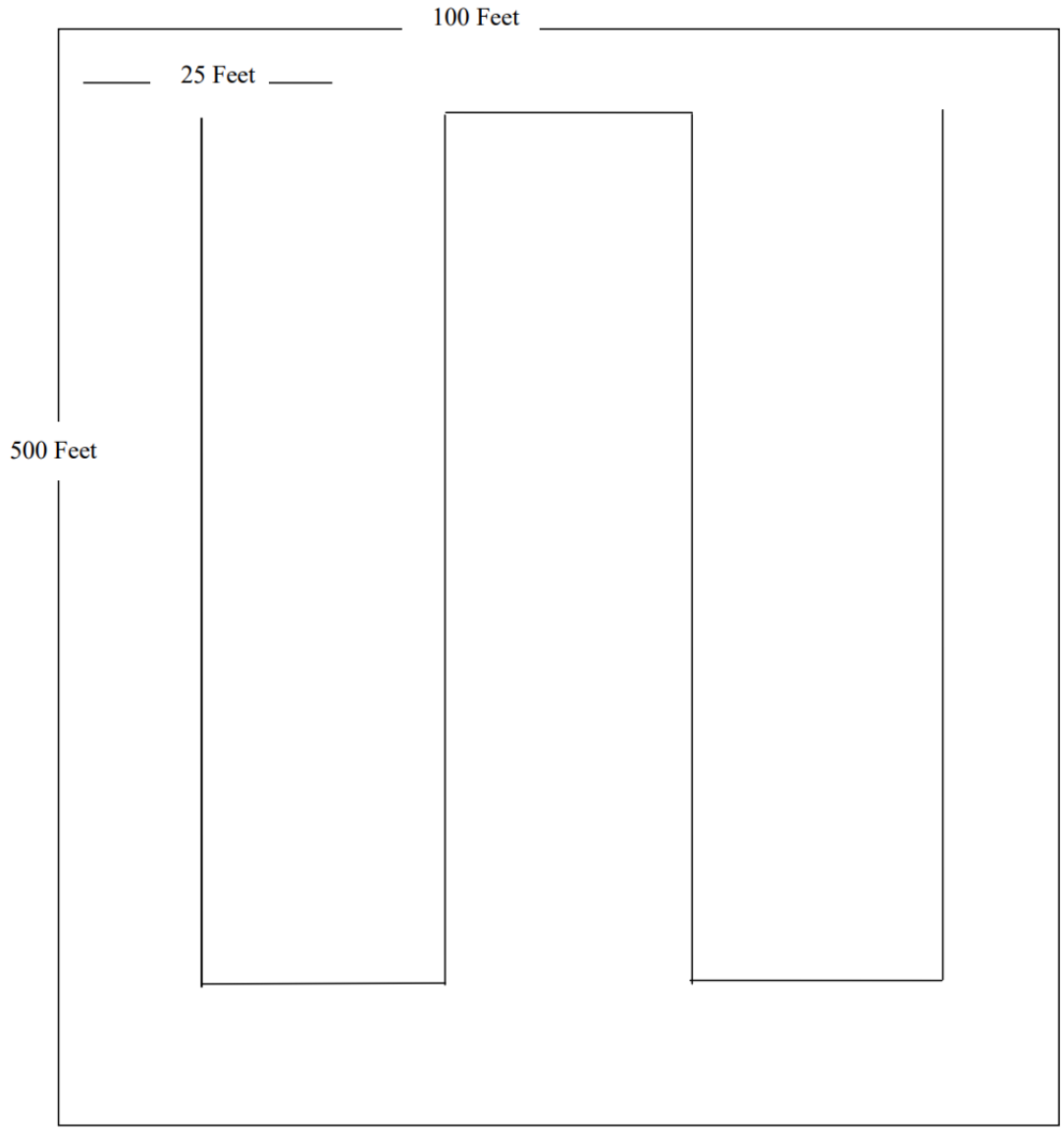
The structure of Tables 3.1 through 3.3 is as follows:

- Column 1 is the grid cell number designation.
- Column 2 is the surface area of each grid cell (each grid cell is nominally 50,000 ft^2, but for this analysis, the exact area of each grid cell is used).
- Columns 3 through 6 are the integrated SEM values (FID response as ppmv methane) for each SEM event from October 15, 2024 to November 5, 2024.
- Column 7 is the cumulative average of all the cells above the cell in question. Column 7 is the cumulative percentage of the cell group (reaction/non-reaction).

The non-reaction area test cells (see Tables 3.1 through 3.3) were initially selected by organizing the integrated SEM data by average (Column 6) and splitting the resulting data into three categories: high emission, medium emission, and low emission. From there, the mean cell(s) from each group were initially selected for testing. These cells are highlighted in blue in the tables below.

A similar process was used for the reaction area test cells (see Table 3.4). One grid cell was selected to be tested from the exceedance area. This cell, highlighted in red, was just over the mean value of all the exceedance area grid cells. The non-exceedance reaction area test cells were initially selected by splitting the data into high, medium, and low emission groups. The mean cell(s) from each group were initially selected for testing.

Figure 3.2 Typical Serpentine Landfill Walk Pattern for a 50,000 Square Foot Grid (from Rule 1150.1).



On Monday, November 18, 2024, the Landfill was evaluated for the final cell selection. This final selection process was necessary to verify whether a selected cell was accessible for testing or is otherwise not representative. Using the data in Table 3.2 as an example, it was determined on November 18, 2024, that Grid Cells 34 and 39 were the best cells for testing (other cells had access issues or active remediation activities), even though the target cell 96 was determined to be the mathematical optimum (which also had access issues or active remediation activity). As the cells selected for testing, Cells 34 and 39 were then highlighted in yellow, signifying that it was the actual test cell for that group. This procedure was replicated for each of the landfill area/sub-area groups.

Note that while any cell can be tested and pro-rated using this methodology, the mean emissions cells were used because they should result in the most accurate results.

Table 3.1 Summary of Non-Reaction Area Cell Sorted Integrated Grid Data (10/15/2024 – 11/5/2024) (ppmv FID as methane); High Emission Cells.

		Integrated ppmv as Methane				11/5	
GRID	Surface Area (ft2)	10/15	10/23	10/30	11/5	Cumulative	Fraction of Total
219	49,910	23.19		69.18	24.31	24	2%
87	58,663	15.54		11.15	24.2	49	4%
246	49,934	21.64		10.32	24.13	73	6%
227	45,403	21.17		27.55	23.41	96	8%
35	56,295	20.08		10.7	23.2	119	9%
59	53,384	21.28	11.37	14.9	23.2	142	11%
251	36,070	22.71		47.19	22.6	165	13%
62	60,736	27.45		12.28	21.93	187	15%
50	61,680	36.09		19.31	21.51	208	17%
31	55,775	15.11		15.8	21.3	230	18%
38	60,634	15.30		54.41	21.3	251	20%
86	43,299	13.11		22.41	21.3	272	22%
247	50,770	24.25		7.85	21.17	294	23%
84	48,990	17.63		24.8	21.13	315	25%
75	51,225	18.70		44.21	20.71	335	27%
238	31,614	21.16		32.5	20.14	356	28%
63	57,567	25.84		12.1	19.93	375	30%
220	49,909	24.13		36.43	19.23	395	31%
42	57,899	14.25		15.73	19.17	414	33%

Normal Area, HIgh, Optimal Target Cells

Notes for Tables 3.1 through 3.4:

1. "HE" means that the grid cell was not monitored due to heavy equipment operating in the grid cell.
2. "AT" means that the grid cell was not monitored due to active trash disposal in the grid cell.

Table 3.2 Summary of Non-Reaction Area Cell Sorted Integrated Grid Data (10/15/2024 – 11/5/2024) (ppmv FID as methane); Medium Emission Cells.

		Integrated ppmv as Methane				11/5	
GRID	Surface Area (ft2)	10/15	10/23	10/30	11/5	Cumulative	Fraction of Total
56	61,386	19.46		13.58	19.17	433	34%
43	55,491	96.50		15.94	18.91	452	36%
60	58,550	15.10		25.17	18.29	470	37%
248	42,748	22.16		6.45	18.23	488	39%
85	45,482	15.65		50.57	17.18	506	40%
237	30,995	20.13		22.9	17.09	523	41%
240	48,923	39.16		11.64	16.49	539	43%
252	23,555	23.40		19.31	16.1	555	44%
34	55,632	14.40		20.77	15.65	571	45%
30	53,460	26.32		20.85	15.4	586	47%
45	58,267	14.30		22.66	15.39	602	48%
95	49,782	9.13		20.66	15.25	617	49%
39	62,100	17.25		24.95	15.23	632	50%
57	58,263	12.01		13.33	15.23	647	51%
76	48,758	15.30	42.08	22.81	15.1	663	53%
102	45,969	19.90		18.41	15.07	678	54%
23	56,405	6.67		4.76	15	693	55%
61	58,640	16.80		18.37	14.64	707	56%
70	55,632	14.30		13.24	13.99	721	57%
74	50,957	14.80		14.25	13.98	735	58%
33	50,273	23.21		21.87	13.74	749	59%
223	48,150	19.96		17.25	13.41	762	61%
100	44,490	27.15		11.42	12.98	775	62%
54	53,298	20.20		20.65	12.97	788	63%
58	46,507	12.29		14.2	12.88	801	64%
239	49,597	24.13		18.16	12.77	814	65%
250	47,494	20.57		13.01	12.17	826	66%
249	52,520	20.01		60.5	11.6	838	66%

Normal Area, Medium, Optimal Target Cells

Table 3.3 Summary of Non-Reaction Area Cell Sorted Integrated Grid Data (10/15/2024 – 11/5/2024) (ppmv FID as methane); Low Emission Cells.

		Integrated ppmv as Methane				11/5	
GRID	Surface Area (ft2)	10/15	10/23	10/30	11/5	Cumulative	Fraction of Total
47	56,104	9.70		11.23	10.83	849	67%
73	55,815	Construction		16.73	10.81	859	68%
72	59,809	14.69		15.9	10.7	870	69%
101	42,395	32.27		31.6	10.28	880	70%
53	60,197	12.10	9.58	23.05	10.27	891	71%
29	43,858	3.72		5.28	9.41	900	71%
80	46,342	17.90		40.2	9.34	909	72%
44	35,715	12.50		14.65	8.97	918	73%
131	41,070	3.03		2.8	8.74	927	74%
108	52,575	9.16		2.29	8.71	936	74%
69	52,221	15.20		12.21	8.63	944	75%
105	47,304	5.32		6.91	8.32	953	76%
24	55,473	5.41		5.32	8.09	961	76%
46	57,683	11.60		26.96	7.78	969	77%
22	58,442	4.71		5.36	7.25	976	77%
106	50,785	4.79		9.53	7.17	983	78%
107	22,162	5.12		7.37	7.15	990	79%
26	54,472	4.43		6.39	7.14	997	79%
71	43,736	16.23		18.87	6.98	1,004	80%
21	72,168	5.81		7.47	6.9	1,011	80%
109	55,703	8.23		3.99	6.79	1,018	81%
27	59,711	4.74		4.19	6.78	1,025	81%
18	42,901	19.97		6.13	6.58	1,031	82%
28	39,741	4.63		3.87	6.49	1,038	82%
25	58,414	5.32		4.91	6.34	1,044	83%
118	45,475	4.57		4.47	6.28	1,051	83%
119	46,712	3.15		4.23	5.93	1,056	84%
129	46,067	4.77		2.17	5.91	1,062	84%
7	50,364	17.10		3.1	5.82	1,068	85%
141	41,413	19.13		4.69	5.49	1,074	85%
130	34,533	2.69		3.65	5.36	1,079	86%
138	46,590	21.90		2.91	5.29	1,084	86%
142	46,169	18.19		4.28	5.18	1,089	86%
122	45,247	3.54		2.42	5.15	1,095	87%
135	43,154	3.62		3.32	5.12	1,100	87%
117	42,797	4.93		2.3	5.11	1,105	88%
222	47,335	28.22		21.3	5.06	1,110	88%
14	57,525	16.03		4.27	4.93	1,115	88%
13	54,190	10.29		5.78	4.89	1,120	89%
16	60,337	15.24		4.19	4.76	1,125	89%
19	57,192	24.10		4.21	4.71	1,129	90%
11	55,395	11.49		4.39	4.63	1,134	90%
127	48,271	5.11		2.14	4.63	1,138	90%
137	45,071	22.50		2.36	4.58	1,143	91%
144	68,243	19.82		2.17	4.56	1,148	91%
132	43,711	3.15		4.98	4.48	1,152	91%
111	54,270	8.13		3.58	4.46	1,157	92%
113	31,853	7.85		4.64	4.33	1,161	92%
5	56,526	19.50		4.21	4.11	1,165	92%
143	48,041	4.73		5.72	4.11	1,169	93%
8	57,675	8.35		6.27	3.96	1,173	93%
140	42,878	21.07		4.85	3.96	1,177	93%
136	33,845	20.99		2.27	3.95	1,181	94%
133	44,845	4.36		4.54	3.89	1,185	94%
139	46,331	21.21		3.43	3.88	1,189	94%
116	39,267	6.25		3.19	3.86	1,193	95%
112	46,549	16.80		6.32	3.85	1,196	95%
1	42,205	8.80		5.29	3.84	1,200	95%
12	55,625	11.82		3.2	3.84	1,204	96%
3	50,019	12.30		3.68	3.81	1,208	96%
9	54,331	15.92		3.44	3.69	1,212	96%
17	54,072	20.25		4.79	3.56	1,215	96%
10	66,970	7.23		3.69	3.39	1,219	97%
2	45,352	10.20		4.87	3.29	1,222	97%
4	53,410	21.30		3.16	3.26	1,225	97%
121	46,453	4.81		2.72	3.26	1,228	97%
114	58,149	15.10		2.99	3.19	1,232	98%
123	37,280	4.52		4.24	3.19	1,235	98%
15	55,063	24.16		6.51	2.99	1,238	98%
6	55,760	7.10		3.1	2.97	1,241	98%
124	43,289	4.91		2.33	2.66	1,243	99%
115	52,538	21.17		3.34	2.53	1,246	99%
134	43,452	4.23		3.25	2.47	1,248	99%
125	46,593	5.36		3.75	2.45	1,251	99%
110	55,586	8.50		2.92	2.37	1,253	99%
126	48,416	3.18		2.69	2.32	1,256	100%
128	48,480	4.93		4.43	2.32	1,258	100%
20	53,895	22.71		5.25	2.18	1,260	100%

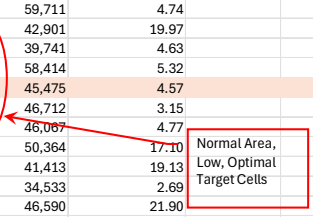


Table 3.4 Summary of Reaction Area Cell Sorted Integrated Grid Data (10/15/2024 – 11/5/2024) (ppmv FID as methane); All Cells.

		Integrated ppmv as Methane				11/5	
GRID	Surface Area (ft2)	10/15	10/23	10/30	11/5	Cumulative	Fraction of Total
170	55,737	23.00	29.67	19.65	24.5	25	4%
182	52,362	22.18	55.11	Heavy Equ	24.22	49	8%
184	51,245	23.26	13.82	14.28	24.15	73	12%
89	47,690	18.96		86.2	23.24	96	16%
79	87,028	11.11	16.25	22.25	22.46	119	20%
183	54,617	21.23	8.94	11.98	22.3	141	23%
175	50,430	19.75	15.4	22.66	22.2	163	27%
192	40,754	14.10	24.7	31.12	22.11	185	31%
168	59,314	17.17	34.96	19.34	21.98	207	34%
83	38,592	21.22	16.94	15.92	21.32	228	38%
152	42,032	17.31	9.12	24.17	21.3	250	41%
193	38,070	36.60	55.89	20.12	20.61	270	45%
174	48,344	9.80	12.61	27.22	20.5	291	48%
212	58,054	Active Trash	18.13	70.34	20.5	311	52%
173	49,960	11.80	10.39	67.11	20.18	332	55%
179	48,176	13.90	14.08	25.38	20	352	58%
214	40,386	16.65	119	83.45	18.2	370	61%
191	44,606	30.50	14.85	40.25	17.83	388	64%
157	45,578	10.30	8.25	18.73	17.25	405	67%
190	44,958	33.80	21.95	20.3	15.79	421	70%
145	60,197	9.20	6.32	21.3	15.31	436	72%
96	45,229	15.21	45.34	4.66	15.16	451	75%
187	47,666	7.20	13.25	27.15	13.59	465	77%
99	46,820	24.40	34.4	23.7	13.2	478	79%
208	70,031	24.30	19.17	71.7	13.2	491	81%
164	61,548	11.50	17.89	19.75	12.13	503	83%
209	60,969	28.42	21.16	17.7	11.51	515	85%
161	60,199	22.04	30.52	59.19	11.22	526	87%
180	51,775	13.78	11.45	45.1	11	537	89%
163	50,909	13.35	24.3	22.27	10.91	548	91%
189	49,163	12.13	54.8	39.15	10.56	558	92%
186	46,611	8.30	11.9	14.72	10.5	569	94%
177	47,454	18.93	11.34	35.67	9.37	578	96%
151	43,622	18.47	10.73	19.89	9.13	587	97%
156	47,581	23.06	17.59	25.89	8.71	596	99%
146	45,166	20.80	12.93	38.47	7.91	**604**	100%

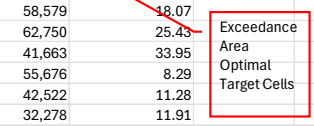
Reaction Area, High, Optimal Target Cells

Reaction Area, Medium, Optimal

Reaction Area, Low, Optimal Target Cells

Table 3.5 Summary of Exceedance Area Cell Sorted Integrated Grid Data (10/15/2024 – 11/5/2024) (ppmv FID as methane); All Cells.

		Integrated ppmv as Methane				11/5	
GRID	Surface Area (ft2)	10/15	10/23	10/30	11/5	Cumulative	Fraction of Total
120	46,799	5.21		3.96	389	389	8%
241	49,029	24.96		86.69	246	635	13%
244	45,884	19.13		12.8	228	863	18%
93	88,479	12.93		20.3	173	1,036	21%
233	49,820	20.20		23.6	153	1,189	24%
178	50,014	21.25	12.3	52.54	133	1,322	27%
185	50,993	20.28	60.81	93.13	129	1,451	30%
90	53,791	19.93	17	23.19	122	1,573	32%
65	58,090	14.25		20.5	115	1,688	35%
91	47,895	10.68		10.01	97.41	1,785	37%
149	56,413	19.16	14.92	21.68	95.73	1,881	39%
243	45,926	26.19		12.41	93.46	1,975	41%
81	48,343	15.60	34.32	7.47	89.76	2,064	43%
160	66,546	12.30	16.93	14.76	87.75	2,152	44%
242	45,188	21.26		24.37	82.17	2,234	46%
165	79,844	12.40	13.33	12.86	72.17	2,306	47%
235	19,742	20.60		20.83	72.13	2,379	49%
49	55,750	17.89		5.85	71.16	2,450	50%
68	47,853	11.10		13.27	71.09	2,521	52%
154	54,536	19.16	40.54	21.1	69.43	2,590	53%
41	58,579	18.07		20.52	68.15	2,658	55%
51	62,750	25.43		45.76	67.95	2,726	56%
98	41,663	33.95		9.3	67.45	2,794	58%
52	55,676	8.29		13.61	66.35	2,860	59%
104	42,522	11.28		28.3	60.92	2,921	60%
228	32,278	11.91		11.81	60.42	2,982	61%
253	50,000	20.94		20.8	57.39	3,039	63%
55	58,851	20.55		22.44	56.78	3,096	64%
67	47,130	14.11		22.6	56.38	3,152	65%
48	55,467	9.29		21.61	56.19	3,208	66%
155	44,022	28.40	5.6	88.43	56.07	3,264	67%
188	50,699	20.10	27.5	22.05	54.32	3,319	68%
234	42,867	21.61		19.72	49.11	3,368	69%
166	56,594	5.40	32.61	17.18	48.72	3,416	70%
210	62,428	41.83	23.1	53.35	48.3	3,465	71%
229	49,011	42.13		14.5	47.31	3,512	72%
224	47,895	26.69		16.34	47.02	3,559	73%
159	56,972	4.00	15.98	23.19	46.32	3,605	74%
37	57,548	17.63		17.85	45.77	3,651	75%
171	49,687	11.90	15.18	11.2	45.53	3,697	76%
167	62,172	8.26	23.17	15.43	45.5	3,742	77%
221	45,169	29.64		20.97	45.2	3,787	78%
94	57,008	10.47		23.06	44.75	3,832	79%
226	48,737	22.78		19.73	42.5	3,875	80%
36	60,138	13.90		24.6	41.62	3,916	81%
232	49,006	20.87		20.57	41.54	3,958	81%
97	42,564	35.39		10.5	41.5	3,999	82%
215	40,916	85.16	43.16	120	40.3	4,040	83%
40	56,878	14.70		18.21	39.76	4,079	84%
66	45,494	16.50	13.92	24.35	39.51	4,119	85%
92	47,660	29.25		16.06	38.81	4,158	86%
158	49,522	11.20	17.35	9.4	38.13	4,196	86%
64	51,169	15.09		35.9	37.85	4,234	87%
236	41,876	21.10		4.16	36.88	4,271	88%
153	45,864	42.57	13.41	10.15	36.36	4,307	89%
150	70,989	22.73	11.03	16.1	36.25	4,343	89%
103	44,432	33.19		15.39	35.18	4,378	90%
147	45,961	13.37	10.22	17.25	34.6	4,413	91%
148	50,546	14.87	12.15	8.12	33.97	4,447	92%
245	39,969	26.13		8.25	31.5	4,478	92%
88	47,618	16.71		49.15	30.44	4,509	93%
230	49,427	45.01		10.84	30.27	4,539	93%
225	38,630	24.50		15.25	29.3	4,568	94%
231	50,572	15.82		20.49	29.16	4,598	95%
169	54,459	8.30	12.6	24.47	27.45	4,625	95%
77	99,941	11.70	9.01	17.69	27.2	4,652	96%
82	42,779	8.50	15.76	42.25	26.27	4,679	96%
194	71,501	14.27	21.21	28.33	25.82	4,704	97%
181	49,379	96.97	16.16	95	25.6	4,730	97%
211	59,725	20.34	14.29	24.32	25.4	4,755	98%
176	52,356	20.02	9.6	36.72	25.37	4,781	98%
78	82,334	10.11	36.69	33.24	25.32	4,806	99%
32	55,304	22.25	19.64	24.32	25.2	4,831	99%
172	44,946	13.90	16.01	23.22	25.17	**4,856**	100%



Selecting Test Points in a Cell

Using survey flags, the serpentine route prescribed by Rule 1150.1 in a cell was walked and FID readings were periodically noted on the planted flags and field screening data forms provided in Appendix 2.

Flux chamber samples were taken at the following target locations:

1. Highest Emission - Peak FID reading on serpentine walk.
2. High Emission - Mid-point of highest 10% of readings.
3. Medium Emission - Mid-point of the next 40% of readings.
4. Low Emission - Mid-point of lowest one half of readings.

Table 3.6 shows the selected test grid cells along with their area metrics.

Table 3.6 Selected Test Grid Cell Area Metrics.

		Rep	Cell Area		Area Rep	
Category	**Subset**	**Cell**	**(ft2)**	**(m2)**	**(ft2)**	**(m2)**
Exceedance Area		160	66,546	6,182	3,878,615	360,335
Repeat		160	66,546	6,182		
Reaction Area	High	184	51,245	4,761	439,863	40,865
Reaction Area	Med	174	48,344	4,491	513,112	47,670
Reaction Area	Med	152	42,032	3,905		
Reaction Area	Low	209	60,969	5,664	878,998	81,662
Non-Reaction Area	High	62	60,736	5,643	979,757	91,022
Non-Reaction Area	Med	34	55,632	5,168	1,413,324	131,302
Non-Reaction Area	Med	39	62,100	5,769		
Non-Reaction Area	Low	118	45,475	4,225	3,859,605	358,569
Non SEM Area					942,020	87,517
Total					12,905,294	1,111,425

Note: The area represented by the three sets of control cells (Reaction Area Medium, Non-Reaction Area High, and Non-reaction Area Medium) is the same for each set of two control cells.

4. Sampling Results

All sampling for the Third Test Event took place on November 19-21, 2024. Table 4.1 presents the sampling data for the key compounds: odor; methane; and VOC (TNMHC). Complete data with quality assurance/quality control (QA/QC) commentary and calculations are provided in Attachment 1 (**Data Validation Technical Memorandum** [DVTM]). Location 1 represents the highest emission grid measurement, location 2 represents the high emission grid measurement, location 3 represents the medium emission grid measurement, and location 4 represents the low grid measurement.

Table 4.2 shows the calculated flux for the TO-15 compounds that had at least one detect. Non-detects were assumed to be MDL/2. Tables 4.3 and 4.4 show the results for TO-14 and ORS (SCAQMD Method 307-91) respectively. The complete list of all target compounds is provided in the DVTM. Tentatively identified compound (TIC) concentrations are shown in the lab reports

Table 4.1 Summary of Sampling Results.

Test Site	TO-15	SRS	Odor	Methane		Carbon Dioxide		H2	Odor	TO-12 TNMHC C1				He	Total Flow	Odor Flux	Methane Flux		TNMHC Flux	
	ID	ID	ID	(ppmv)		(%)		(%)	DT	(ppbv}		(ug/m3)		(%)	(m3/min)	Flux	Flux		Flux	
Grid 160 L1	T-401	S-401	O-401	12,100		1.54		ND	3,894	26,641		18,132		2.53	0.0197	591	820		2.753	
Grid 160 L2	T-402	S-402	O-402	4		0.20		ND	30	6,717		4,563		1.63	0.0307	7.07	0.4		1.076	
Grid 160 L3	T-403	S-403	O-403	135		ND	U	ND	89	99	J	68	J	1.39	0.0360	24.6	16.8		0.019	J
Grid 160 L4	T-404	S-404	O-404	1	J	0.34		ND	27	77	J	53	J	3.600	0.0139	2.88	0.1	J	0.006	J
Grid 34 L1	T-405	S-405	O-405	122		ND	U	ND	45	88	J	58	J	0.96	0.0524	18.1	21.4		0.023	J
Grid 34 L2	T-406	S-406	O-406	12		ND	U	ND	69	ND	U	19	U	0.46	0.108	57.4	4.5		0.016	U
Grid 34 L3	T-407	S-407	O-407	28		ND	U	ND	38	ND	U	15	U	1.17	0.0426	12.4	3.9		0.005	U
Grid 34 L4	T-408	S-408	O-408	2		ND	U	ND	35	85	J	55	J	1.353	0.0370	9.95	0.2		0.016	J
Grid 39 L1	T-409	S-409	O-409	9		ND	U	ND	25	83	J	53	J	0.64	0.0779	15.0	2.4		0.032	J
Grid 39 L2	T-410	S-410	O-410	3,864		2.49		ND	12	67,413		42,889		1.96	0.0255	2.36	316.5		8.420	
Grid 39 L3	T-411	S-411	O-411	3		0.07		ND	21	504		325		1.38	0.0363	5.86	0.3		0.091	
Grid 39 L4	T-412	S-412	O-412	6		0.22		ND	19	359		235		1.08	0.0462	6.75	0.9		0.084	
Grid 118 L1	T-413	S-413	O-413	1	J	ND	D	ND	17	57	J	37	J	2.62	0.0191	2.50	0.06	J	0.005	J
Grid 118 L2	T-414	S-414	O-414	ND	U	ND	U	ND	10	46	J	30	J	7.378	0.00678	0.521	0.01	U	0.002	J
Grid 118 L3	T-415	S-415	O-415	ND	U	ND	U	ND	11	ND	U	15	U	4.9	0.0102	0.863	0.01	U	0.001	U
Grid 118 L4	T-416	S-416	O-416	1	J	ND	U	ND	23	82	J	53	J	2.34	0.0213	3.78	0.07	J	0.009	J
Grid 118 L4	T-417	S-417	O-417	1	J	ND	U	ND	12	ND	U	15	U	1.25	0.0401	3.70	0.15	J	0.004	U
Media Blank	T-418	S-418	O-418	ND	U	ND	U	ND	13	ND	U	15	U	9.632	0.00519	0.519	0.01	U	0.001	U
Grid 174 L1	T-501	S-501	O-501	3		ND	U	ND	45	ND	U	16	U	3.57	0.0140	4.84	0.17		0.002	U
Grid 174 L2	T-502	S-502	O-502	ND	U	ND	U	ND	82	707		484		4.54	0.0110	6.95	0.01	U	0.041	
Grid 174 L3	T-503	S-503	O-503	1	J	ND	U	ND	10	51	J	35	J	3.64	0.0137	1.06	0.06	J	0.004	J
Grid 174 L4	T-504	S-504	O-504	ND	U	ND	U	ND	9	ND	U	15	U	5.210	0.00960	0.664	0.01	U	0.001	U
Grid 152 L1	T-505	S-505	O-505	1	J	ND	U	ND	12	66	J	44	J	3.620	0.0138	1.27	0.07	J	0.005	J
Grid 152 L2	T-506	S-506	O-506	ND	U	ND	U	ND	19	275		181		9.24	0.00541	0.791	0.01	U	0.008	
Grid 152 L3	T-507	S-507	O-507	ND	U	ND	U	ND	9	57	J	37	J	8.534	0.00586	0.406	0.01	U	0.002	J
Grid 152 L4	T-508	S-508	O-508	ND	U	ND	U	ND	12	58	J	38	J	8.37	0.00597	0.551	0.01	U	0.002	J
Grid 184 L1	T-509	S-509	O-509	ND	U	ND	U	ND	11	66	J	44	J	6.82	0.00733	0.620	0.01	U	0.002	J
Grid 184 L2	T-510	S-510	O-510	ND	U	ND	U	ND	11	85	J	54	J	5.46	0.00916	0.775	0.01	U	0.004	J
Grid 184 L3	T-511	S-511	O-511	ND	U	ND	U	ND	25	130	J	84	J	6.58	0.00760	1.46	0.01	U	0.005	J
Grid 184 L4	T-512	S-512	O-512	ND	U	ND	U	ND	17	570		362		5.33	0.00938	1.23	0.01	U	0.026	
Grid 184 L4	T-513	S-513	O-513	ND	U	ND	U	ND	13	359		228		7.980	0.00627	0.627	0.01	U	0.011	
Media Blank	T-514	S-514	O-514	ND	U	ND	U	ND	9	ND	U	15	U	####	0.00499	0.345	0.01	U	0.001	U
Grid 62 L1	T-601	S-601	O-601	6.000.6		0.61		ND	163	1,717		1,177		2.33	0.0215	27.0	446		0.195	
Grid 62 L2	T-602	S-602	O-602	1,159		0.35		ND	9	3,163		2,174		4.1	0.0122	0.844	49		0.204	
Grid 62 L3	T-603	S-603	O-603	16,670		0.25		ND	15	387		268		3.76	0.0133	1.54	78		0.027	
Grid 62 L4	T-604	S-604	O-604	11		0.10		ND	8	169		117		2.86	0.0175	1.07	0.6		0.016	
Grid 160 L1	T-605	S-605	O-605	28,823		3.16		ND	2,885	58,141		38,893		3.1	0.0161	357	1,567		4.819	
Grid 160 L2	T-606	S-606	O-606	563		0.08		ND	49	663		444		2.08	0.0241	9.08	46		0.082	
Grid 160 L3	T-607	S-607	O-607	6		0.18		ND	115	570		384		1.88	0.0266	23.5	0.51		0.079	
Grid 160 L4	T-608	S-608	O-608	3		0.20		ND	11	179		119		3.340	0.0150	1.27	0.14		0.014	
Grid 209 L1	T-609	S-609	O-609	ND	U	ND	U	ND	15	110	J	71	J	6.63	0.00754	0.871	0.01	U	0.004	J
Grid 209 L2	T-610	S0610	O-610	8		ND	U	ND	75	523		348		2.28	0.0220	12.7	0.61		0.059	
Grid 209 L3	T-611	S-611	O-611	ND	U	ND	U	ND	58	154		101		3.71	0.0135	6.01	0.01	U	0.010	
Grid 209 L4	T-612	S-612	O-612	ND	U	ND	U	ND	11	66	J	43	J	4.21	0.0119	1.00	0.01	U	0.004	J
Grid 209 L4	T-613	S-613	O-613	ND	U	ND	U	ND	10	93	J	61	J	6.1	0.00819	0.630	0.01	U	0.004	J
Media Blank	T-614	S-614	O-614	ND	U	ND	U	ND	9	ND	U	15	U	10.7	0.00469	0.325	0.01	U	0.001	U

Table 4.1 Notes: LOC = Location, H2 = Hydrogen, TNMHC = Total Non-Methane Hydrocarbon, He = Helium, CO2 = Carbon Dioxide, mg/m3 = milligram per cubic meter, mg/min = milligram per minute, m3/min = cubic meter per minute, m/min = meters per minute, DT/m2, min = Dilutions to threshold (or Odor Units) per square meter per minute, ug/m2, min = microgram per square meter per minute, J = quantified data near detection limit, Media Blank = QA/QC data (see DVTM), Flux = mg/m2-min or OU/m2-min.

Table 4.2a TO-15 Compounds (Flux in mg/m2-min for only compounds that had at least one detect).

Sample ID	Compound	2-Butanone (MEK)	Acetone	Propylene	2-propanol (isopropylalcohol)	Toluene	m,p-Xylenes	Carbon disulfide	Ethanol	Tetrahydrofuran	Ethylbenzene	n-Heptane	o-Xylene	Methanol	Nonane	Cyclohexane	Bromomethane	1,2-Dichloroethane	Chloromethane	Benzene	Isopropyltoluene	Octane	4-Methyl-2-pentanone (MIBK)
	CAS	78-93-3	67-64-1	115-07-1	67-63-0	108-88-3	1330-20-7	75-15-0	64-17-5	109-99-9	100-41-4	142-82-5	95-47-6	67-56-1	111-84-2	110-82-7	74-83-9	107-06-2	74-87-3	71-43-2	99-87-6	111-65-9	108-10-1
	MW	72.1	58.1	42.08	60.1	92.1	106.2	76.1	46.1	72.1	106.2	100.2	106.2	32	128.3	84.2	94.9	99	50.5	78.1	134.2	114.2	100.2
T-401		1.25167	0.52944	0.11370	0.01059	0.04336	0.04093	0.02534	0.00063	0.01005	0.02316	0.01455	0.01672	0.00139	0.01340	0.00567	0.00344	0.00780	0.00126	0.00433	0.00968	0.00786	0.00311
T-402		0.00219	0.00411	0.00056	0.00143	0.00095	0.00064	0.00016	0.00048	0.00008	0.00022	0.00021	0.00022	0.00173	0.00027	0.00030	0.00020	0.00010	0.00051	0.00057	0.00056	0.00024	0.00021
T-403		0.00105	0.00336	0.00055	0.00030	0.00099	0.00026	0.00019	0.00058	0.00009	0.00026	0.00025	0.00026	0.00040	0.00032	0.00040	0.00024	0.00012	0.00019	0.00068	0.00068	0.00028	0.00025
T-404		0.00020	0.00155	0.00024	0.00011	0.00018	0.00010	0.00007	0.00022	0.00003	0.00010	0.00009	0.00010	0.00032	0.00012	0.00004	0.00009	0.00005	0.00007	0.00026	0.00026	0.00011	0.00009
T-405		0.00026	0.00339	0.00167	0.00043	0.00172	0.00038	0.00027	0.00082	0.00013	0.00038	0.00036	0.00038	0.00057	0.00046	0.00061	0.00034	0.00017	0.00060	0.00097	0.00095	0.00041	0.00036
T-406		0.00053	0.00628	0.00119	0.00089	0.00136	0.00079	0.00056	0.00170	0.00027	0.00079	0.00074	0.00079	0.00118	0.00095	0.00083	0.00070	0.00037	0.00056	0.00202	0.00198	0.00084	0.00074
T-407		0.00021	0.00261	0.00043	0.00035	0.00054	0.00031	0.00022	0.00067	0.00011	0.00031	0.00029	0.00031	0.00203	0.00037	0.00012	0.00028	0.00014	0.00022	0.00080	0.00078	0.00033	0.00029
T-408		0.00045	0.00439	0.00054	0.00167	0.00046	0.00027	0.00019	0.00058	0.00009	0.00027	0.00026	0.00027	0.00166	0.00033	0.00011	0.00024	0.00013	0.00050	0.00069	0.00068	0.00029	0.00026
T-409		0.00039	0.00159	0.01635	0.00066	0.00101	0.00057	0.00041	0.00126	0.00020	0.00057	0.00054	0.00140	0.00087	0.00069	0.00023	0.00051	0.00027	0.00113	0.00149	0.00147	0.00062	0.00054
T-410		0.00125	0.00303	0.04437	0.00021	0.00397	0.02182	0.00130	0.00041	0.00138	0.02312	0.00514	0.00672	0.00175	0.00023	0.01796	0.03712	0.00009	0.01299	0.00250	0.00048	0.00020	0.00018
T-411		0.00017	0.00315	0.00036	0.00029	0.00044	0.00026	0.00018	0.00055	0.00009	0.00026	0.00024	0.00026	0.00573	0.00031	0.00010	0.00023	0.00012	0.00309	0.00065	0.00064	0.00028	0.00024
T-412		0.00023	0.00247	0.00117	0.00039	0.00059	0.00034	0.00024	0.00074	0.00012	0.00034	0.00032	0.00034	0.00334	0.00041	0.00014	0.00465	0.00016	0.00227	0.00088	0.00086	0.00037	0.00032
T-413		0.00010	0.00089	0.00017	0.00016	0.00024	0.00014	0.00010	0.00030	0.00005	0.00014	0.00013	0.00014	0.00021	0.00017	0.00005	0.00013	0.00006	0.00057	0.00036	0.00035	0.00015	0.00013
T-414		0.00003	0.00013	0.00006	0.00006	0.00009	0.00005	0.00004	0.00011	0.00002	0.00005	0.00005	0.00005	0.00007	0.00006	0.00002	0.00036	0.00002	0.00015	0.00013	0.00012	0.00005	0.00005
T-415		0.00005	0.00043	0.00011	0.00008	0.00013	0.00008	0.00005	0.00016	0.00003	0.00008	0.00007	0.00008	0.00011	0.00009	0.00003	0.00007	0.00004	0.00019	0.00019	0.00019	0.00008	0.00007
T-416		0.00011	0.00046	0.00023	0.00019	0.00029	0.00017	0.00012	0.00036	0.00006	0.00017	0.00016	0.00017	0.00025	0.00020	0.00007	0.00015	0.00008	0.00066	0.00043	0.00042	0.00018	0.00016
T-417		0.00019	0.00079	0.00042	0.00033	0.00050	0.00028	0.00020	0.00062	0.00010	0.00028	0.00027	0.00028	0.00043	0.00034	0.00012	0.00025	0.00014	0.00096	0.00074	0.00073	0.00031	0.00027
T-418		0.00002	0.00010	0.00001	0.00004	0.00006	0.00004	0.00003	0.00008	0.00001	0.00004	0.00003	0.00004	0.00005	0.00004	0.00001	0.00003	0.00002	0.00003	0.00009	0.00009	0.00004	0.00003
T-501		0.00007	0.00077	0.00027	0.00098	0.00018	0.00011	0.00008	0.00023	0.00004	0.00011	0.00010	0.00011	0.00016	0.00013	0.00004	0.00009	0.00005	0.00008	0.00027	0.00027	0.00011	0.00010
T-502		0.00006	0.00057	0.00014	0.00010	0.00168	0.00104	0.00006	0.00019	0.00003	0.00083	0.00008	0.00022	0.00013	0.00026	0.00003	0.00008	0.00004	0.00026	0.00308	0.00455	0.00019	0.00008
T-503		0.00007	0.00028	0.00015	0.00012	0.00018	0.00010	0.00007	0.00022	0.00003	0.00010	0.00010	0.00010	0.00015	0.00013	0.00004	0.00009	0.00005	0.00007	0.00053	0.00026	0.00011	0.00010
T-504		0.00005	0.00020	0.00003	0.00008	0.00012	0.00020	0.00005	0.00478	0.00002	0.00007	0.00007	0.00017	0.00011	0.00009	0.00003	0.00006	0.00003	0.00005	0.00018	0.00018	0.00008	0.00007
T-505		0.00007	0.00065	0.00004	0.00012	0.00019	0.00011	0.00008	0.00423	0.00004	0.00011	0.00010	0.00011	0.00016	0.00013	0.00004	0.00010	0.00005	0.00008	0.00028	0.00027	0.00011	0.00010
T-506		0.00003	0.00140	0.00008	0.00337	0.00007	0.00004	0.00003	0.00154	0.00001	0.00004	0.00004	0.00004	0.00006	0.00005	0.00002	0.00004	0.00002	0.00003	0.00011	0.00010	0.00004	0.00004
T-507		0.00003	0.00025	0.00002	0.00005	0.00008	0.00004	0.00003	0.00084	0.00002	0.00004	0.00004	0.00004	0.00007	0.00005	0.00002	0.00004	0.00002	0.00003	0.00011	0.00011	0.00005	0.00004
T-508		0.00003	0.00013	0.00002	0.00005	0.00008	0.00005	0.00003	0.00010	0.00002	0.00005	0.00004	0.00005	0.00007	0.00006	0.00002	0.00004	0.00002	0.00003	0.00028	0.00012	0.00005	0.00004
T-509		0.00004	0.00016	0.00011	0.00006	0.00024	0.00013	0.00004	0.00012	0.00002	0.00006	0.00005	0.00006	0.00009	0.00007	0.00002	0.00005	0.00003	0.00004	0.00054	0.00014	0.00006	0.00005
T-510		0.00005	0.00019	0.00003	0.00008	0.00012	0.00049	0.00005	0.00015	0.00002	0.00007	0.00007	0.00028	0.00011	0.00008	0.00003	0.00006	0.00003	0.00005	0.00018	0.00018	0.00008	0.00007
T-511		0.00004	0.00036	0.00002	0.00006	0.00030	0.00016	0.00004	0.00012	0.00002	0.00006	0.00005	0.00006	0.00009	0.00007	0.00002	0.00005	0.00003	0.00004	0.00067	0.00014	0.00006	0.00005
T-512		0.00005	0.00046	0.00003	0.00008	0.00012	0.00014	0.00005	0.00015	0.00002	0.00007	0.00006	0.00007	0.00010	0.00008	0.00003	0.00006	0.00003	0.00005	0.00018	0.00017	0.00007	0.00006
T-513		0.00003	0.00039	0.00002	0.00005	0.00008	0.00010	0.00003	0.00010	0.00002	0.00005	0.00004	0.00005	0.00007	0.00006	0.00002	0.00004	0.00002	0.00003	0.00012	0.00012	0.00005	0.00004
T-514		0.00003	0.00011	0.00002	0.00004	0.00007	0.00004	0.00003	0.00008	0.00001	0.00004	0.00004	0.00004	0.00006	0.00005	0.00002	0.00003	0.00002	0.00003	0.00010	0.00010	0.00004	0.00004
T-601		0.00011	0.00286	0.00379	0.00019	0.00028	0.00016	0.00081	0.00035	0.00033	0.00016	0.00015	0.00016	0.00071	0.00020	0.00007	0.00014	0.00008	0.00012	0.00042	0.00041	0.00017	0.00015
T-602		0.00006	0.00148	0.02374	0.00010	0.00032	0.00009	0.00067	0.00020	0.00003	0.00009	0.00009	0.00027	0.00014	0.00011	0.00026	0.00008	0.00004	0.00007	0.00023	0.00023	0.00010	0.00009
T-603		0.00007	0.00075	0.00098	0.00011	0.00017	0.00010	0.00007	0.00021	0.00003	0.00010	0.00009	0.00010	0.00015	0.00012	0.00004	0.00009	0.00005	0.00007	0.00025	0.00025	0.00010	0.00009
T-604		0.00009	0.00146	0.00029	0.00015	0.00024	0.00014	0.00010	0.00030	0.00005	0.00014	0.00013	0.00014	0.00067	0.00016	0.00005	0.00012	0.00006	0.00010	0.00035	0.00035	0.00015	0.00013
T-605		1.96412	1.53209	0.21009	0.37632	0.34465	0.20099	0.14905	0.07450	0.07774	0.07524	0.07326	0.05877	0.00480	0.07180	0.03420	0.01397	0.03924	0.00692	0.01788	0.03288	0.02848	0.02374
T-606		0.00013	0.00443	0.00085	0.00021	0.00033	0.00019	0.00030	0.00136	0.00006	0.00019	0.00018	0.00019	0.00154	0.00023	0.00133	0.00017	0.00009	0.00014	0.00049	0.00048	0.00020	0.00018
T-607		0.00249	0.01281	0.00042	0.00023	0.00035	0.00020	0.00014	0.00576	0.00108	0.00020	0.00019	0.00020	0.00132	0.00024	0.00008	0.00018	0.00009	0.00067	0.00052	0.00050	0.00022	0.00019
T-608		0.00008	0.00150	0.00027	0.00013	0.00020	0.00011	0.00008	0.00025	0.00004	0.00011	0.00011	0.00011	0.00100	0.00014	0.00005	0.00010	0.00005	0.00008	0.00029	0.00029	0.00012	0.00011
T-609		0.00004	0.00098	0.00013	0.00006	0.00009	0.00005	0.00004	0.00012	0.00002	0.00005	0.00005	0.00005	0.00008	0.00007	0.00002	0.00005	0.00003	0.00004	0.00014	0.00014	0.00006	0.00005
T-610		0.00131	0.00323	0.00079	0.00019	0.00079	0.00050	0.00012	0.00037	0.00006	0.00017	0.00016	0.00017	0.00165	0.00021	0.00007	0.00015	0.00008	0.00046	0.00044	0.00043	0.00018	0.00016
T-611		0.00110	0.00163	0.00026	0.00066	0.00018	0.00010	0.00007	0.00022	0.00004	0.00010	0.00010	0.00010	0.00044	0.00012	0.00004	0.00009	0.00005	0.00007	0.00026	0.00026	0.00011	0.00010
T-612		0.00006	0.00111	0.00004	0.00010	0.00016	0.00009	0.00006	0.00020	0.00003	0.00009	0.00009	0.00009	0.00048	0.00011	0.00004	0.00008	0.00004	0.00007	0.00023	0.00023	0.00010	0.00009
T-613		0.00004	0.00054	0.00002	0.00007	0.00011	0.00006	0.00004	0.00014	0.00002	0.00006	0.00006	0.00006	0.00031	0.00008	0.00002	0.00006	0.00003	0.00005	0.00016	0.00016	0.00007	0.00006
T-614		0.00002	0.00010	0.00001	0.00004	0.00006	0.00004	0.00003	0.00008	0.00001	0.00004	0.00003	0.00004	0.00005	0.00004	0.00001	0.00003	0.00002	0.00003	0.00009	0.00009	0.00004	0.00003

Table 4.2b TO-15 Compounds (Flux in ug/m2-min for only compounds that had at least one detect) (cont.).

Sample ID	Compound	Decane	Styrene	2,2,4-Trimethylpentane	4-Ethyltoluene	Hexane	1,2,4-Trimethylbenzene	Chloroethane	1,3,5-Trimethylbenzene	Tetrachloroethene (PCE)	Acrolein	Methylene chloride	1,2-Dichloropropane	cis-1,2-Dichloroethene	Naphthalene	Trichloroethene (TCE)	Chloroform	Trichlorofluoromethane	2-Hexanone	Isopropylbenzene	n-Butylbenzene	Methyl iodide	1,1-Dichloroethane
	CAS	124-18-5	100-42-5	540-84-1	622-96-8	110-54-3	95-63-6	75-00-3	108-67-8	127-18-4	107-02-8	75-09-2	78-87-5	156-59-2	91-20-3	79-01-6	67-66-3	75-69-4	591-78-6	98-82-8	104-51-8	4227-95-6	75-34-3
	MW	142.3	104.2	114.2	120.2	86.2	120.2	64.5	120.2	165.8	56.1	84.9	113	96.9	128.2	131.4	119.4	137.4	100.2	120.2	134.2	142.9	99
T-401		0.00680	0.00386	0.00008	0.00196	0.00632	0.00255	0.00074	0.00148	0.00269	0.00078	0.00066	0.00008	0.00007	0.00086	0.00004	0.00025	0.00019	0.00116	0.00105	0.00101	0.00019	0.00007
T-402		0.00059	0.00033	0.00012	0.00050	0.00018	0.00050	0.00014	0.00050	0.00008	0.00071	0.00009	0.00012	0.00010	0.00133	0.00007	0.00013	0.00029	0.00021	0.00050	0.00056	0.00030	0.00010
T-403		0.00072	0.00040	0.00014	0.00061	0.00050	0.00061	0.00016	0.00061	0.00011	0.00049	0.00011	0.00014	0.00012	0.00161	0.00009	0.00034	0.00034	0.00025	0.00061	0.00068	0.00036	0.00012
T-404		0.00027	0.00015	0.00006	0.00023	0.00008	0.00023	0.00006	0.00023	0.00004	0.00018	0.00004	0.00005	0.00005	0.00061	0.00003	0.00006	0.00013	0.00009	0.00023	0.00026	0.00013	0.00005
T-405		0.00101	0.00056	0.00020	0.00085	0.00065	0.00085	0.00023	0.00085	0.00036	0.00020	0.00015	0.00020	0.00017	0.00228	0.00012	0.00021	0.00049	0.00036	0.00085	0.00095	0.00051	0.00017
T-406		0.00210	0.00116	0.00042	0.00178	0.00064	0.00178	0.00048	0.00178	0.00032	0.00041	0.00031	0.00042	0.00036	0.00474	0.00025	0.00044	0.00102	0.00074	0.00178	0.00198	0.00106	0.00037
T-407		0.00083	0.00046	0.00017	0.00070	0.00025	0.00070	0.00019	0.00070	0.00012	0.00016	0.00012	0.00016	0.00014	0.00187	0.00010	0.00017	0.00040	0.00029	0.00070	0.00078	0.00042	0.00014
T-408		0.00072	0.00040	0.00015	0.00061	0.00022	0.00061	0.00016	0.00061	0.00011	0.00071	0.00011	0.00014	0.00012	0.00162	0.00008	0.00015	0.00035	0.00026	0.00061	0.00068	0.00036	0.00013
T-409		0.00156	0.00188	0.00032	0.00454	0.00047	0.00396	0.00035	0.00131	0.00052	0.00030	0.00023	0.00031	0.00027	0.00350	0.00051	0.00033	0.00074	0.00054	0.00131	0.00147	0.00077	0.00027
T-410		0.00246	0.00072	0.00509	0.00497	0.00775	0.00388	0.00011	0.00724	0.00246	0.00010	0.00008	0.00010	0.00009	0.00340	0.00089	0.00011	0.00024	0.00018	0.00043	0.00048	0.00025	0.00009
T-411		0.00068	0.00037	0.00013	0.00123	0.00021	0.00136	0.00016	0.00057	0.00010	0.00014	0.00010	0.00013	0.00011	0.00153	0.00008	0.00014	0.00033	0.00024	0.00057	0.00064	0.00035	0.00012
T-412		0.00091	0.00050	0.00018	0.00077	0.00028	0.00077	0.00021	0.00077	0.00013	0.00018	0.00014	0.00018	0.00016	0.00206	0.00011	0.00019	0.00044	0.00032	0.00077	0.00086	0.00046	0.00016
T-413		0.00037	0.00020	0.00007	0.00031	0.00011	0.00031	0.00009	0.00031	0.00005	0.00007	0.00005	0.00007	0.00006	0.00084	0.00004	0.00008	0.00018	0.00013	0.00031	0.00035	0.00019	0.00006
T-414		0.00013	0.00007	0.00003	0.00011	0.00004	0.00011	0.00003	0.00011	0.00002	0.00003	0.00002	0.00003	0.00002	0.00030	0.00002	0.00003	0.00006	0.00005	0.00011	0.00012	0.00007	0.00002
T-415		0.00020	0.00011	0.00004	0.00017	0.00006	0.00017	0.00005	0.00017	0.00003	0.00004	0.00003	0.00004	0.00003	0.00045	0.00002	0.00004	0.00010	0.00007	0.00017	0.00019	0.00010	0.00004
T-416		0.00045	0.00025	0.00009	0.00038	0.00013	0.00038	0.00010	0.00038	0.00007	0.00009	0.00007	0.00009	0.00008	0.00101	0.00005	0.00010	0.00021	0.00016	0.00038	0.00042	0.00022	0.00008
T-417		0.00077	0.00042	0.00016	0.00065	0.00023	0.00065	0.00017	0.00065	0.00011	0.00015	0.00012	0.00016	0.00013	0.00174	0.00009	0.00016	0.00037	0.00027	0.00065	0.00073	0.00038	0.00014
T-418		0.00010	0.00005	0.00002	0.00008	0.00003	0.00008	0.00002	0.00008	0.00001	0.00002	0.00001	0.00002	0.00002	0.00022	0.00001	0.00002	0.00005	0.00003	0.00008	0.00009	0.00005	0.00002
T-501		0.00028	0.00016	0.00006	0.00024	0.00009	0.00024	0.00006	0.00024	0.00004	0.00006	0.00004	0.00006	0.00005	0.00063	0.00003	0.00006	0.00014	0.00010	0.00024	0.00027	0.00014	0.00005
T-502		0.00023	0.00013	0.00005	0.00019	0.00007	0.00019	0.00005	0.00019	0.00003	0.00004	0.00003	0.00005	0.00004	0.00052	0.00003	0.00005	0.00011	0.00008	0.00019	0.00022	0.00011	0.00004
T-503		0.00027	0.00015	0.00005	0.00023	0.00008	0.00023	0.00006	0.00023	0.00004	0.00005	0.00004	0.00005	0.00005	0.00062	0.00003	0.00006	0.00013	0.00010	0.00023	0.00026	0.00014	0.00005
T-504		0.00019	0.00023	0.00004	0.00063	0.00006	0.00045	0.00004	0.00016	0.00003	0.00004	0.00003	0.00004	0.00003	0.00043	0.00002	0.00004	0.00009	0.00007	0.00016	0.00018	0.00010	0.00003
T-505		0.00029	0.00016	0.00006	0.00057	0.00009	0.00024	0.00006	0.00024	0.00004	0.00006	0.00004	0.00006	0.00005	0.00064	0.00003	0.00006	0.00014	0.00010	0.00024	0.00027	0.00014	0.00005
T-506		0.00011	0.00006	0.00002	0.00009	0.00003	0.00009	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00025	0.00001	0.00002	0.00005	0.00004	0.00009	0.00010	0.00006	0.00002
T-507		0.00012	0.00007	0.00002	0.00010	0.00004	0.00010	0.00003	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00027	0.00001	0.00003	0.00006	0.00004	0.00010	0.00011	0.00006	0.00002
T-508		0.00012	0.00007	0.00002	0.00010	0.00004	0.00010	0.00003	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00028	0.00001	0.00003	0.00006	0.00004	0.00010	0.00012	0.00006	0.00002
T-509		0.00015	0.00008	0.00003	0.00027	0.00005	0.00013	0.00004	0.00013	0.00002	0.00003	0.00002	0.00003	0.00003	0.00035	0.00002	0.00003	0.00007	0.00005	0.00013	0.00014	0.00008	0.00003
T-510		0.00019	0.00010	0.00004	0.00016	0.00006	0.00016	0.00004	0.00033	0.00003	0.00004	0.00003	0.00004	0.00003	0.00043	0.00002	0.00004	0.00009	0.00007	0.00016	0.00018	0.00009	0.00003
T-511		0.00015	0.00009	0.00003	0.00013	0.00005	0.00013	0.00004	0.00013	0.00002	0.00003	0.00002	0.00003	0.00003	0.00035	0.00002	0.00003	0.00007	0.00005	0.00013	0.00014	0.00008	0.00003
T-512		0.00019	0.00010	0.00004	0.00016	0.00006	0.00016	0.00004	0.00016	0.00003	0.00004	0.00003	0.00004	0.00003	0.00042	0.00002	0.00004	0.00009	0.00006	0.00016	0.00017	0.00009	0.00003
T-513		0.00012	0.00007	0.00003	0.00010	0.00004	0.00010	0.00003	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00028	0.00001	0.00003	0.00006	0.00004	0.00010	0.00012	0.00006	0.00002
T-514		0.00010	0.00006	0.00002	0.00009	0.00003	0.00009	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00023	0.00001	0.00002	0.00005	0.00004	0.00009	0.00010	0.00005	0.00002
T-601		0.00044	0.00024	0.00009	0.00037	0.00013	0.00037	0.00010	0.00037	0.00006	0.00009	0.00007	0.00009	0.00008	0.00099	0.00005	0.00009	0.00021	0.00015	0.00037	0.00041	0.00022	0.00008
T-602		0.00024	0.00013	0.00005	0.00021	0.00007	0.00021	0.00006	0.00021	0.00013	0.00005	0.00004	0.00005	0.00004	0.00055	0.00008	0.00005	0.00012	0.00009	0.00021	0.00023	0.00012	0.00004
T-603		0.00026	0.00014	0.00005	0.00022	0.00008	0.00022	0.00006	0.00022	0.00004	0.00005	0.00004	0.00005	0.00005	0.00059	0.00003	0.00006	0.00012	0.00009	0.00022	0.00025	0.00013	0.00005
T-604		0.00037	0.00020	0.00007	0.00031	0.00011	0.00031	0.00008	0.00031	0.00005	0.00007	0.00005	0.00007	0.00006	0.00082	0.00004	0.00008	0.00017	0.00013	0.00031	0.00035	0.00018	0.00006
T-605		0.02366	0.01282	0.01284	0.00740	0.00010	0.00359	0.00461	0.00210	0.00538	0.00102	0.00304	0.00410	0.00330	0.00151	0.00270	0.00079	0.00191	0.00011	0.00027	0.00030	0.00054	0.00029
T-606		0.00051	0.00028	0.00010	0.00043	0.00015	0.00043	0.00012	0.00043	0.00008	0.00010	0.00008	0.00010	0.00009	0.00114	0.00006	0.00144	0.00025	0.00018	0.00043	0.00048	0.00026	0.00009
T-607		0.00053	0.00030	0.00011	0.00045	0.00016	0.00045	0.00012	0.00045	0.00008	0.00011	0.00008	0.00011	0.00009	0.00121	0.00006	0.00011	0.00026	0.00019	0.00045	0.00050	0.00027	0.00009
T-608		0.00031	0.00017	0.00006	0.00026	0.00009	0.00026	0.00007	0.00026	0.00004	0.00006	0.00005	0.00006	0.00005	0.00069	0.00003	0.00007	0.00015	0.00011	0.00026	0.00029	0.00015	0.00005
T-609		0.00014	0.00008	0.00003	0.00012	0.00004	0.00012	0.00003	0.00012	0.00002	0.00003	0.00002	0.00003	0.00002	0.00033	0.00002	0.00003	0.00007	0.00005	0.00012	0.00014	0.00007	0.00003
T-610		0.00046	0.00025	0.00009	0.00038	0.00014	0.00038	0.00010	0.00038	0.00006	0.00009	0.00007	0.00009	0.00008	0.00103	0.00005	0.00010	0.00022	0.00016	0.00038	0.00043	0.00023	0.00008
T-611		0.00027	0.00015	0.00006	0.00023	0.00008	0.00023	0.00006	0.00023	0.00004	0.00005	0.00004	0.00005	0.00005	0.00061	0.00003	0.00006	0.00013	0.00010	0.00023	0.00026	0.00014	0.00005
T-612		0.00025	0.00014	0.00005	0.00021	0.00007	0.00021	0.00006	0.00021	0.00004	0.00005	0.00004	0.00005	0.00004	0.00055	0.00003	0.00005	0.00012	0.00009	0.00021	0.00023	0.00012	0.00004
T-613		0.00017	0.00009	0.00003	0.00014	0.00005	0.00014	0.00004	0.00014	0.00003	0.00003	0.00003	0.00003	0.00003	0.00038	0.00002	0.00004	0.00008	0.00006	0.00014	0.00016	0.00008	0.00003
T-614		0.00010	0.00005	0.00002	0.00008	0.00003	0.00008	0.00002	0.00008	0.00001	0.00002	0.00001	0.00002	0.00002	0.00022	0.00001	0.00002	0.00005	0.00003	0.00008	0.00009	0.00005	0.00002

Table 4.3a TO-14 Compounds (Flux in ug/m2-min for only compounds that had at least one detect).

Sample ID	Compound	Total Non-Methane Hydrocarbons	Total Non-Methane Hydrocarbons	Toluene	Propene	m,p-xylene	i-Pentane	n-Butane	Ethylbenzene	o-xylene	2-Ethyltoluene	Ethane	t-2-Pentene	n-Heptane	Ethene	Methylcyclohexane	2,2,4-Trimethylpentane	n-Nonane	Propane	n-Pentane	Benzene	3-Methylhexane	Cyclohexane	2,3-Dimethylpentane	1-Pentene	n-Octane	2-Methylpentane	2-Methylhexane	2,3,4-Trimethylpentane	1,3,5-Trimethylbenzene	Styrene	3-Ethyltoluene	n-Decane	2,4-Dimethylpentane
	CAS	TNMHC - C1	TNMHC - C6	108-88-3	115-07-1	108-38-3	78-78-4	106-97-8	100-41-4	95-47-6	611-14-3	74-84-0	646-04-8	142-82-5	74-85-1	108-87-2	540-84-1	111-84-2	74-98-6	109-66-0	71-43-2	589-34-4	110-82-7	565-59-3	109-67-1	111-65-9	107-83-5	591-76-4	565-75-3	108-67-8	100-42-5	620-14-4	124-18-5	108-08-7
	MW	16	80	92.1	42.1	106.2	72.2	58.1	106.2	106.2	120.2	30.1	70.1	100.2	28.1	98.2	114.2	128.3	44.1	72.1	78.1	100.2	84.2	100.2	70.1	114.2	86.2	100.2	114.2	120.2	104.2	120.2	142.3	100.2
T-401		2.75326	2.29438	0.19258	0.02057	0.08909	0.02974	0.03376	0.04324	0.03661	0.00654	0.00829	0.01521	0.04228	0.00772	0.01317	0.00879	0.01814	0.00954	0.00640	0.00350	0.01669	0.00608	0.01276	0.00587	0.01472	0.00113	0.00908	0.01105	0.00526	0.00101	0.00367	0.00403	0.00744
T-402		1.07602	0.89669	0.00181	0.00035	0.00033	0.00554	0.00112	0.00033	0.00033	0.00898	0.00096	0.00035	0.00036	0.00035	0.00723	0.00036	0.00036	0.00037	0.00261	0.00033	0.00228	0.00357	0.00036	0.00091	0.00036	0.00361	0.01943	0.00102	0.00033	0.00128	0.00033	0.00036	0.00211
T-403		0.01869	0.01557	0.00040	0.00042	0.00040	0.00043	0.00044	0.00040	0.00040	0.00040	0.00045	0.00042	0.00043	0.00042	0.00042	0.00043	0.00043	0.00204	0.00043	0.00039	0.00043	0.00042	0.00043	0.00042	0.00043	0.00043	0.00043	0.00043	0.00040	0.00039	0.00040	0.00043	0.00043
T-404		0.00569	0.00474	0.00015	0.00016	0.00015	0.00016	0.00017	0.00060	0.00015	0.00015	0.00017	0.00016	0.00088	0.00016	0.00016	0.00016	0.00016	0.00017	0.00016	0.00015	0.00016	0.00016	0.00016	0.00119	0.00016	0.00016	0.00016	0.00016	0.00015	0.00015	0.00015	0.00016	0.00016
T-405		0.02347	0.01956	0.00056	0.00060	0.00057	0.00062	0.00062	0.00057	0.00057	0.00057	0.00064	0.00060	0.00061	0.00060	0.00060	0.00061	0.00061	0.00931	0.00062	0.00056	0.00061	0.00060	0.00061	0.00060	0.00061	0.00061	0.00061	0.00061	0.00057	0.00056	0.00057	0.00061	0.00061
T-406		0.01597	0.01331	0.00117	0.00125	0.00118	0.00128	0.00129	0.00118	0.00118	0.00118	0.00134	0.00124	0.00127	0.00125	0.00124	0.00127	0.00126	0.00130	0.00128	0.00115	0.00127	0.00125	0.00127	0.00124	0.00127	0.00127	0.00127	0.00127	0.00118	0.00116	0.00118	0.00126	0.00127
T-407		0.00478	0.00398	0.00035	0.00037	0.00035	0.00038	0.00039	0.00035	0.00035	0.00035	0.00040	0.00037	0.00038	0.00037	0.00037	0.00038	0.00038	0.00039	0.00038	0.00035	0.00038	0.00037	0.00038	0.00037	0.00038	0.00038	0.00038	0.00038	0.00035	0.00035	0.00035	0.00038	0.00038
T-408		0.01572	0.0131	0.00030	0.00071	0.00031	0.00033	0.00034	0.00031	0.00031	0.00031	0.00035	0.00032	0.00033	0.00033	0.00032	0.00033	0.00033	0.00034	0.00033	0.00030	0.00033	0.00032	0.00033	0.00032	0.00033	0.00033	0.00033	0.00033	0.00031	0.00030	0.00031	0.00033	0.00033
T-409		0.0318	0.0265	0.00063	0.01281	0.00064	0.00069	0.00070	0.00064	0.00064	0.00064	0.00072	0.00067	0.00069	0.00068	0.00067	0.00069	0.00069	0.00071	0.00069	0.00063	0.00069	0.00067	0.00069	0.00067	0.00069	0.00069	0.00069	0.00069	0.00064	0.00063	0.00064	0.00068	0.00069
T-410		8.42042	7.01701	0.01710	0.06225	0.15183	0.02771	0.00023	0.05880	0.03619	0.15085	0.00023	0.00919	0.01394	0.00022	0.04888	0.08848	0.00022	0.00023	0.01906	0.00698	0.02182	0.02658	0.00665	0.01403	0.00022	0.02377	0.00949	0.01587	0.03902	0.00020	0.04531	0.00288	0.00551
T-411		0.09051	0.07542	0.00030	0.00032	0.00030	0.00338	0.00291	0.00030	0.00030	0.00096	0.00117	0.00031	0.00032	0.00032	0.00032	0.00032	0.00032	0.00076	0.00032	0.00029	0.00032	0.00032	0.00032	0.00031	0.00032	0.00032	0.00032	0.00032	0.00104	0.00029	0.00030	0.00032	0.00032
T-412		0.0837	0.06976	0.00038	0.00087	0.00039	0.00042	0.00042	0.00039	0.00039	0.00039	0.00044	0.00041	0.00042	0.00041	0.00041	0.00167	0.00042	0.00043	0.00042	0.00038	0.00042	0.00041	0.00042	0.00041	0.00042	0.00042	0.00042	0.00042	0.00039	0.00038	0.00039	0.00222	0.00042
T-413		0.00537	0.00447	0.00015	0.00016	0.00016	0.00017	0.00017	0.00016	0.00016	0.00016	0.00049	0.00016	0.00017	0.00016	0.00016	0.00017	0.00017	0.00017	0.00017	0.00015	0.00017	0.00016	0.00017	0.00016	0.00017	0.00017	0.00017	0.00017	0.00016	0.00015	0.00016	0.00017	0.00017
T-414		0.00155	0.00129	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00005	0.00006	0.00006	0.00006	0.00025	0.00006	0.00006	0.00006	0.00006	0.00006	0.00005	0.00006	0.00006	0.00006
T-415		0.00116	0.00097	0.00008	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00010	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00009	0.00030	0.00009	0.00009	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00009
T-416		0.00874	0.00728	0.00017	0.00019	0.00018	0.00019	0.00019	0.00018	0.00018	0.00018	0.00020	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00053	0.00059	0.00017	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00018	0.00017	0.00018	0.00019	0.00019
T-417		0.00449	0.00374	0.00033	0.00035	0.00033	0.00036	0.00036	0.00033	0.00033	0.00033	0.00038	0.00035	0.00036	0.00035	0.00035	0.00036	0.00036	0.00037	0.00036	0.00032	0.00036	0.00035	0.00036	0.00035	0.00036	0.00036	0.00036	0.00036	0.00033	0.00033	0.00033	0.00036	0.00036
T-418		0.00059	0.00049	0.00004	0.00005	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00005
T-501		0.00167	0.00139	0.00012	0.00013	0.00012	0.00013	0.00014	0.00012	0.00012	0.00012	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00014	0.00013	0.00012	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013
T-502		0.04099	0.03416	0.00246	0.00010	0.00223	0.00010	0.00011	0.00163	0.00054	0.00010	0.00026	0.00010	0.00031	0.00010	0.00010	0.00010	0.00065	0.00011	0.00010	0.00622	0.00010	0.00010	0.00010	0.00010	0.00076	0.00010	0.00010	0.00028	0.00053	0.00009	0.00010	0.00109	0.00010
T-503		0.0037	0.00308	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00012	0.00031	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00070	0.00013	0.00013	0.00013	0.00036	0.00027	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013
T-504		0.00114	0.00095	0.00008	0.00009	0.00008	0.00009	0.00009	0.00008	0.00008	0.00008	0.00010	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00038	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00008	0.00008	0.00008	0.00009	0.00009
T-505		0.00469	0.00391	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00012	0.00044	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00027	0.00013	0.00012	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013
T-506		0.00755	0.00629	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005
T-507		0.00168	0.0014	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00021	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-508		0.00176	0.00146	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00006	0.00015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00006	0.00005	0.00038	0.00005	0.00005	0.00016	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-509		0.00247	0.00206	0.00013	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00110	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007
T-510		0.00379	0.00316	0.00007	0.00008	0.00090	0.00008	0.00008	0.00015	0.00034	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00028	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00021	0.00008	0.00008	0.00008	0.00008	0.00007	0.00007	0.00007	0.00008	0.00008
T-511		0.0049	0.00409	0.00006	0.00007	0.00006	0.00024	0.00007	0.00019	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00128	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007
T-512		0.0261	0.02175	0.00034	0.00008	0.00071	0.00008	0.00008	0.00029	0.00033	0.00026	0.00009	0.00008	0.00017	0.00008	0.00008	0.00008	0.00021	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00022	0.00027	0.00008	0.00008	0.00008	0.00008	0.00007	0.00008	0.00033	0.00008
T-513		0.01099	0.00916	0.00018	0.00005	0.00029	0.00006	0.00006	0.00016	0.00011	0.00012	0.00006	0.00005	0.00011	0.00005	0.00005	0.00005	0.00005	0.00005	0.00006	0.00006	0.00005	0.00005	0.00005	0.00015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00011	0.00005
T-514		0.00057	0.00047	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00004	0.00005	0.00004	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00005	0.00004	0.00005	0.00004	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00005
T-601		0.19477	0.16231	0.00093	0.00374	0.00019	0.00534	0.00703	0.00162	0.00041	0.00052	0.00355	0.00020	0.00020	0.00020	0.00363	0.00020	0.00020	0.00065	0.00553	0.00144	0.00018	0.00020	0.00020	0.00020	0.00020	0.00083	0.00020	0.00020	0.00019	0.00079	0.00046	0.00020	0.00081
T-602		0.204	0.17	0.00090	0.01389	0.00132	0.00190	0.00012	0.00044	0.00123	0.00043	0.00170	0.00023	0.00012	0.00459	0.00149	0.00012	0.00025	0.00012	0.00142	0.00069	0.00036	0.00120	0.00025	0.00101	0.00012	0.00076	0.00011	0.00028	0.00014	0.00024	0.00011	0.00027	0.00091
T-603		0.02743	0.02285	0.00012	0.00785	0.00012	0.00100	0.00366	0.00012	0.00012	0.00012	0.00116	0.00012	0.00013	0.00143	0.00012	0.00013	0.00013	0.00013	0.00037	0.00012	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013
T-604		0.01567	0.01306	0.00015	0.00016	0.00015	0.00034	0.00017	0.00015	0.00015	0.00015	0.00151	0.00016	0.00017	0.00016	0.00016	0.00017	0.00016	0.00110	0.00017	0.00015	0.00017	0.00016	0.00017	0.00016	0.00017	0.00017	0.00017	0.00017	0.00015	0.00015	0.00015	0.00016	0.00017
T-605		4.81923	4.01602	0.22880	0.08276	0.17157	0.04444	0.04087	0.06380	0.06160	0.01925	0.00993	0.04812	0.04690	0.00619	0.02011	0.00860	0.05620	0.00015	0.01235	0.01166	0.01815	0.01102	0.02847	0.00884	0.02690	0.00433	0.00760	0.01202	0.00258	0.02712	0.00014	0.02578	0.01188
T-606		0.08238	0.06865	0.00122	0.00022	0.00207	0.00364	0.00170	0.00100	0.00021	0.00021	0.00078	0.00022	0.00022	0.00081	0.00022	0.00022	0.00075	0.00529	0.00022	0.00020	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00047	0.00020	0.00021	0.00051	0.00022
T-607		0.07866	0.06555	0.00053	0.00024	0.00067	0.00189	0.00025	0.00023	0.00023	0.00023	0.00151	0.00024	0.00025	0.00024	0.00024	0.00025	0.00025	0.00076	0.00025	0.00022	0.00025	0.00024	0.00025	0.00024	0.00025	0.00025	0.00025	0.00025	0.00023	0.00022	0.00023	0.00025	0.00025
T-608		0.01366	0.01138	0.00013	0.00013	0.00013	0.00014	0.00014	0.00013	0.00013	0.00013	0.00029	0.00013	0.00014	0.00013	0.00013	0.00014	0.00014	0.00041	0.00014	0.00012	0.00014	0.00013	0.00014	0.00013	0.00014	0.00014	0.00014	0.00014	0.00013	0.00012	0.00013	0.00184	0.00014
T-609		0.00411	0.00342	0.00006	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00006	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007	0.00152	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007
T-610		0.05883	0.04903	0.00092	0.00073	0.00162	0.00075	0.00144	0.00066	0.00019	0.00019	0.00021	0.00020	0.00020	0.00020	0.00020	0.00020	0.00079	0.00169	0.00047	0.00044	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00065	0.00020	0.00019	0.00018	0.00019	0.00020	0.00020
T-611		0.01043	0.00869	0.00011	0.00012	0.00027	0.00012	0.00012	0.00011	0.00011	0.00011	0.00013	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00011	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00011	0.00011	0.00011	0.00012	0.00012
T-612		0.0039	0.00325	0.00010	0.00010	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00011	0.00010	0.00011	0.00010	0.00010	0.00011	0.00011	0.00011	0.00011	0.00010	0.00011	0.00010	0.00011	0.00010	0.00011	0.00011	0.00011	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011
T-613		0.00381	0.00318	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00008	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00008	0.00007	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
T-614		0.00053	0.00044	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004

Table 4.3b TO-14 Compounds (Flux in ug/m2-min for only compounds that had at least one detect).

Sample ID	Compound	n-Hexane	3-Methylheptane	4-Ethyltoluene	Cyclopentane	3-Methylpentane	2,2-Dimethylbutane	1,4-Diethylbenzene	2,3-Dimethylbutane	2-Methylheptane	1,2,4-Trimethylbenzene	1,3-Diethylbenzene	c-2-Pentene	Methylcyclopentane	t-2-Butene	1-Butene	i-Propylbenzene	Undecane	1,2,3-Trimethylbenzene	c-2-Butene	n-propylbenzene	i-Butane	Dodecane
	CAS	110-54-3	589-81-1	622-96-8	287-92-3	96-14-0	75-83-2	105-05-5	79-29-8	592-27-8	95-63-6	141-93-5	627-20-3	96-37-7	624-64-6	106-98-9	98-82-8	1120-21-4	526-73-8	590-18-1	103-65-1	75-28-5	112-40-3
	MW	86.2	114.2	120.2	70.1	86.2	86.2	134.2	86.2	114.2	120.2	134.2	70.1	84.2	56.1	56.1	120.2	156.3	120.2	56.1	120.2	58.1	170.3
T-401		0.00743	0.00743	0.00435	0.00023	0.00023	0.00051	0.00140	0.00023	0.01073	0.00283	0.00022	0.00165	0.00023	0.00023	0.00023	0.00495	0.00023	0.00022	0.00023	0.00022	0.00023	0.00023
T-402		0.00036	0.00036	0.00549	0.00086	0.00993	0.00098	0.00352	0.00036	0.00036	0.00033	0.00034	0.00035	0.00035	0.00035	0.00035	0.00264	0.00036	0.00033	0.00035	0.00033	0.00036	0.00036
T-403		0.00043	0.00043	0.00040	0.00042	0.00107	0.00043	0.00040	0.00043	0.00043	0.00040	0.00215	0.00042	0.00042	0.00042	0.00042	0.00040	0.00043	0.00040	0.00042	0.00040	0.00044	0.00043
T-404		0.00016	0.00016	0.00015	0.00016	0.00016	0.00016	0.00015	0.00016	0.00016	0.00015	0.00015	0.00016	0.00016	0.00016	0.00016	0.00015	0.00016	0.00015	0.00016	0.00015	0.00017	0.00016
T-405		0.00061	0.00061	0.00057	0.00060	0.00061	0.00061	0.00057	0.00061	0.00061	0.00057	0.00057	0.00060	0.00060	0.00060	0.00060	0.00057	0.00061	0.00057	0.00060	0.00057	0.00062	0.00061
T-406		0.00127	0.00127	0.00118	0.00124	0.00127	0.00127	0.00119	0.00127	0.00127	0.00118	0.00119	0.00124	0.00125	0.00124	0.00124	0.00118	0.00126	0.00118	0.00124	0.00118	0.00129	0.00126
T-407		0.00038	0.00038	0.00035	0.00037	0.00038	0.00038	0.00036	0.00038	0.00038	0.00035	0.00036	0.00037	0.00037	0.00037	0.00037	0.00035	0.00038	0.00035	0.00037	0.00035	0.00039	0.00038
T-408		0.00033	0.00033	0.00031	0.00032	0.00033	0.00033	0.00031	0.00033	0.00033	0.00031	0.00031	0.00032	0.00032	0.00032	0.00032	0.00031	0.00033	0.00031	0.00032	0.00031	0.00079	0.00211
T-409		0.00069	0.00069	0.00064	0.00067	0.00069	0.00069	0.00065	0.00069	0.00069	0.00064	0.00065	0.00067	0.00067	0.00067	0.00067	0.00064	0.00068	0.00064	0.00067	0.00064	0.00070	0.00068
T-410		0.01373	0.00988	0.01054	0.01357	0.00911	0.00634	0.01553	0.01941	0.00177	0.00967	0.01545	0.00282	0.00371	0.00022	0.00022	0.00021	0.00896	0.00021	0.00111	0.00021	0.00023	0.00022
T-411		0.00032	0.00032	0.00085	0.00091	0.00032	0.00032	0.00158	0.00032	0.00032	0.00030	0.00030	0.00031	0.00504	0.00032	0.00032	0.00030	0.00032	0.00099	0.00032	0.00131	0.00033	0.00032
T-412		0.00042	0.00042	0.00039	0.00145	0.00042	0.00042	0.00129	0.00042	0.00042	0.00039	0.00039	0.00041	0.00312	0.00132	0.00041	0.00039	0.00041	0.00792	0.00120	0.00039	0.00042	0.00041
T-413		0.00058	0.00017	0.00016	0.00016	0.00017	0.00017	0.00016	0.00017	0.00017	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00017	0.00016	0.00016	0.00016	0.00017	0.00017
T-414		0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00019	0.00029	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
T-415		0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00019	0.00009	0.00009	0.00031	0.00025	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
T-416		0.00019	0.00019	0.00018	0.00019	0.00019	0.00019	0.00018	0.00019	0.00019	0.00018	0.00072	0.00019	0.00019	0.00046	0.00053	0.00018	0.00019	0.00018	0.00019	0.00018	0.00019	0.00019
T-417		0.00036	0.00036	0.00033	0.00035	0.00036	0.00036	0.00033	0.00036	0.00036	0.00033	0.00033	0.00035	0.00035	0.00035	0.00035	0.00033	0.00035	0.00033	0.00035	0.00033	0.00036	0.00035
T-418		0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00004	0.00004	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00004	0.00005	0.00004	0.00005	0.00005
T-501		0.00013	0.00013	0.00012	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00013	0.00012	0.00013	0.00012	0.00014	0.00013
T-502		0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00063	0.00129	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00020	0.00011	0.00010
T-503		0.00013	0.00013	0.00012	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013
T-504		0.00009	0.00009	0.00008	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00008	0.00008	0.00009	0.00009	0.00009	0.00009	0.00008	0.00009	0.00008	0.00009	0.00008	0.00009	0.00009
T-505		0.00013	0.00013	0.00012	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00037	0.00013	0.00012	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013
T-506		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-507		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-508		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-509		0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00007
T-510		0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00022	0.00008	0.00007	0.00008	0.00007	0.00008	0.00007	0.00008	0.00008
T-511		0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00007
T-512		0.00008	0.00008	0.00008	0.00019	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00020	0.00008	0.00008	0.00008	0.00008	0.00044	0.00008	0.00008	0.00008	0.00008
T-513		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00028	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00011	0.00006	0.00005
T-514		0.00005	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00005	0.00004
T-601		0.00078	0.00020	0.00019	0.00045	0.00092	0.00051	0.00019	0.00020	0.00130	0.00019	0.00056	0.00020	0.00020	0.00059	0.00020	0.00047	0.00020	0.00019	0.00020	0.00019	0.00021	0.00020
T-602		0.00035	0.00012	0.00052	0.00021	0.00066	0.00051	0.00011	0.00012	0.00012	0.00011	0.00011	0.00011	0.00011	0.00034	0.00024	0.00011	0.00011	0.00011	0.00011	0.00038	0.00012	0.00011
T-603		0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00012	0.00012	0.00012	0.00034	0.00012	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013
T-604		0.00017	0.00017	0.00015	0.00016	0.00017	0.00017	0.00016	0.00017	0.00017	0.00180	0.00016	0.00016	0.00016	0.00016	0.00016	0.00015	0.00016	0.00015	0.00016	0.00015	0.00017	0.00016
T-605		0.00015	0.00892	0.00710	0.00106	0.00015	0.00820	0.00567	0.00015	0.00633	0.00522	0.00014	0.00434	0.00100	0.00055	0.00015	0.00014	0.00015	0.00014	0.00015	0.00014	0.00015	0.00015
T-606		0.00022	0.00022	0.00021	0.00048	0.00022	0.00022	0.00021	0.00022	0.00022	0.00021	0.00021	0.00022	0.00144	0.00097	0.00022	0.00021	0.00022	0.00021	0.00022	0.00021	0.00023	0.00022
T-607		0.00025	0.00025	0.00023	0.00024	0.00202	0.00025	0.00023	0.00025	0.00025	0.00023	0.00023	0.00024	0.00134	0.00090	0.00076	0.00023	0.00025	0.00023	0.00081	0.00122	0.00025	0.00024
T-608		0.00014	0.00014	0.00013	0.00013	0.00014	0.00014	0.00013	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00032	0.00013	0.00014	0.00013	0.00013	0.00026	0.00014	0.00014
T-609		0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00006	0.00013	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00007
T-610		0.00020	0.00020	0.00114	0.00020	0.00020	0.00020	0.00019	0.00020	0.00020	0.00019	0.00019	0.00020	0.00020	0.00020	0.00020	0.00019	0.00020	0.00055	0.00020	0.00019	0.00020	0.00020
T-611		0.00012	0.00012	0.00011	0.00012	0.00066	0.00012	0.00011	0.00012	0.00012	0.00011	0.00011	0.00012	0.00012	0.00050	0.00012	0.00011	0.00012	0.00011	0.00012	0.00011	0.00012	0.00012
T-612		0.00011	0.00011	0.00010	0.00010	0.00011	0.00011	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011
T-613		0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
T-614		0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004

Table 4.4 shows the calculated flux for the ORS compounds.

Table 4.4 ORS Compounds Flux (mg/m2-min). (Only compounds that had at least one detect)

Sample ID	Synonym	Total Reduced Sulfurs	Carbonyl sulfide (COS)	Methanethiol (MeSH)	Carbon disulfide (CS2)	Hydrogen sulfide (H2S)	Dimethylsulfide (DMS)	Dimethyldisulfide (DMDS)	Total Unidentified Sulfur	2-Propanethiol (iPrSH)	i-Butanethiol (i-BuSH)	s-Butanethiol (s-BuSH)	Ethanethiol (EtSH)
	CAS		463-58-1	74-93-1	75-15-0	7783-06-4	75-18-3	624-92-0		75-33-2	513-44-0	513-53-1	75-08-1
	MW	34.08	60.08	48.11	76.14	34.08	62.134	94.19	34.08	76.16	90.186	90.186	62.134
S- 401 a		0.1695	0.0010	0.0360	0.1352	0.0088	0.0369	0.0608	0.0161	0.0093	0.0105	0.0070	0.0040
S- 402 a		0.0009	0.0015	0.0012	0.0019	0.0009	0.0016	0.0024	0.0009	0.0019	0.0023	0.0023	0.0016
S- 403 a		0.0052	0.0018	0.0014	0.0023	0.0052	0.0018	0.0028	0.0010	0.0023	0.0027	0.0027	0.0018
S- 404 a		0.0004	0.0007	0.0006	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007
S- 405 a		0.0171	0.0025	0.0020	0.0032	0.0171	0.0026	0.0039	0.0014	0.0032	0.0038	0.0038	0.0026
S- 406 a		0.0192	0.0053	0.0042	0.0067	0.0192	0.0055	0.0083	0.0030	0.0067	0.0079	0.0079	0.0055
S- 407 a		0.0011	0.0020	0.0016	0.0025	0.0011	0.0021	0.0031	0.0011	0.0025	0.0030	0.0030	0.0021
S- 408 a		0.0010	0.0017	0.0014	0.0022	0.0010	0.0018	0.0027	0.0010	0.0022	0.0026	0.0026	0.0018
S- 409 a		0.0020	0.0036	0.0029	0.0046	0.0020	0.0037	0.0057	0.0020	0.0046	0.0054	0.0054	0.0037
S- 410 a		0.0016	0.0012	0.0009	0.0036	0.0007	0.0012	0.0018	0.0007	0.0015	0.0018	0.0018	0.0012
S- 411 a		0.0010	0.0017	0.0014	0.0021	0.0010	0.0017	0.0026	0.0010	0.0021	0.0025	0.0025	0.0017
S- 412 a		0.0012	0.0022	0.0018	0.0028	0.0012	0.0023	0.0034	0.0012	0.0028	0.0033	0.0033	0.0023
S- 413 a		0.0005	0.0009	0.0007	0.0011	0.0005	0.0009	0.0014	0.0005	0.0011	0.0013	0.0013	0.0009
S- 414 a		0.0002	0.0003	0.0003	0.0004	0.0002	0.0003	0.0005	0.0002	0.0004	0.0005	0.0005	0.0003
S- 415 a		0.0003	0.0005	0.0004	0.0006	0.0003	0.0005	0.0008	0.0003	0.0006	0.0007	0.0007	0.0005
S- 416 a		0.0006	0.0010	0.0008	0.0013	0.0006	0.0010	0.0016	0.0006	0.0013	0.0015	0.0015	0.0010
S- 417 a		0.0011	0.0019	0.0015	0.0024	0.0011	0.0019	0.0029	0.0011	0.0024	0.0028	0.0028	0.0019
S- 418 a		0.0001	0.0002	0.0002	0.0003	0.0001	0.0003	0.0004	0.0001	0.0003	0.0004	0.0004	0.0003
S- 501 a		0.0004	0.0007	0.0006	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007
S- 502 a		0.0003	0.0005	0.0004	0.0007	0.0003	0.0006	0.0009	0.0003	0.0007	0.0008	0.0008	0.0006
S- 503 a		0.0004	0.0007	0.0005	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007
S- 504 a		0.0003	0.0005	0.0004	0.0006	0.0003	0.0005	0.0007	0.0003	0.0006	0.0007	0.0007	0.0005
S- 505 a		0.0004	0.0007	0.0005	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007
S- 506 a		0.0001	0.0003	0.0002	0.0003	0.0001	0.0003	0.0004	0.0001	0.0003	0.0004	0.0004	0.0003
S- 507 a		0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0004	0.0002	0.0003	0.0004	0.0004	0.0003
S- 508 a		0.0002	0.0003	0.0002	0.0004	0.0002	0.0003	0.0004	0.0002	0.0004	0.0004	0.0004	0.0003
S- 509 a		0.0002	0.0003	0.0003	0.0004	0.0002	0.0004	0.0005	0.0002	0.0004	0.0005	0.0005	0.0004
S- 510 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0007	0.0002	0.0005	0.0006	0.0006	0.0004
S- 511 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0006	0.0002	0.0005	0.0005	0.0005	0.0004
S- 512 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0007	0.0002	0.0005	0.0006	0.0006	0.0004
S- 513 a		0.0002	0.0003	0.0002	0.0004	0.0002	0.0003	0.0005	0.0002	0.0004	0.0004	0.0004	0.0003
S- 514 a		0.0001	0.0002	0.0002	0.0003	0.0001	0.0002	0.0004	0.0001	0.0003	0.0004	0.0004	0.0002
S- 601 a		0.0104	0.0072	0.0009	0.0049	0.0082	0.0011	0.0017	0.0006	0.0014	0.0016	0.0016	0.0011
S- 602 a		0.0003	0.0006	0.0005	0.0008	0.0003	0.0006	0.0009	0.0003	0.0008	0.0009	0.0009	0.0006
S- 603 a		0.0004	0.0007	0.0005	0.0008	0.0004	0.0007	0.0010	0.0004	0.0008	0.0010	0.0010	0.0007
S- 604 a		0.0005	0.0009	0.0007	0.0011	0.0005	0.0009	0.0014	0.0005	0.0011	0.0013	0.0013	0.0009
S- 605 a		0.2931	0.1310	0.1169	0.1093	0.0659	0.0509	0.0586	0.0208	0.0304	0.0135	0.0112	0.0061
S- 606 a		0.0042	0.0012	0.0009	0.0015	0.0042	0.0012	0.0018	0.0007	0.0015	0.0018	0.0018	0.0012
S- 607 a		0.0194	0.0829	0.0021	0.0016	0.0044	0.0123	0.0130	0.0021	0.0016	0.0019	0.0019	0.0013
S- 608 a		0.0004	0.0007	0.0006	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0011	0.0011	0.0007
S- 609 a		0.0002	0.0004	0.0003	0.0004	0.0002	0.0004	0.0006	0.0002	0.0004	0.0005	0.0005	0.0004
S- 610 a		0.0053	0.0385	0.0008	0.0013	0.0041	0.0011	0.0033	0.0006	0.0013	0.0016	0.0016	0.0011
S- 611 a		0.0004	0.0006	0.0005	0.0008	0.0004	0.0007	0.0010	0.0004	0.0008	0.0010	0.0010	0.0007
S- 612 a		0.0003	0.0006	0.0004	0.0007	0.0003	0.0006	0.0009	0.0003	0.0007	0.0008	0.0008	0.0006
S- 613 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0006	0.0002	0.0005	0.0006	0.0006	0.0004
S- 614 a		0.0001	0.0002	0.0002	0.0003	0.0001	0.0002	0.0003	0.0001	0.0003	0.0003	0.0003	0.0002

5. Data Analysis

Cell Area Apportionment

Table 5.1 shows how the individual flux chamber data points were apportioned to calculate the average flux value for the test grid cell. Four measurements were made in each test cell. The four measurements were targeted to represent the low emission (bottom half), medium emission (between the bottom half and the top 10%), high emission (top 10%), and maximum screened concentration in the test cell. Therefore, the target low measurement represented 50% of the cell area, the medium measurement represented 40% of the cell area, the high measurement represented 10% of the cell area, and the maximum measurement represented the area of the flux chamber, 0.13 m^2. However, the actual values were substantially different than the target values. Table 5.1 shows the calculated apportionment values based on the analysis of interior cell screening. The calculation basis is provided in Appendix 2.

Table 5.1 Grid Cell Area Apportionment by Interior Grid Cell Zone.

		Rep	Sample Apportionment			
Category	**Subset**	**Cell**	**Max**	**High**	**Med**	**Low**
Exceedance Area		160	0.003%	18%	23%	60%
Repeat		160	0.003%	18%	23%	60%
Reaction Area	High	184	0.003%	15%	22%	63%
Reaction Area	Med	174	0.003%	9%	28%	63%
Reaction Area	Med	152	0.003%	20%	17%	63%
Reaction Area	Low	209	0.003%	17%	25%	61%
Non-Reaction Area	High	62	0.003%	26%	31%	43%
Non-Reaction Area	Med	34	0.003%	9%	35%	56%
Non-Reaction Area	Med	39	0.003%	7%	14%	79%
Non-Reaction Area	Low	118	0.003%	43%	23%	33%

The average flux value of the cell was calculated by multiplying the appropriate apportionment factor (see Table 5.1) by the measured flux value for each position. The maximum reading was assumed to be valid only under the flux chamber, an area of 0.13 m^2, because the maximum reading is only represented at one point of the grid. No other portion of the grid is represented by the maximum reading.

Emissions Calculations

All emissions calculations are provided in Appendix 3. As an example, the methane emissions calculation is provided below in Table 5.2. The flux values shown in Section 5 (for the four internal cell categories [low, medium, high, max]) are averaged based on the area apportionment described above. That average cell flux value (column “W. Avg”) is then multiplied by the area represented by that grid cell to arrive at the total emissions. Emissions were calculated and presented using the calculation methodology as stated in the test protocol. The highlighted data are flux values for test locations over the polymer membrane cover.

Carbon monoxide and hydrogen were not detected in any of the samples and were not otherwise quantified.

Table 5.2 Methane Emissions Calculations.

						Flux (mg/m2-min)												
		Rep		Cell Area						Weighted Avg.		Used		Area Rep		Emissions		
Category	Subset	Cell	M?	(ft2)	(m2)	Max	High	Med	Low	Target	Actual	Target	Actual	(ft2)	(m2)	(mg/min)	(lbs/yr)	(TPY)
Exceedance Area		160		66,546	6,182	820	0.43	16.8	0.057	6.8	3.9	5.9	6.1	3,878,615	360,335	2,197,463	2,546,267	1,273
Repeat		160		66,546	6,182	1,567	45.8	0.51	0.14	4.9	8.3							
Reaction Area	High	184	Y	51,245	4,761	0.009	0.011	0.009	0.010	0.01	0.01	0.010	0.010	439,863	40,865	407	471	0.24
Reaction Area	Med	174	Y	48,344	4,491	0.167	0.013	0.064	0.011	0.03	0.03	0.019	0.016	513,112	47,670	774	897	0.45
Reaction Area	Med	152	Y	42,032	3,905	0.066	0.0062	0.0066	0.0068	0.01	0.01							
Reaction Area	Low	209	M	60,969	5,664	0.008	0.612	0.015	0.014	0.07	0.11	0.07	0.11	878,998	81,662	9,320	10,799	5.4
Non-Reaction Area	High	62		60,736	5,643	446	49	77.69	0.64	36	37	36	37	979,757	91,022	3,375,280	3,911,038	1,956
Non-Reaction Area	Med	34		55,632	5,168	21.40	4.50	3.95	0.23	2	2	17.2	12.4	1,413,324	131,302	1,626,023	1,884,122	942
Non-Reaction Area	Med	39		62,100	5,769	2.35	316	0.34	0.91	32	23							
Non-Reaction Area	Low	118		45,475	4,225	0.062	0.0072	0.011	0.072	0.04	0.03	0.04	0.03	3,859,605	358,569	10,696	12,394	6.2
Non SEM Area													6.5	942,020	87,517	568,519	658,760	329
Total														12,905,294	1,111,425	**7,219,963**	**8,365,989**	**4,512**
							Average Flux =		6,496	ug/m2-min								
									6.4961	mg/m2-min								

Emissions Summary

Table 5.3 and 5.4 summarize the total site surface emissions in tons per year. Although the emissions data is presented in tons per year, it should be noted that these emission rates are only valid for the time period during the sampling event and are not intended to imply that the emissions over the next 365 days would be equal to these values.

In addition, the average flux rate for each compound is provided in mg/m2-min.

Table 5.3 Site Surface Emissions Summary, Odor, Methane, VOC, TO-14 and 307-91 Compounds.

		Emissions	Emissions (tons/yr)									
		OU/min			TO-14			Method 307-91				
Category	Subset	Odor	Methane	VOC	Toluene	Propylene	m,p-xylene	Total Reduced Sulfurs	Carbonyl sulfide (COS)	Methanethiol (MeSH)	Carbon disulfide (CS2)	Hydrogen sulfide (H2S)
Exceedance Area		2,916,989	1,273	24.7	0.096	0.045	0.087	0.723	2.126	0.192	0.266	0.370
Reaction Area	High	49,405	0.24	0.43	0.006	0.002	0.014	0.006	0.010	0.008	0.012	0.006
Reaction Area	Med	45,194	0.45	0.11	0.005	0.002	0.005	0.006	0.011	0.009	0.014	0.006
Reaction Area	Low	345,327	5.4	0.70	0.011	0.010	0.019	0.055	0.327	0.026	0.041	0.046
Non-Reaction Area	High	105,526	1,956	3.59	0.018	0.322	0.023	0.022	0.039	0.031	0.049	0.022
Non-Reaction Area	Med	1,415,593	942	25.8	0.074	0.217	0.431	0.151	0.160	0.128	0.208	0.148
Non-Reaction Area	Low	604,520	6.2	0.80	0.021	0.023	0.021	0.069	0.121	0.097	0.153	0.069
Non SEM Area		431,711	329	4.42	0.018	0.049	0.047	0.081	0.220	0.039	0.059	0.052
Total		**5,914,265**	**4,512**	**60.5**	**0.25**	**0.67**	**0.65**	**1.11**	**3.01**	**0.53**	**0.80**	**0.72**
Average Flux (mg/m2-min)			6.5	0.087	0.00036	0.00096	0.00093	0.00160	0.00434	0.00076	0.00116	0.00103

Table 5.4 Site Surface Emissions Summary, TO-15 Compounds.

		Emissions (tons/yr)																			
		TO-15 Compounds																			
Category	**Subset**	**Acetone**	**Propylene**	**Methanol**	**Ethanol**	**Bromomethane**	**Chloromethane**	**Benzene**	**2-Butanone (MEK)**	**Toluene**	**2-propanol (isopropylalcohol)**	**m,p-Xylenes**	**Ethylbenzene**	**Cyclohexane**	**o-Xylene**	**Nonane**	**n-Heptane**	**Acrolein**	**Carbon disulfide**	**Tetrahydrofuran**	**1,2-Dichloroethane**
Exceedance Area		0.734	0.081	0.183	0.212	0.029	0.042	0.082	0.154	0.079	0.059	0.040	0.032	0.047	0.032	0.039	0.030	0.044	0.026	0.035	0.015
Reaction Area	High	0.009	0.001	0.002	0.003	0.001	0.001	0.007	0.001	0.004	0.002	0.005	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001
Reaction Area	Med	0.009	0.001	0.003	0.050	0.002	0.001	0.010	0.001	0.005	0.011	0.004	0.003	0.001	0.003	0.002	0.002	0.001	0.001	0.001	0.001
Reaction Area	Low	0.077	0.010	0.032	0.011	0.005	0.006	0.013	0.025	0.013	0.012	0.008	0.005	0.002	0.005	0.006	0.005	0.003	0.004	0.002	0.002
Non-Reaction Area	High	0.066	0.346	0.020	0.013	0.005	0.004	0.015	0.004	0.013	0.007	0.006	0.006	0.005	0.008	0.007	0.006	0.003	0.013	0.002	0.003
Non-Reaction Area	Med	0.249	0.176	0.202	0.054	0.251	0.135	0.069	0.025	0.052	0.057	0.082	0.086	0.059	0.042	0.030	0.037	0.025	0.021	0.012	0.012
Non-Reaction Area	Low	0.065	0.027	0.030	0.043	0.046	0.069	0.051	0.013	0.034	0.022	0.020	0.020	0.008	0.020	0.024	0.018	0.010	0.014	0.007	0.009
Non SEM Area		0.095	0.051	0.037	0.030	0.027	0.020	0.019	0.018	0.016	0.013	0.013	0.012	0.010	0.009	0.009	0.008	0.007	0.006	0.005	0.003
Total		**1.30**	**0.69**	**0.51**	**0.42**	**0.36**	**0.28**	**0.27**	**0.24**	**0.22**	**0.18**	**0.18**	**0.16**	**0.13**	**0.12**	**0.12**	**0.11**	**0.093**	**0.086**	**0.06**	**0.046**
Average Flux (mg/m2-min)		0.0019	0.0010	0.00073	0.00060	0.00052	0.00040	0.00038	0.00035	0.00031	0.00026	0.00026	0.00024	0.00019	0.00017	0.00017	0.00015	0.00013	0.00012	0.00009	0.00007

Table 5.5 provides a comparison of site-wide emission rates (in tons/year) for selected chemicals from the August 2023, March 2024, and November 2024 flux chamber testing events. These data demonstrate that although there was a significant increase in emissions estimates from the first to the second test, the results of the third event show a substantial decrease in emissions compared to the earlier events, likely resulting from improvements in gas recovery and cover systems. Note that for most of the speciated compounds, the laboratory results were near or below the method detection limit. Therefore, there will likely be no further reductions in quantifiable emissions for those compounds in future events due to the limitations of the performance of the chemical analysis for the gas samples.

Table 5.5 Comparison of Site-wide Surface Emissions for the Three Test Events.

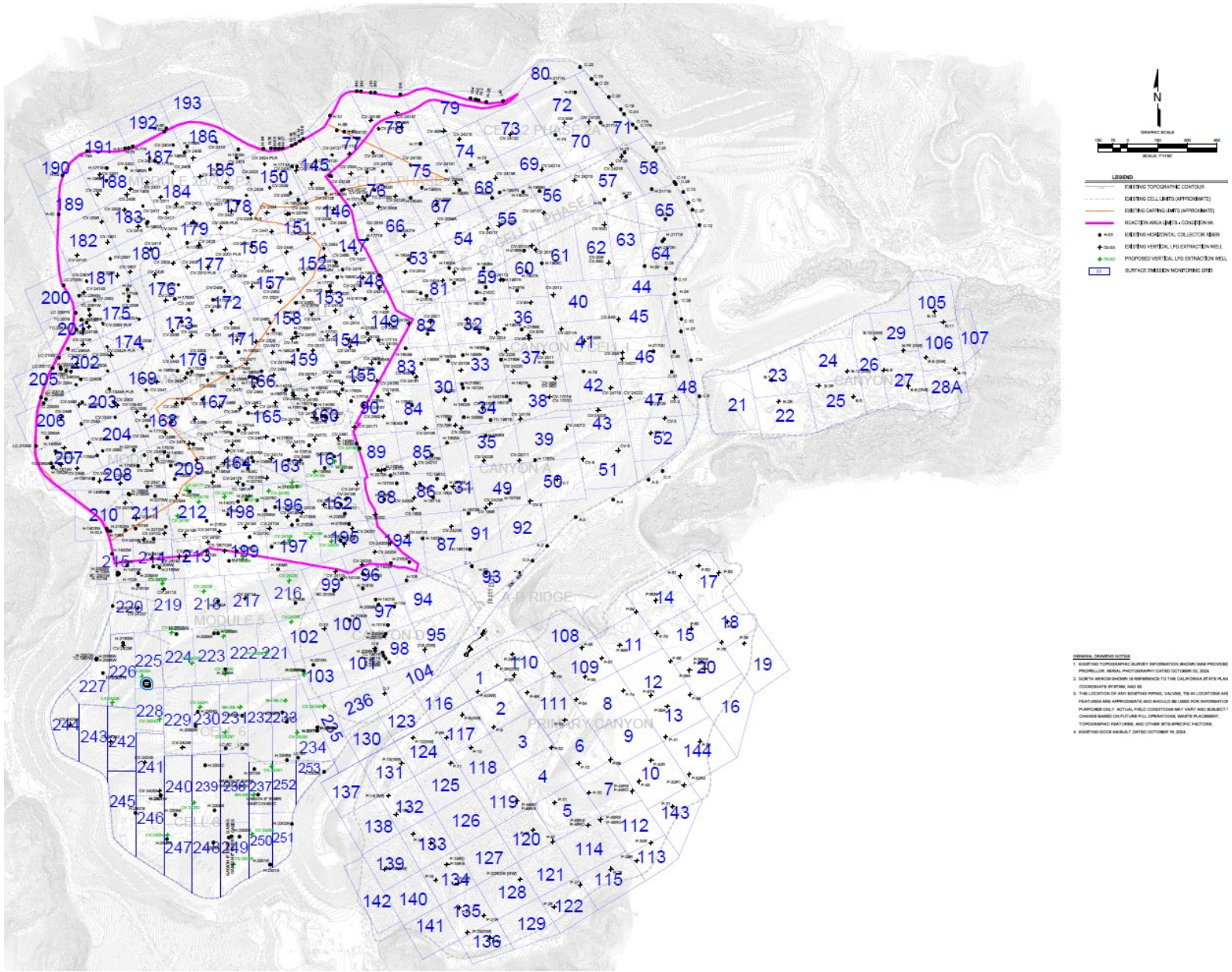
		Event		
Compound	**Units**	**1 (8/23)**	**2 (3/24)**	**3 (11/24)**
Methane	tons/yr	3,357	11,456	4,512
Carbon dioxide	tons/yr	41,312	327,049	216,177
Total VOC	tons/yr	207	853	61
Ethanol	tons/yr	18.3	NQ	0.42
Acetone	tons/yr	17.6	51	1.30
Tetrahydrofuran	tons/yr	13.6	107	0.06
Benzene	tons/yr	9.33	104	0.27
Methanol	tons/yr	9.09	NQ	0.51
Methyl ethyl ketone (MEK)	tons/yr	9.06	51.2	0.24
Propylene	tons/yr	6.62	29.8	0.69
Isopropyl alcohol (IPA)	tons/yr	3.72	15.2	0.18
Isopropyl toluene	tons/yr	3.25	13.7	0.25
Toluene	tons/yr	2.00	18.6	0.22
Ethylbenzene	tons/yr	1.14	10.1	0.16
Total Xylenes	tons/yr	1.52	9.79	0.30
Hydrogen sulfide	tons/yr	0.13	3.81	0.72
Dimethyl sulfide	tons/yr	15.2	57.9	0.93
Note: NQ = Not Quantified				

6. Works Cited

Card and Schmidt. *Chiquita Canyon Landfill, Castaic, California, Post Remediation Assessment of Air Emissions from Landfill Surfaces, Sampling Protocol*. December 2023

U.S. Environmental Protection Agency (USEPA). 1986. *Measurement of Gaseous Emission Rates from Land Surfaces Using an Emission Isolation Flux Chamber- User's Guide*, EPA 600/8-86-008 (NTIS PB86-223161).

Appendix 1
Reaction Area Designation Map


N
GRAPHIC SCALE
SCALE: 1"=150'
LEGEND
EXISTING TOPOGRAPHIC CONTOUR
EXISTING CELL LIMITS (APPROXIMATE)
EXISTING CAPPING LIMITS (APPROXIMATE)
REACTION AREA LIMITS + CONDITION NA
EXISTING HORIZONTAL COLLECTOR FIBER
EXISTING VERTICAL LFG EXTRACTION WELL
PROPOSED VERTICAL LFG EXTRACTION WELL
SURFACE EMISSION MONITORING GRID
GENERAL DRAWING NOTES
1. EXISTING TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS PROVIDE
PROPELLOR, AERIAL PHOTOGRAPHY DATED OCTOBER 02, 2024.
2. NORTH ARROW SHOWN IS REFERENCE TO THE CALIFORNIA STATE PLAN
COORDINATE SYSTEM, NAD 83.
3. THE LOCATION OF ANY EXISTING PIPING, VALVES, TIE-IN LOCATIONS AN
FEATURES ARE APPROXIMATE AND SHOULD BE USED FOR INFORMATIO
PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY VARY AND SUBJECT T
CHANGE BASED ON FUTURE FILL OPERATIONS, WASTE PLACEMENT,
TOPOGRAPHIC FEATURES, AND OTHER SITE-SPECIFIC FACTORS.
4. EXISTING SCCA AS-BUILT DATED OCTOBER 16, 2024.

Appendix 2
Grid Cell Field Screening Data

Appendix 2

Table 2.1

Summary of Screening Point Apportionment Calculations

Grid ID -->	157			152			151			146			182			171			83			88			41		
	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total	Screening Values Highest to Lowest (ppmv as methane)	Number of Points in Group	Fraction of Total
	1100			89			50000			7000			40000			245			913			104			30000		
	200			54			169			1700			10000			154			280			99			519		
	69			51			**116**	4	15%	1300			900			94			**75**	3	10%	79			**170**	4	14%
	59			49			63			250			520			**93**	5	17%	34			**61**	5	17%	27		
	47	6	19%	49			52			210			**350**	11	39%	81			**27**	3	10%	60			24		
	45			47			43			**188**	7	30%	300			65			17			44			24		
	44			39			37			188			112			49			17			39			22		
	43			38			**35**	8	30%	106			90			47			17			37			21		
	35			**35**	9	36%	33			96			80			**31**	6	21%	13			35			**20**	8	28%
	27	7	22%	34			27			92			75			25			**13**	23	79%	**29**	9	31%	17		
	25			34			25			**77**	6	26%	60			22			9			29			17		
	25			31			24			74			50			22			9			27			15		
	19			**27**	7	28%	24			69			40			19			9			25			14		
	17			25			22			43			23			19			9			25			13		
	17			25			22			35			22			17			7			24			12		
	17			25			19			35			17			**15**	18	62%	7			22			12		
	17			22			17			**25**	10	43%	13			15			7			22			11		
	17			15			17			17			**12**	8	29%	14			7			21			**9**	17	59%
	17			15			**15**	15	56%	13			11			12			5			21			9		
	13			14			15			13			9			12			5			21			9		
	13	19	59%	**12**	9	36%	14			12			7			12			5			18			7		
	13			9			14			10			**4**	9	32%	12			5			**17**	15	52%	7		
	12			7			14			7			4			12			5			17			7		
	12			5			13			5			4			12			5			17			5		
	12			5			10						4			11			5			14			5		
	11			5			9						3			9			5			14			5		
	11						9						3			9			5			13			5		
	11						4						3			9			5			12			4		
	11												1			7			4			11			4		
	9															5			4			11			4		
	9																										
	9																										
	9																										
	9																										
Total Points	32			25			27			23			28			29			29			29			29		

Chiquita Canyon Landfill
Cell Screening Form

No Membrane?

Date 11/8

Grid ID 160

Exceedance

Time 10:20

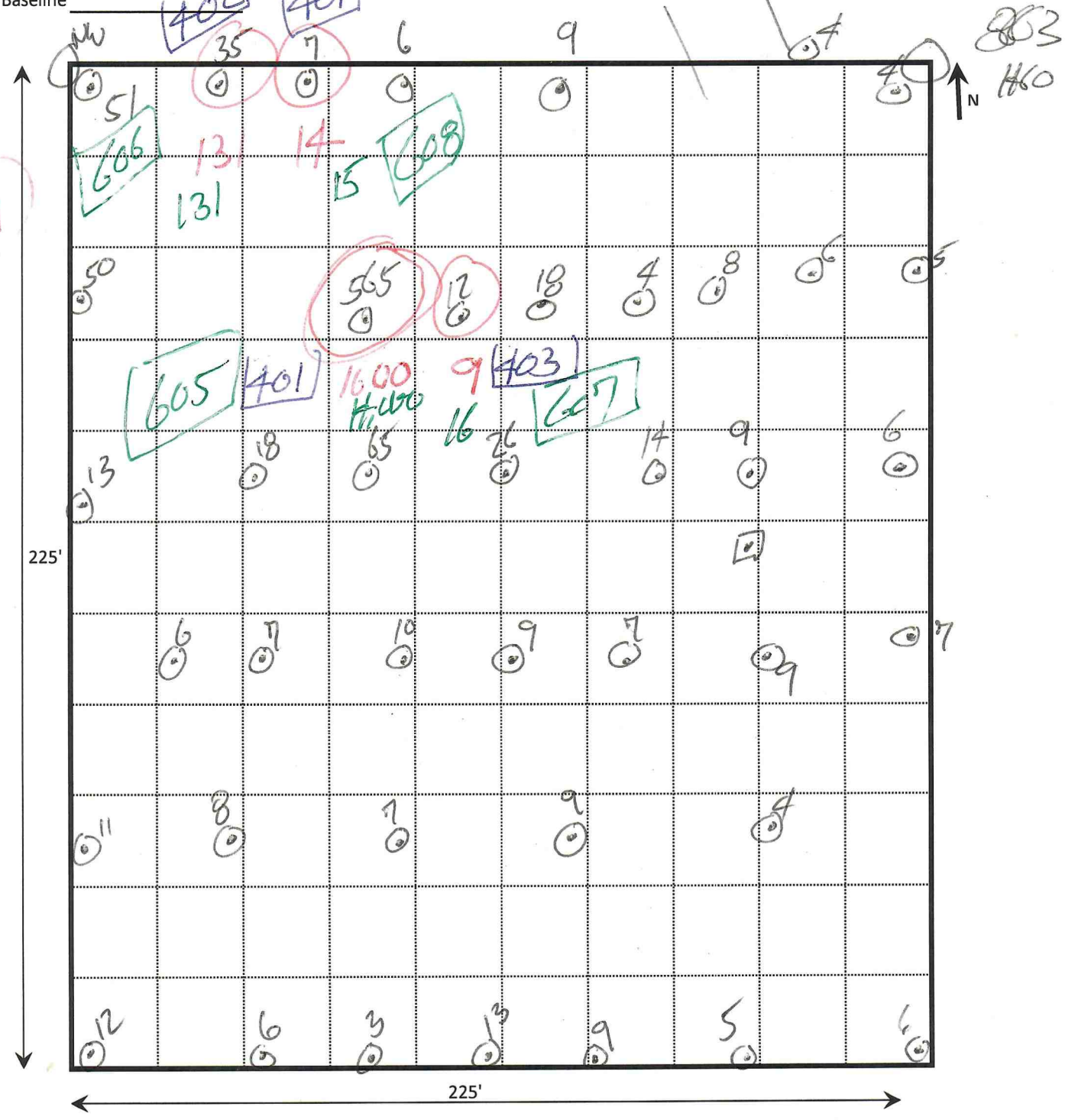
Instrument _____

Coordinates are: 11S 34_,___
3,81_,___

Windpeed/Dir _____

Baseline _____

Samplers _____



Chiquita Canyon Landfill
Cell Screening Form

Grid ID 34

Instrument

Baseline

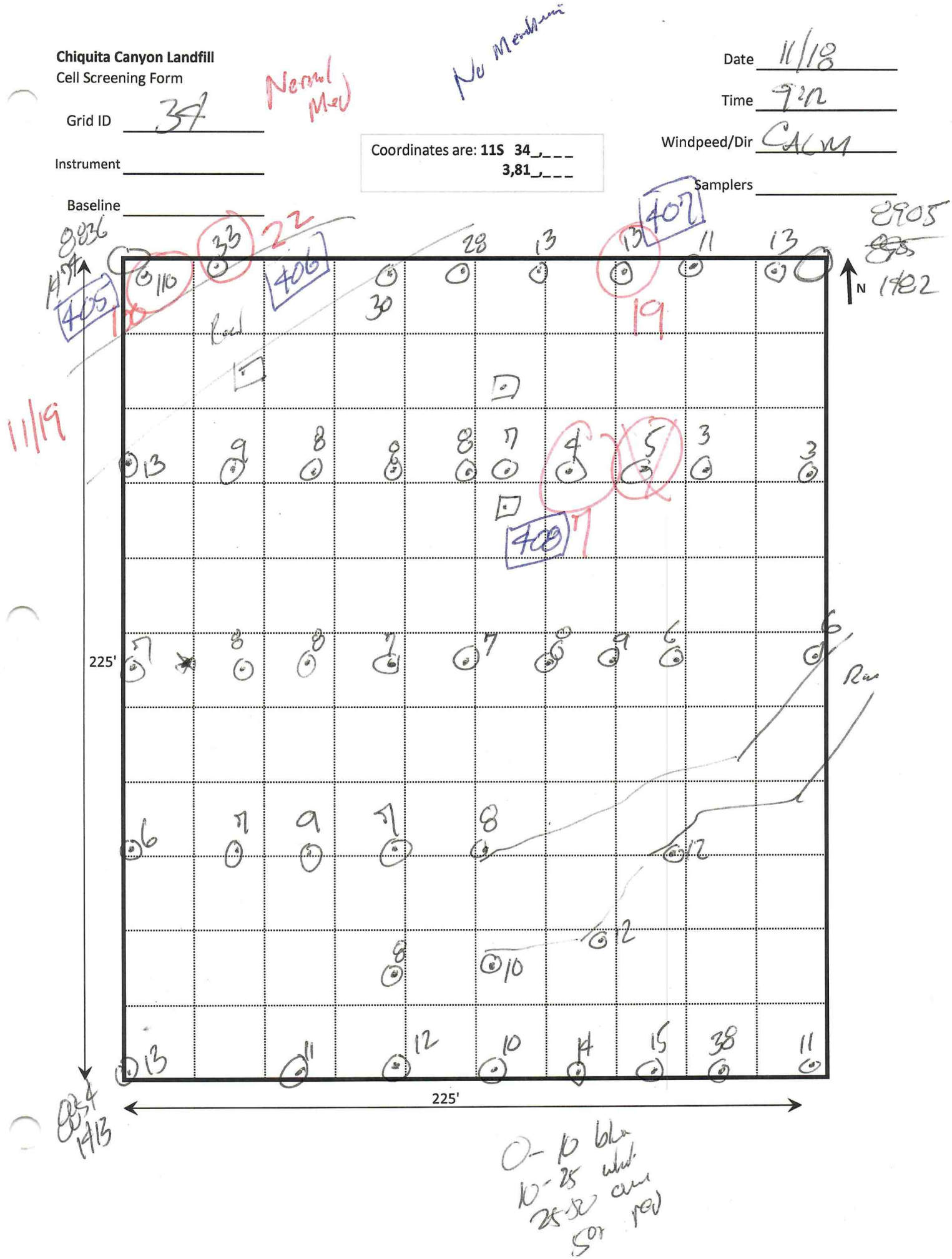
Coordinates are: **11S 34_,___**
3,81_,___

Date 11/18

Time 9:12

Windpeed/Dir CALM

Samplers



0-10 blue
10-25 white
25-50 orange
50+ red

Chiquita Canyon Landfill
Cell Screening Form

Normal Mod Normandini

Date 11/18

Time 9:40

Grid ID 39

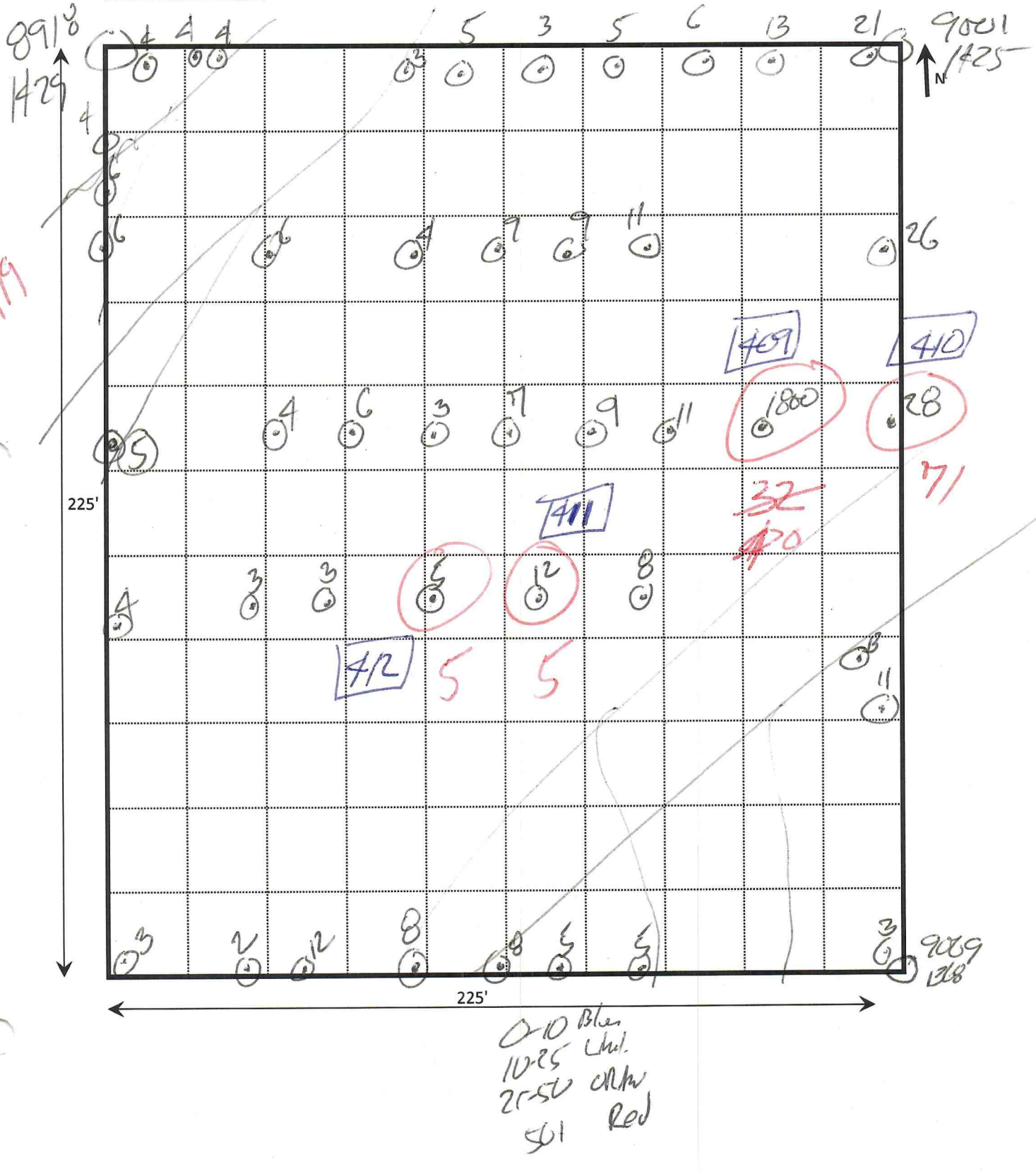
Windpeed/Dir 3

Instrument _____

Coordinates are: 11S 34_,___
3,81_,___

Samplers _____

Baseline _____



Chiquita Canyon Landfill
Cell Screening Form

Grid ID 118

Instrument _____

Baseline _____

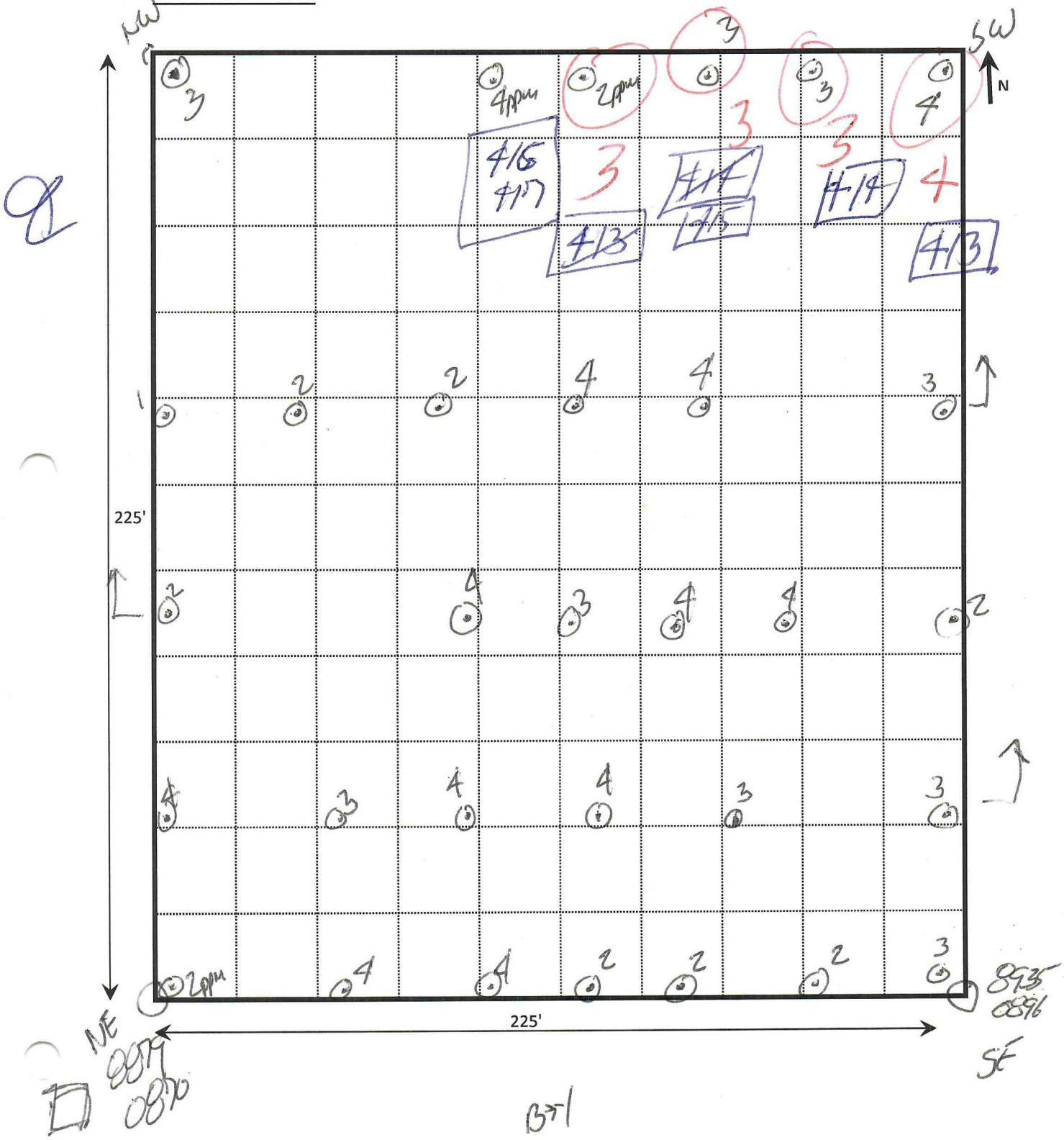
Coordinates are: 11S 34_,_ _ _
3,81_,_ _ _

Date 11/18

Time 12:47

Windpeed/Dir _____

Samplers _____



Chiquita Canyon Landfill
Cell Screening Form

Grid ID 174

Instrument _____

Baseline _____

Reaction Mod

All membrane

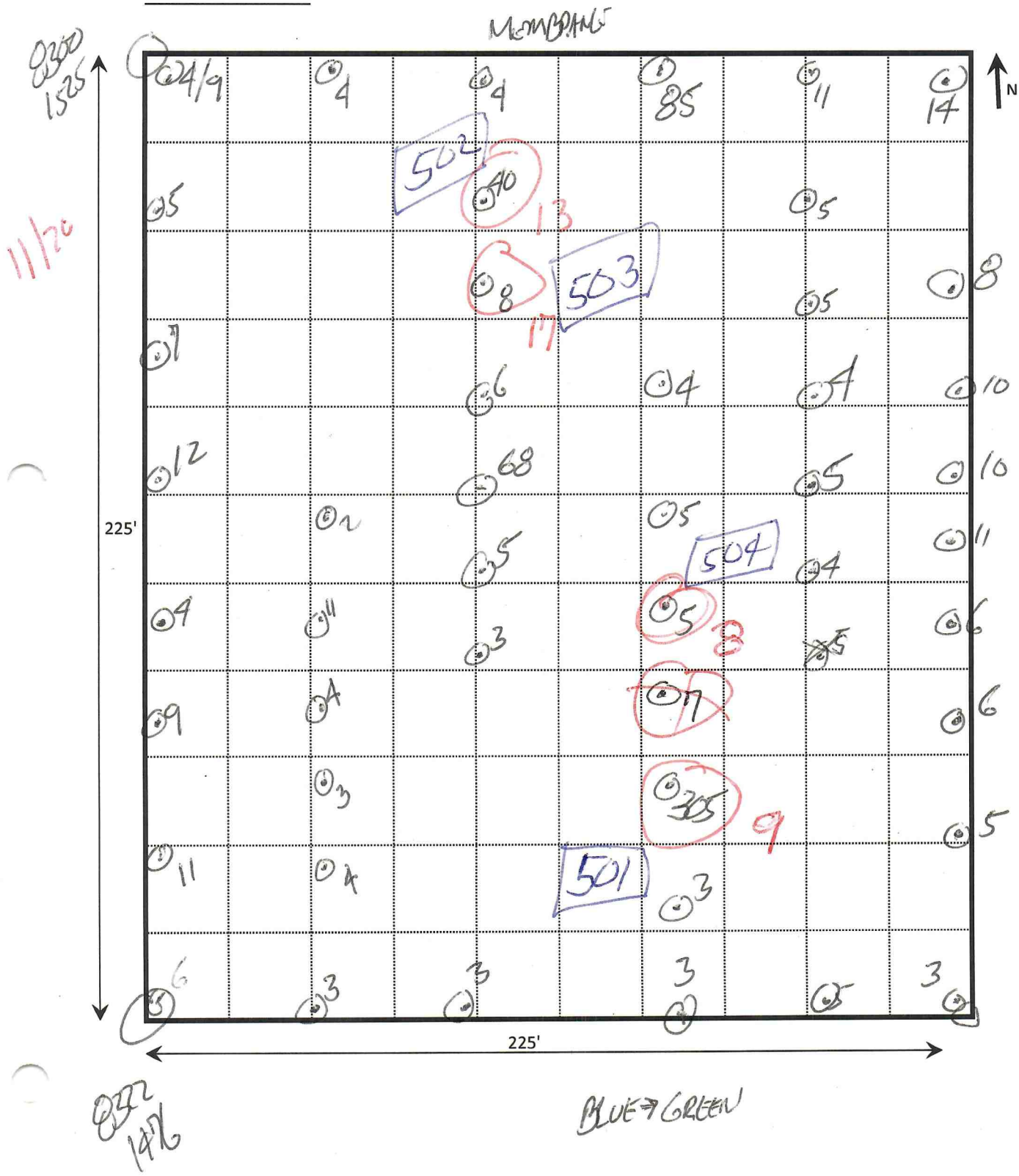
Coordinates are: **11S 34_,___**
3,81_,___

Date 11/18

Time 11:33

Windpeed/Dir _____

Samplers _____



Chiquita Canyon Landfill
Cell Screening Form

Grid ID 152

Instrument _____

Baseline _____

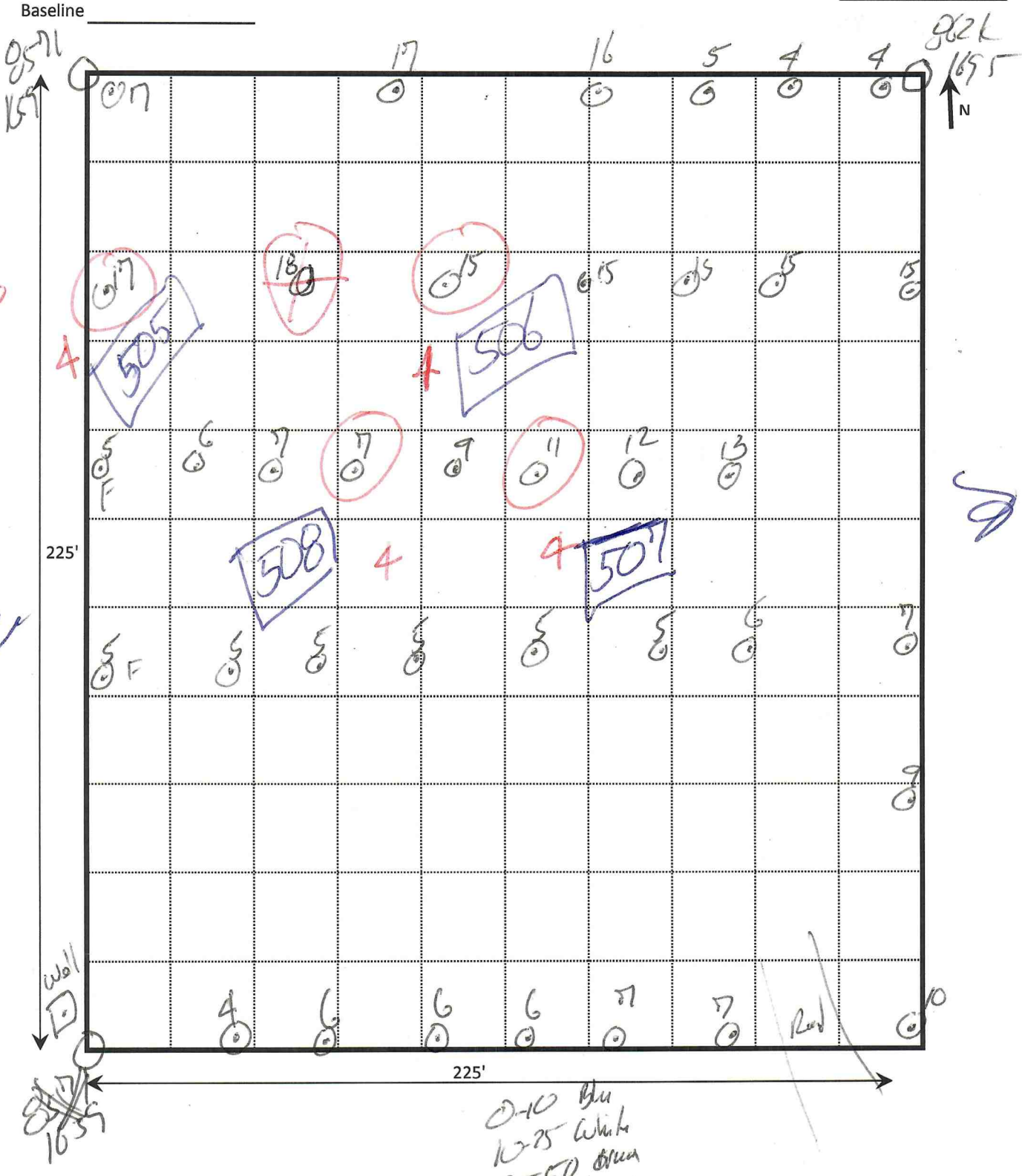
Coordinates are: 11S 34_,___
3,81_,___

Date 11/18

Time 7:55

Windpeed/Dir Calm

Samplers _____



0-10 Blu
10-25 White
25-50 Green
50+ red

Chiquita Canyon Landfill
Cell Screening Form

MIKE

All membrane

Reaction Mish

Grid ID 184

Instrument _____

Baseline _____

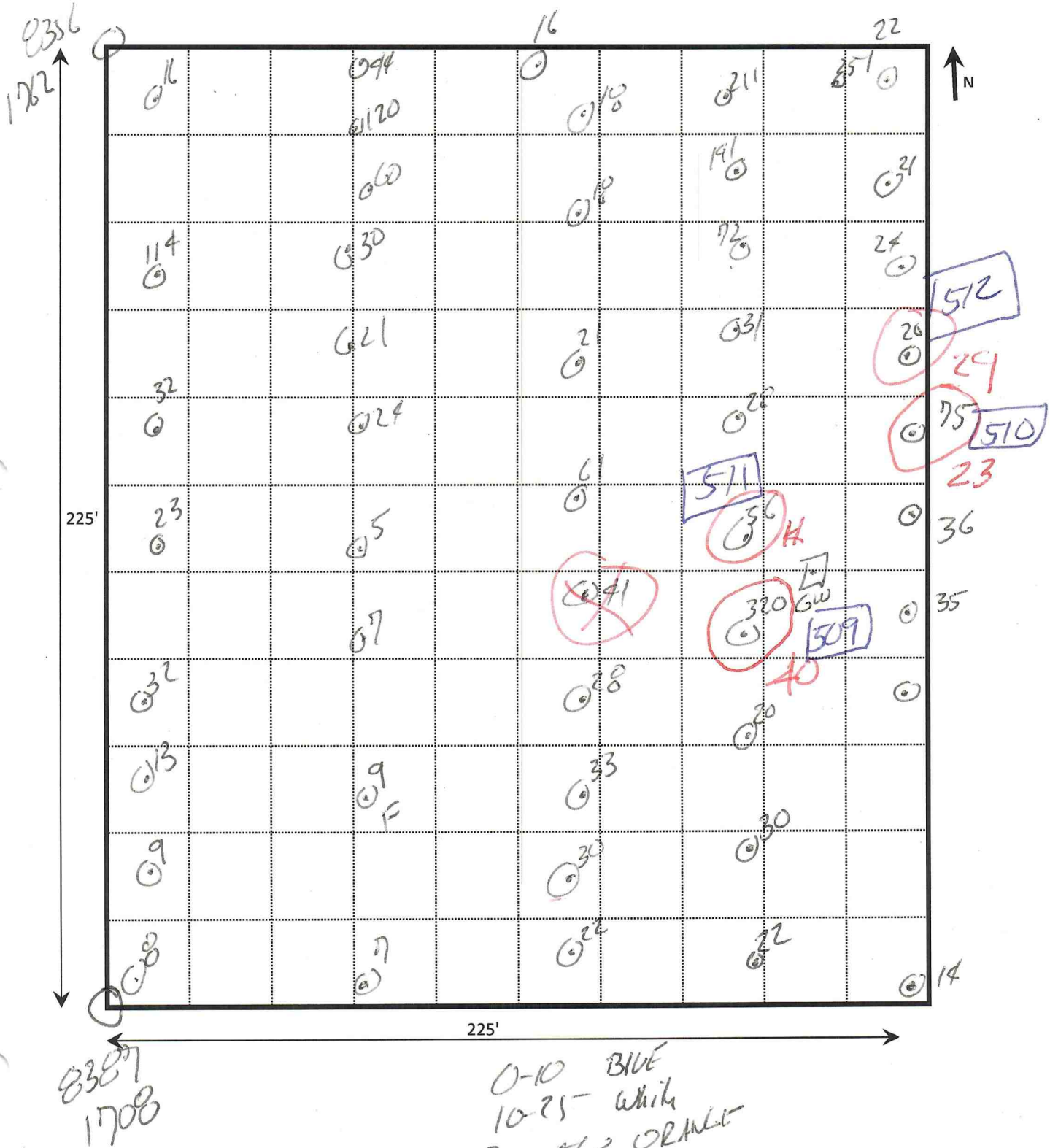
Coordinates are: 11S 34_,___
3,81_,___

Date 11/18

Time 720

Windpeed/Dir _____

Samplers _____



0-10 BLUE
10-25 White
25 SC ORANGE
or Red

Chiquita Canyon Landfill
Cell Screening Form

Normal High No membranes

Grid ID G2

Instrument _____

Baseline _____

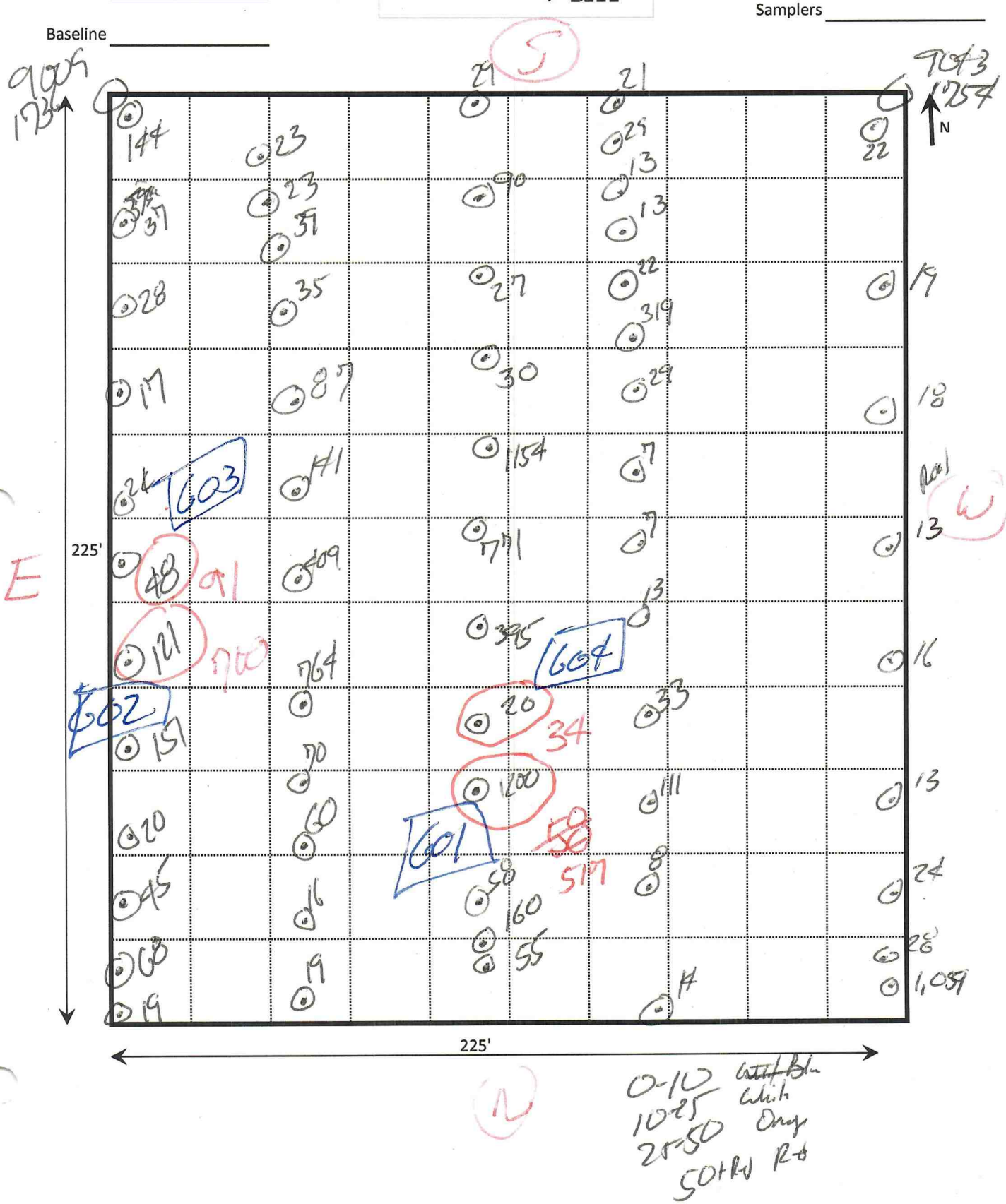
Coordinates are: 11S 34_,___ 3,81_,___

Date 11/6

Time 8:21

Windpeed/Dir _____

Samplers _____



Chiquita Canyon Landfill
Cell Screening Form

Grid ID 705

Instrument _____

Baseline _____

Reading Low 1/2 meaning

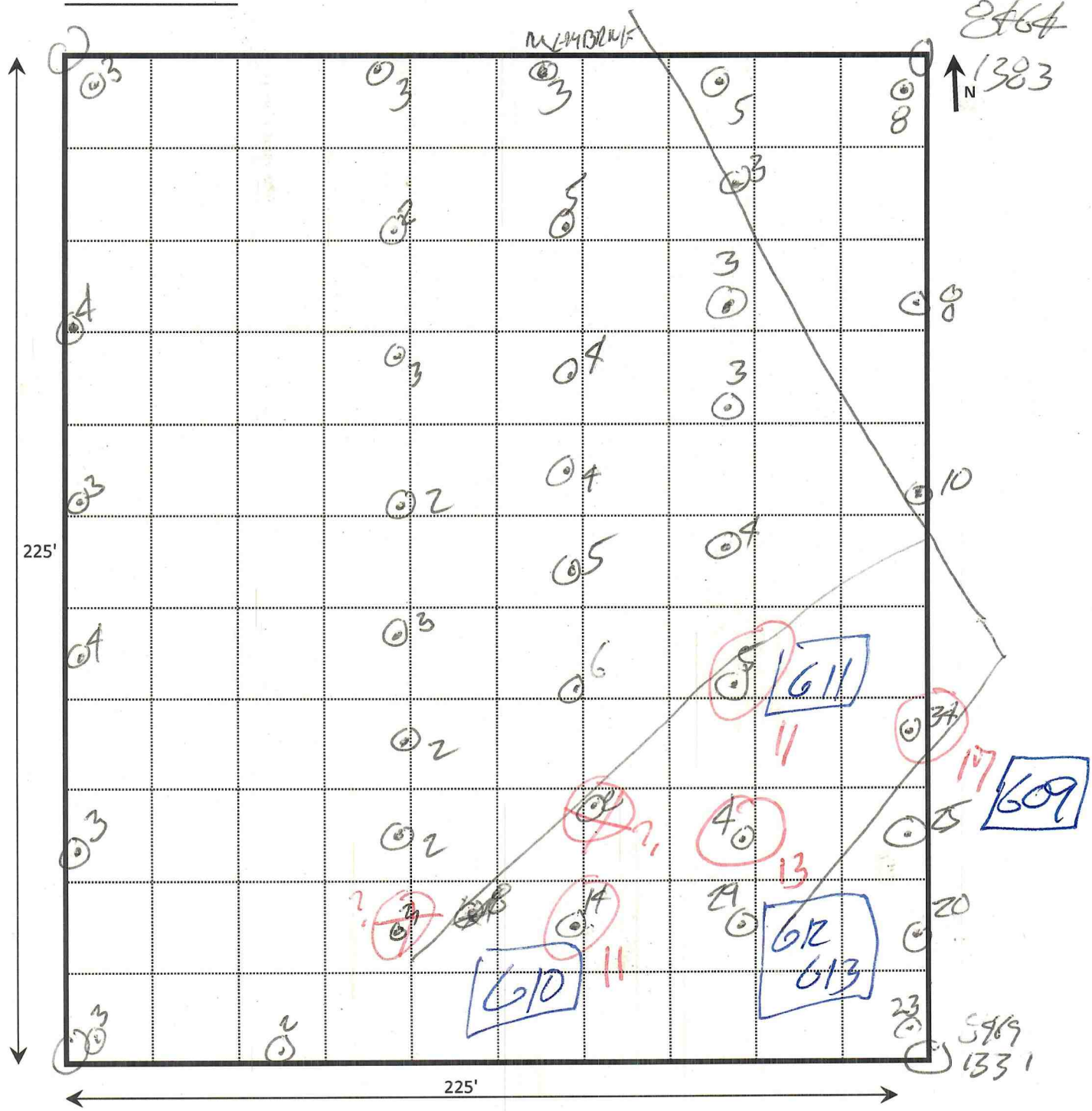
Coordinates are: **11S 34_,___**
3,81_,___

Date 11/10

Time 10:51

Windpeed/Dir _____

Samplers _____



Appendix 3

Emissions Calculations for Each Compound

Odor

			Flux (OU/m2-min)										
		Rep					Weighted Avg.		Used		Area Rep		Emissions
Category	**Subset**	**Cell**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(OU/min)**
Exceedance Area		160	591	7.07	24.6	2.885	12.0	8.5	11.5	8.1	3,878,615	360,335	2,916,989
Repeat		160	357	9.1	23.54	1.27	11.0	7.7					
Reaction Area	High	184	0.620	0.775	1.462	1.226	1.28	1.21	1	1.209	439,863	40,865	49,405
Reaction Area	Med	174	4.843	6.948	1.056	0.664	1.45	1.32	1.0	0.948	513,112	47,670	45,194
Reaction Area	Med	152	1.275	0.7911	0.4056	0.5515	0.52	0.57					
Reaction Area	Low	209	0.871	12.668	6.014	1.004	4.17	4.23	4	4.23	878,998	81,662	345,327
Non-Reaction Area	High	62	27	1	1.54	1.07	1	1	1	1	979,757	91,022	105,526
Non-Reaction Area	Med	34	18.12	57.44	12.45	9.95	16	15	10.8	10.8	1,413,324	131,302	1,415,593
Non-Reaction Area	Med	39	14.98	2	5.86	6.75	6	6					
Non-Reaction Area	Low	118	2.497	0.5213	0.863	3.776	2.29	1.69	2	1.69	3,859,605	358,569	604,520
Non SEM Area										4.9	942,020	87,517	431,711
Total											12,905,294	1,111,425	**5,914,265**

Average Flux = 5,321 mOU/m2-min

4.9329 OU/m2-min

Methane

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	Subset	Cell	M?	(ft2)	(m2)	Max	High	Med	Low	Target	Actual	Target	Actual	(ft2)	(m2)	(mg/min)	(lbs/yr)	(TPY)
Exceedance Area		160		66,546	6,182	820	0.43	16.8	0.057	6.8	3.9	5.9	6.1	3,878,615	360,335	2,197,463	2,546,267	1,273
Repeat		160		66,546	6,182	1,567	45.8	0.51	0.14	4.9	8.3							
Reaction Area	High	184	Y	51,245	4,761	0.009	0.011	0.009	0.010	0.010	0.010	0.010	0.010	439,863	40,865	407	471	0.24
Reaction Area	Med	174	Y	48,344	4,491	0.167	0.013	0.064	0.011	0.032	0.026	0.019	0.016	513,112	47,670	774	897	0.45
Reaction Area	Med	152	Y	42,032	3,905	0.066	0.0062	0.0066	0.0068	0.007	0.007							
Reaction Area	Low	209	M	60,969	5,664	0.008	0.612	0.015	0.014	0.07	0.11	0.07	0.11	878,998	81,662	9,320	10,799	5.4
Non-Reaction Area	High	62		60,736	5,643	446	49	77.69	0.64	36	37	36	37	979,757	91,022	3,375,280	3,911,038	1,956
Non-Reaction Area	Med	34		55,632	5,168	21.40	4.50	3.95	0.23	2	2	17.2	12.4	1,413,324	131,302	1,626,023	1,884,122	942
Non-Reaction Area	Med	39		62,100	5,769	2.35	316	0.34	0.91	32	23							
Non-Reaction Area	Low	118		45,475	4,225	0.062	0.0072	0.011	0.072	0.04	0.03	0.04	0.03	3,859,605	358,569	10,696	12,394	6.2
Non SEM Area													6.5	942,020	87,517	568,519	658,760	329
Total														12,905,294	1,111,425	**7,219,963**	**8,365,989**	**4,512**

Average Flux = 6,496 ug/m2-min
6.496 mg/m2-min

Carbon Dioxide
124-38-9

						Flux (mg/m2-min)												
		Rep		Cell Area						Weighted Avg.		Used		Area Rep		Emissions		
Category	Subset	Cell	M?	(ft2)	(m2)	Max	High	Med	Low	Target	Actual	Target	Actual	(ft2)	(m2)	(mg/min)	(lbs/yr)	(TPY)
Exceedance Area		160		66,546	6,182	4,362.8	862.1	33.1	680.5	439.8	566.8	474.5	509.6	3,878,615	360,335	183,621,014	212,767,207	106,384
Repeat		160		66,546	6,182	7,201.9	287.0	683.8	413.5	509.2	452.4							
Reaction Area	High	184	Y	51,245	4,761	7.2	8.8	7.1	8.6	8.010	8.282	8.010	8.282	439,863	40,865	338,451	392,173	196.09
Reaction Area	Med	174	Y	48,344	4,491	13.1	10.6	12.8	8.9	10.627	10.152	8.107	7.861	513,112	47,670	374,716	434,195	217.10
Reaction Area	Med	152	Y	42,032	3,905	13.3	5.1	5.5	5.7	5.588	5.570							
Reaction Area	Low	209	M	60,969	5,664	6.7	21.2	12.6	11.3	12.82	13.61	12.82	13.61	878,998	81,662	1,111,423	1,287,839	643.9
Non-Reaction Area	High	62		60,736	5,643	1,916.0	624.4	495.4	249.6	385	423	385	423	979,757	91,022	38,490,866	44,600,527	22,300
Non-Reaction Area	Med	34		55,632	5,168	47.1	97.6	38.5	33.4	42	41	868.3	896.8	1,413,324	131,302	117,745,978	136,435,816	68,218
Non-Reaction Area	Med	39		62,100	5,769	71.9	8,552	348.4	1,400.2	1,695	1,752							
Non-Reaction Area	Low	118		45,475	4,225	17.3	6.1	9.3	20.8	14.71	11.74	14.71	11.74	3,859,605	358,569	4,207,820	4,875,728	2,437.9
Non SEM Area													311.2	942,020	87,517	27,236,319	31,559,545	15,780
Total														12,905,294	1,111,425	**345,890,268**	**400,793,485**	**216,177**

Average Flux = 311,213 ug/m2-min
311.2134 mg/m2-min

Total Non-Methane Hydrocarbons
TNMHC - C1

						Flux (mg/m2-min)												
		Rep		Cell Area						Weighted Avg.		Used		Area Rep		Emissions		
Category	Subset	Cell	M?	(ft2)	(m2)	Max	High	Med	Low	Target	Actual	Target	Actual	(ft2)	(m2)	(mg/min)	(lbs/yr)	(TPY)
Exceedance Area		160		66,546	6,182	3	1.08	0.0	0.006	0.1	0.2	0.1	0.1	3,878,615	360,335	42,605	49,368	25
Repeat		160		66,546	6,182	5	0.1	0.08	0.01	0.0	0.0							
Reaction Area	High	184	Y	51,245	4,761	0.002	0.004	0.005	0.026	0.02	0.02	0	0.018	439,863	40,865	740	857	0.43
Reaction Area	Med	174	Y	48,344	4,491	0.002	0.041	0.004	0.001	0.01	0.01	0.0	0.004	513,112	47,670	196	227	0.11
Reaction Area	Med	152	Y	42,032	3,905	0.005	0.0076	0.0017	0.0018	0.00	0.00							
Reaction Area	Low	209	M	60,969	5,664	0.004	0.059	0.010	0.004	0.01	0.01	0	0.01	878,998	81,662	1,208	1,400	0.7
Non-Reaction Area	High	62		60,736	5,643	0	0	0.03	0.02	0	0	0	0	979,757	91,022	6,192	7,175	4
Non-Reaction Area	Med	34		55,632	5,168	0.02	0.02	0.00	0.02	0	0	0.5	0.3	1,413,324	131,302	44,525	51,593	26
Non-Reaction Area	Med	39		62,100	5,769	0.03	8	0.09	0.08	1	1							
Non-Reaction Area	Low	118		45,475	4,225	0.005	0.0016	0.001	0.009	0.00	0.00	0	0.00	3,859,605	358,569	1,382	1,602	0.8
Non SEM Area													0.1	942,020	87,517	7,626	8,837	4
Total														12,905,294	1,111,425	**96,849**	**112,222**	**61**

Average Flux = 87 ug/m2-min
0.087 mg/m2-min

2-Butanone (MEK)
78-93-3

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	1.2517	0.0022	0.0011	0.0002	0.0008	0.0008	0.00095	0.00074	3,878,615	360,335	266	308	0.15
Repeat		160		66,546	6,182	1.9641	0.0001	0.0025	0.0001	0.0011	0.0007							
Reaction Area	High	184	Y	51,245	4,761	0.00004	0.00005	0.00004	0.00005	0.00004	0.00005	0.00004	0.00005	439,863	40,865	2	2	0.0011
Reaction Area	Med	174	Y	48,344	4,491	0.00007	0.00006	0.00007	0.00005	0.00006	0.00006	0.00004	0.00004	513,112	47,670	2	2	0.0012
Reaction Area	Med	152	Y	42,032	3,905	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003							
Reaction Area	Low	209	M	60,969	5,664	0.00004	0.00131	0.00110	0.00006	0.00060	0.00053	0.00060	0.00053	878,998	81,662	43	50	0.025
Non-Reaction Area	High	62		60,736	5,643	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00008	0.00008	979,757	91,022	7	8	0.0040
Non-Reaction Area	Med	34		55,632	5,168	0.0003	0.0005	0.0002	0.0005	0.0004	0.0004	0.00034	0.00033	1,413,324	131,302	44	51	0.025
Non-Reaction Area	Med	39		62,100	5,769	0.0004	0.0012	0.0002	0.0002	0.0003	0.0003							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.00008	0.00006	3,859,605	358,569	23	27	0.013
Non SEM Area													0.00035	942,020	87,517	30	35	0.018
Total														12,905,294	1,111,425	**386**	**448**	**0.24**

Average Flux = 0.35 ug/m2-min
0.0003 mg/m2-min

Acetone
67-64-1

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.5294	0.0041	0.0034	0.0016	0.0025	0.0024	0.00446	0.00351	3,878,615	360,335	1,267	1,468	0.73
Repeat		160		66,546	6,182	1.5321	0.0044	0.0128	0.0015	0.0064	0.0046							
Reaction Area	High	184	Y	51,245	4,761	0.00016	0.00019	0.00036	0.00046	0.00039	0.00040	0.00039	0.00040	439,863	40,865	16	19	0.0094
Reaction Area	Med	174	Y	48,344	4,491	0.00077	0.00057	0.00028	0.00020	0.00027	0.00025	0.00028	0.00033	513,112	47,670	16	18	0.0090
Reaction Area	Med	152	Y	42,032	3,905	0.00065	0.00140	0.00025	0.00013	0.00030	0.00040							
Reaction Area	Low	209	M	60,969	5,664	0.00098	0.00323	0.00163	0.00111	0.00153	0.00162	0.00153	0.00162	878,998	81,662	132	153	0.077
Non-Reaction Area	High	62		60,736	5,643	0.0029	0.0015	0.0008	0.0015	0.0012	0.0012	0.00118	0.00125	979,757	91,022	114	132	0.066
Non-Reaction Area	Med	34		55,632	5,168	0.0034	0.0063	0.0026	0.0044	0.0039	0.0039	0.00333	0.00327	1,413,324	131,302	429	498	0.25
Non-Reaction Area	Med	39		62,100	5,769	0.0016	0.0030	0.0032	0.0025	0.0028	0.0026							
Non-Reaction Area	Low	118		45,475	4,225	0.0009	0.0001	0.0004	0.0005	0.0004	0.0003	0.00041	0.00031	3,859,605	358,569	112	129	0.065
Non SEM Area													0.00188	942,020	87,517	164	190	0.10
Total														12,905,294	1,111,425	**2,086**	**2,417**	**1.30**

Average Flux = 1.88 ug/m2-min
0.002 mg/m2-min

Propylene
115-07-1

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.1137	0.0006	0.0005	0.0002	0.0004	0.0004	0.00040	0.00039	3,878,615	360,335	141	163	0.081
Repeat		160		66,546	6,182	0.2101	0.0008	0.0004	0.0003	0.0004	0.0004							
Reaction Area	High	184	Y	51,245	4,761	0.00011	0.00003	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	439,863	40,865	1	1.2	0.0006
Reaction Area	Med	174	Y	48,344	4,491	0.00027	0.00014	0.00015	0.00003	0.00009	0.00007	0.00006	0.00005	513,112	47,670	2	2.9	0.0014
Reaction Area	Med	152	Y	42,032	3,905	0.00004	0.00008	0.00002	0.00002	0.00002	0.00003							
Reaction Area	Low	209	M	60,969	5,664	0.00013	0.00079	0.00026	0.00004	0.00020	0.00022	0.00020	0.00022	878,998	81,662	18	21	0.010
Non-Reaction Area	High	62		60,736	5,643	0.0038	0.0237	0.0010	0.0003	0.0029	0.0066	0.00291	0.00657	979,757	91,022	598	693	0.346
Non-Reaction Area	Med	34		55,632	5,168	0.0017	0.0012	0.0004	0.0005	0.0006	0.0006	0.00286	0.00232	1,413,324	131,302	304	352	0.176
Non-Reaction Area	Med	39		62,100	5,769	0.0163	0.0444	0.0004	0.0012	0.0052	0.0041							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0002	0.0002	0.0001	0.00017	0.00013	3,859,605	358,569	46	53	0.027
Non SEM Area													0.00100	942,020	87,517	87	101	0.051
Total														12,905,294	1,111,425	**1,110**	**1,286**	**0.69**

Average Flux = 1.00 ug/m2-min
1E-03 mg/m2-min

2-propanol (isopropylalcohol)
67-63-0

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0106	0.0014	0.0003	0.0001	0.0003	0.0004	0.00026	0.00028	3,878,615	360,335	102	118	0.059
Repeat		160		66,546	6,182	0.3763	0.0002	0.0002	0.0001	0.0002	0.0002							
Reaction Area	High	184	Y	51,245	4,761	0.00006	0.00008	0.00006	0.00008	0.00007	0.00008	0.00007	0.00008	439,863	40,865	3	4	0.002
Reaction Area	Med	174	Y	48,344	4,491	0.00098	0.00010	0.00012	0.00008	0.00010	0.00009	0.00024	0.00040	513,112	47,670	19	22	0.011
Reaction Area	Med	152	Y	42,032	3,905	0.00012	0.00337	0.00005	0.00005	0.00038	0.00072							
Reaction Area	Low	209	M	60,969	5,664	0.00006	0.00019	0.00066	0.00010	0.00034	0.00026	0.00034	0.00026	878,998	81,662	21	25	0.012
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.00013	0.00013	979,757	91,022	12	13	0.007
Non-Reaction Area	Med	34		55,632	5,168	0.0004	0.0009	0.0004	0.0017	0.0011	0.0011	0.00070	0.00075	1,413,324	131,302	98	114	0.057
Non-Reaction Area	Med	39		62,100	5,769	0.0007	0.0002	0.0003	0.0004	0.0003	0.0004							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.00013	0.00011	3,859,605	358,569	38	44	0.022
Non SEM Area													0.00026	942,020	87,517	23	27	0.013
Total														12,905,294	1,111,425	**294**	**341**	**0.18**

Average Flux = 0.26 ug/m2-min
0.00026 mg/m2-min

Toluene
108-88-3

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0434	0.0009	0.0010	0.0002	0.0006	0.0005	0.00043	0.00038	3,878,615	360,335	137	159	0.079
Repeat		160		66,546	6,182	0.3447	0.0003	0.0003	0.0002	0.0003	0.0003							
Reaction Area	High	184	Y	51,245	4,761	0.00024	0.00012	0.00030	0.00012	0.00019	0.00016	0.00019	0.00016	439,863	40,865	7	8	0.0038
Reaction Area	Med	174	Y	48,344	4,491	0.00018	0.00168	0.00018	0.00012	0.00030	0.00027	0.00019	0.00018	513,112	47,670	8	10	0.0049
Reaction Area	Med	152	Y	42,032	3,905	0.00019	0.00007	0.00008	0.00008	0.00008	0.00008							
Reaction Area	Low	209	M	60,969	5,664	0.00009	0.00079	0.00018	0.00016	0.00023	0.00027	0.00023	0.00027	878,998	81,662	22	26	0.013
Non-Reaction Area	High	62		60,736	5,643	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.00022	0.00024	979,757	91,022	22	25	0.013
Non-Reaction Area	Med	34		55,632	5,168	0.0017	0.0014	0.0005	0.0005	0.0006	0.0006	0.00073	0.00069	1,413,324	131,302	91	105	0.052
Non-Reaction Area	Med	39		62,100	5,769	0.0010	0.0040	0.0004	0.0006	0.0009	0.0008							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0003	0.0002	0.0002	0.00021	0.00016	3,859,605	358,569	59	68	0.034
Non SEM Area													0.00031	942,020	87,517	27	32	0.016
Total														12,905,294	1,111,425	**345**	**400**	**0.22**

Average Flux = 0.31 ug/m2-min
0.00031 mg/m2-min

m,p-Xylenes
1330-20-7

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0409	0.0006	0.0003	0.0001	0.0002	0.0002	0.00019	0.00019	3,878,615	360,335	70	81	0.040
Repeat		160		66,546	6,182	0.2010	0.0002	0.0002	0.0001	0.0002	0.0002							
Reaction Area	High	184	Y	51,245	4,761	0.00013	0.00049	0.00016	0.00014	0.00018	0.00020	0.00018	0.00020	439,863	40,865	8	9	0.0047
Reaction Area	Med	174	Y	48,344	4,491	0.00011	0.00104	0.00010	0.00020	0.00024	0.00025	0.00014	0.00014	513,112	47,670	7	8	0.004
Reaction Area	Med	152	Y	42,032	3,905	0.00011	0.00004	0.00004	0.00005	0.00004	0.00004							
Reaction Area	Low	209	M	60,969	5,664	0.00005	0.00050	0.00010	0.00009	0.00014	0.00016	0.00014	0.00016	878,998	81,662	13	16	0.008
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.00012	0.00011	979,757	91,022	10	12	0.006
Non-Reaction Area	Med	34		55,632	5,168	0.0004	0.0008	0.0003	0.0003	0.0003	0.0003	0.00140	0.00108	1,413,324	131,302	142	164	0.082
Non-Reaction Area	Med	39		62,100	5,769	0.0006	0.0218	0.0003	0.0003	0.0025	0.0018							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0001	0.0002	0.0001	0.0001	0.00012	0.00009	3,859,605	358,569	34	39	0.020
Non SEM Area													0.00026	942,020	87,517	22	26	0.013
Total														12,905,294	1,111,425	**284**	**329**	**0.18**

Average Flux = 0.26 ug/m2-min
0.00026 mg/m2-min

Carbon disulfide
75-15-0

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0253	0.0002	0.0002	0.0001	0.0001	0.0001	0.00013	0.00013	3,878,615	360,335	45	53	0.026
Repeat		160		66,546	6,182	0.1490	0.0003	0.0001	0.0001	0.0001	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00004	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	439,863	40,865	2	2	0.0011
Reaction Area	Med	174	Y	48,344	4,491	0.00008	0.00006	0.00007	0.00005	0.00006	0.00006	0.00005	0.00005	513,112	47,670	2	3	0.0013
Reaction Area	Med	152	Y	42,032	3,905	0.00008	0.00003	0.00003	0.00003	0.00003	0.00003							
Reaction Area	Low	209	M	60,969	5,664	0.00004	0.00012	0.00007	0.00006	0.00007	0.00008	0.00007	0.00008	878,998	81,662	6	7	0.0037
Non-Reaction Area	High	62		60,736	5,643	0.0008	0.0007	0.0001	0.0001	0.0001	0.0002	0.00014	0.00024	979,757	91,022	22	25	0.013
Non-Reaction Area	Med	34		55,632	5,168	0.0003	0.0006	0.0002	0.0002	0.0002	0.0002	0.00028	0.00027	1,413,324	131,302	36	42	0.021
Non-Reaction Area	Med	39		62,100	5,769	0.0004	0.0013	0.0002	0.0002	0.0003	0.0003							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.00008	0.00007	3,859,605	358,569	24	28	0.014
Non SEM Area													0.00012	942,020	87,517	11	13	0.0063
Total														12,905,294	1,111,425	**138**	**160**	**0.09**

Average Flux = 0.12 ug/m2-min
0.00012 mg/m2-min

Ethanol
64-17-5

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0006	0.0005	0.0006	0.0002	0.0004	0.0003	0.00148	0.00102	3,878,615	360,335	366	424	0.212
Repeat		160		66,546	6,182	0.0745	0.0014	0.0058	0.0002	0.0026	0.0017							
Reaction Area	High	184	Y	51,245	4,761	0.00012	0.00015	0.00012	0.00015	0.00014	0.00014	0.00014	0.00014	439,863	40,865	6	7	0.0034
Reaction Area	Med	174	Y	48,344	4,491	0.00023	0.00019	0.00022	0.00478	0.00250	0.00309	0.00152	0.00180	513,112	47,670	86	100	0.050
Reaction Area	Med	152	Y	42,032	3,905	0.00423	0.00154	0.00084	0.00010	0.00054	0.00052							
Reaction Area	Low	209	M	60,969	5,664	0.00012	0.00037	0.00022	0.00020	0.00022	0.00024	0.00022	0.00024	878,998	81,662	19	22	0.011
Non-Reaction Area	High	62		60,736	5,643	0.0004	0.0002	0.0002	0.0003	0.0003	0.0002	0.00025	0.00024	979,757	91,022	22	26	0.013
Non-Reaction Area	Med	34		55,632	5,168	0.0008	0.0017	0.0007	0.0006	0.0007	0.0007	0.00068	0.00070	1,413,324	131,302	92	107	0.054
Non-Reaction Area	Med	39		62,100	5,769	0.0013	0.0004	0.0006	0.0007	0.0006	0.0007							
Non-Reaction Area	Low	118		45,475	4,225	0.0003	0.0001	0.0002	0.0004	0.0003	0.0002	0.00026	0.00021	3,859,605	358,569	74	85	0.043
Non SEM Area													0.00060	942,020	87,517	52	61	0.030
Total														12,905,294	1,111,425	**666**	**771**	**0.42**

Average Flux = 0.60 ug/m2-min
0.0006 mg/m2-min

Tetrahydrofuran
109-99-9

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0100	0.0001	0.0001	0.0000	0.0001	0.0001	0.00026	0.00017	3,878,615	360,335	60	70	0.035
Repeat		160		66,546	6,182	0.0777	0.0001	0.0011	0.0000	0.0005	0.0003							
Reaction Area	High	184	Y	51,245	4,761	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	439,863	40,865	1	1	0.00054
Reaction Area	Med	174	Y	48,344	4,491	0.00004	0.00003	0.00003	0.00002	0.00003	0.00003	0.00002	0.00002	513,112	47,670	1	1	0.00059
Reaction Area	Med	152	Y	42,032	3,905	0.00004	0.00001	0.00002	0.00002	0.00002	0.00002							
Reaction Area	Low	209	M	60,969	5,664	0.00002	0.00006	0.00004	0.00003	0.00004	0.00004	0.00004	0.00004	878,998	81,662	3	4	0.0018
Non-Reaction Area	High	62		60,736	5,643	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.00004	0.00004	979,757	91,022	3	4	0.0020
Non-Reaction Area	Med	34		55,632	5,168	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001	0.00017	0.00016	1,413,324	131,302	21	24	0.012
Non-Reaction Area	Med	39		62,100	5,769	0.0002	0.0014	0.0001	0.0001	0.0002	0.0002							
Non-Reaction Area	Low	118		45,475	4,225	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.00004	0.00003	3,859,605	358,569	12	13	0.0067
Non SEM Area													0.00009	942,020	87,517	8	9	0.0046
Total														12,905,294	1,111,425	**101**	**117**	**0.063**

Average Flux = 0.09 ug/m2-min
9.1E-05 mg/m2-min

Ethylbenzene
100-41-4

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0232	0.0002	0.0003	0.0001	0.0002	0.0002	0.00017	0.00015	3,878,615	360,335	56	64	0.032
Repeat		160		66,546	6,182	0.0752	0.0002	0.0002	0.0001	0.0002	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	439,863	40,865	3	3	0.0016
Reaction Area	Med	174	Y	48,344	4,491	0.00011	0.00083	0.00010	0.00007	0.00016	0.00015	0.00010	0.00010	513,112	47,670	5	5	0.0026
Reaction Area	Med	152	Y	42,032	3,905	0.00011	0.00004	0.00004	0.00005	0.00004	0.00004							
Reaction Area	Low	209	M	60,969	5,664	0.00005	0.00017	0.00010	0.00009	0.00010	0.00011	0.00010	0.00011	878,998	81,662	9	10	0.0052
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.00012	0.00011	979,757	91,022	10	12	0.0059
Non-Reaction Area	Med	34		55,632	5,168	0.0004	0.0008	0.0003	0.0003	0.0003	0.0003	0.00146	0.00113	1,413,324	131,302	148	171	0.086
Non-Reaction Area	Med	39		62,100	5,769	0.0006	0.0231	0.0003	0.0003	0.0026	0.0019							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0001	0.0002	0.0001	0.0001	0.00012	0.00009	3,859,605	358,569	34	39	0.020
Non SEM Area													0.00024	942,020	87,517	21	24	0.012
Total														12,905,294	1,111,425	**264**	**305**	**0.16**

Average Flux = 0.24 ug/m2-min
0.00024 mg/m2-min

n-Heptane
142-82-5

						Flux (mg/m2-min)												
		Rep		Cell Area						Weighted Avg.		Used		Area Rep		Emissions		
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0145	0.0002	0.0002	0.0001	0.0002	0.0001	0.00016	0.00015	3,878,615	360,335	52	61	0.030
Repeat		160		66,546	6,182	0.0733	0.0002	0.0002	0.0001	0.0002	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00005	0.00007	0.00005	0.00006	0.00006	0.00006	0.00006	0.00006	439,863	40,865	3	3	0.0015
Reaction Area	Med	174	Y	48,344	4,491	0.00010	0.00008	0.00010	0.00007	0.00008	0.00008	0.00006	0.00006	513,112	47,670	3	3	0.0017
Reaction Area	Med	152	Y	42,032	3,905	0.00010	0.00004	0.00004	0.00004	0.00004	0.00004							
Reaction Area	Low	209	M	60,969	5,664	0.00005	0.00016	0.00010	0.00009	0.00010	0.00010	0.00010	0.00010	878,998	81,662	8	10	0.0049
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.00011	0.00011	979,757	91,022	10	11	0.0056
Non-Reaction Area	Med	34		55,632	5,168	0.0004	0.0007	0.0003	0.0003	0.0003	0.0003	0.00055	0.00048	1,413,324	131,302	63	73	0.037
Non-Reaction Area	Med	39		62,100	5,769	0.0005	0.0051	0.0002	0.0003	0.0008	0.0006							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0001	0.0002	0.0001	0.0001	0.00011	0.00009	3,859,605	358,569	32	37	0.018
Non SEM Area													0.00015	942,020	87,517	13	16	0.0078
Total														12,905,294	1,111,425	**171**	**198**	**0.11**

Average Flux = 0.15 ug/m2-min
0.00015 mg/m2-min

o-Xylene
95-47-6

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0167	0.0002	0.0003	0.0001	0.0002	0.0002	0.00017	0.00015	3,878,615	360,335	55	64	0.032
Repeat		160		66,546	6,182	0.0588	0.0002	0.0002	0.0001	0.0002	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00006	0.00028	0.00006	0.00007	0.00008	0.00010	0.00008	0.00010	439,863	40,865	4	5	0.0023
Reaction Area	Med	174	Y	48,344	4,491	0.00011	0.00022	0.00010	0.00017	0.00015	0.00016	0.00010	0.00010	513,112	47,670	5	6	0.0028
Reaction Area	Med	152	Y	42,032	3,905	0.00011	0.00004	0.00004	0.00005	0.00004	0.00004							
Reaction Area	Low	209	M	60,969	5,664	0.00005	0.00017	0.00010	0.00009	0.00010	0.00011	0.00010	0.00011	878,998	81,662	9	10	0.0052
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0003	0.0001	0.0001	0.0001	0.0002	0.00013	0.00016	979,757	91,022	14	17	0.0083
Non-Reaction Area	Med	34		55,632	5,168	0.0004	0.0008	0.0003	0.0003	0.0003	0.0003	0.00064	0.00055	1,413,324	131,302	73	84	0.042
Non-Reaction Area	Med	39		62,100	5,769	0.0014	0.0067	0.0003	0.0003	0.0009	0.0008							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0001	0.0002	0.0001	0.0001	0.00012	0.00009	3,859,605	358,569	34	39	0.020
Non SEM Area													0.00017	942,020	87,517	15	18	0.0088
Total														12,905,294	1,111,425	**194**	**225**	**0.12**

Average Flux = 0.17 ug/m2-min
0.00017 mg/m2-min

Methanol
67-56-1

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0014	0.0017	0.0004	0.0003	0.0005	0.0006	0.00084	0.00087	3,878,615	360,335	315	365	0.183
Repeat		160		66,546	6,182	0.0048	0.0015	0.0013	0.0010	0.0012	0.0012							
Reaction Area	High	184	Y	51,245	4,761	0.00009	0.00011	0.00009	0.00010	0.00010	0.00010	0.00010	0.00010	439,863	40,865	4	5	0.0024
Reaction Area	Med	174	Y	48,344	4,491	0.00016	0.00013	0.00015	0.00011	0.00013	0.00012	0.00010	0.00010	513,112	47,670	5	5	0.0026
Reaction Area	Med	152	Y	42,032	3,905	0.00016	0.00006	0.00007	0.00007	0.00007	0.00007							
Reaction Area	Low	209	M	60,969	5,664	0.00008	0.00165	0.00044	0.00048	0.00058	0.00068	0.00058	0.00068	878,998	81,662	55	64	0.032
Non-Reaction Area	High	62		60,736	5,643	0.0007	0.0001	0.0001	0.0007	0.0004	0.0004	0.00041	0.00037	979,757	91,022	34	39	0.020
Non-Reaction Area	Med	34		55,632	5,168	0.0006	0.0012	0.0020	0.0017	0.0018	0.0017	0.00295	0.00265	1,413,324	131,302	348	403	0.202
Non-Reaction Area	Med	39		62,100	5,769	0.0009	0.0017	0.0057	0.0033	0.0041	0.0036							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0003	0.0002	0.0001	0.00018	0.00014	3,859,605	358,569	51	59	0.030
Non SEM Area													0.00073	942,020	87,517	64	74	0.037
Total														12,905,294	1,111,425	**812**	**941**	**0.51**

Average Flux = 0.73 ug/m2-min
0.00073 mg/m2-min

Nonane
111-84-2

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0134	0.0003	0.0003	0.0001	0.0002	0.0002	0.00020	0.00019	3,878,615	360,335	67	78	0.039
Repeat		160		66,546	6,182	0.0718	0.0002	0.0002	0.0001	0.0002	0.0002							
Reaction Area	High	184	Y	51,245	4,761	0.00007	0.00008	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008	439,863	40,865	3	4	0.0019
Reaction Area	Med	174	Y	48,344	4,491	0.00013	0.00026	0.00013	0.00009	0.00012	0.00011	0.00009	0.00008	513,112	47,670	4	5	0.0023
Reaction Area	Med	152	Y	42,032	3,905	0.00013	0.00005	0.00005	0.00006	0.00005	0.00005							
Reaction Area	Low	209	M	60,969	5,664	0.00007	0.00021	0.00012	0.00011	0.00012	0.00013	0.00012	0.00013	878,998	81,662	11	12	0.0062
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.00014	0.00014	979,757	91,022	12	14	0.0071
Non-Reaction Area	Med	34		55,632	5,168	0.0005	0.0009	0.0004	0.0003	0.0004	0.0004	0.00038	0.00039	1,413,324	131,302	52	60	0.030
Non-Reaction Area	Med	39		62,100	5,769	0.0007	0.0002	0.0003	0.0004	0.0004	0.0004							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.00014	0.00011	3,859,605	358,569	41	47	0.024
Non SEM Area													0.00017	942,020	87,517	15	17	0.0087
Total														12,905,294	1,111,425	**190**	**220**	**0.12**

Average Flux = 0.17 ug/m2-min
0.00017 mg/m2-min

Cyclohexane
110-82-7

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0057	0.0003	0.0004	0.0000	0.0002	0.0002	0.00020	0.00022	3,878,615	360,335	80	93	0.047
Repeat		160		66,546	6,182	0.0342	0.0013	0.0001	0.0000	0.0002	0.0003							
Reaction Area	High	184	Y	51,245	4,761	0.00002	0.00003	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	439,863	40,865	1	1	0.00063
Reaction Area	Med	174	Y	48,344	4,491	0.00004	0.00003	0.00004	0.00003	0.00003	0.00003	0.00003	0.00002	513,112	47,670	1	1	0.00069
Reaction Area	Med	152	Y	42,032	3,905	0.00004	0.00002	0.00002	0.00002	0.00002	0.00002							
Reaction Area	Low	209	M	60,969	5,664	0.00002	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	878,998	81,662	4	4	0.0021
Non-Reaction Area	High	62		60,736	5,643	0.0001	0.0003	0.0000	0.0001	0.0001	0.0001	0.00007	0.00010	979,757	91,022	9	11	0.0054
Non-Reaction Area	Med	34		55,632	5,168	0.0006	0.0008	0.0001	0.0001	0.0002	0.0002	0.00104	0.00078	1,413,324	131,302	102	118	0.059
Non-Reaction Area	Med	39		62,100	5,769	0.0002	0.0180	0.0001	0.0001	0.0019	0.0014							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.00005	0.00004	3,859,605	358,569	14	16	0.0079
Non SEM Area													0.00019	942,020	87,517	17	19	0.010
Total														12,905,294	1,111,425	**211**	**245**	**0.13**

Average Flux = 0.19 ug/m2-min
0.00019 mg/m2-min

Bromomethane
74-83-9

						Flux (mg/m2-min)												
		Rep		Cell Area						Weighted Avg.		Used		Area Rep		Emissions		
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0034	0.0002	0.0002	0.0001	0.0002	0.0001	0.00015	0.00014	3,878,615	360,335	49	57	0.029
Repeat		160		66,546	6,182	0.0140	0.0002	0.0002	0.0001	0.0001	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00005	0.00006	0.00005	0.00006	0.00006	0.00006	0.00006	0.00006	439,863	40,865	2	3	0.0014
Reaction Area	Med	174	Y	48,344	4,491	0.00009	0.00008	0.00009	0.00006	0.00008	0.00007	0.00006	0.00006	513,112	47,670	3	3	0.0016
Reaction Area	Med	152	Y	42,032	3,905	0.00010	0.00004	0.00004	0.00004	0.00004	0.00004							
Reaction Area	Low	209	M	60,969	5,664	0.00005	0.00015	0.00009	0.00008	0.00009	0.00010	0.00009	0.00010	878,998	81,662	8	9	0.0046
Non-Reaction Area	High	62		60,736	5,643	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00010	0.00010	979,757	91,022	9	11	0.0053
Non-Reaction Area	Med	34		55,632	5,168	0.0003	0.0007	0.0003	0.0002	0.0003	0.0003	0.00322	0.00330	1,413,324	131,302	433	502	0.251
Non-Reaction Area	Med	39		62,100	5,769	0.0005	0.0371	0.0002	0.0047	0.0061	0.0063							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0004	0.0001	0.0001	0.0001	0.0002	0.00014	0.00022	3,859,605	358,569	79	91	0.046
Non SEM Area													0.00052	942,020	87,517	46	53	0.027
Total														12,905,294	1,111,425	**583**	**676**	**0.36**

Average Flux = 0.52 ug/m2-min
0.00052 mg/m2-min

1,2-Dichloroethane
107-06-2

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0078	0.0001	0.0001	0.0000	0.0001	0.0001	0.00008	0.00007	3,878,615	360,335	26	30	0.015
Repeat		160		66,546	6,182	0.0392	0.0001	0.0001	0.0001	0.0001	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	439,863	40,865	1	1	0.00075
Reaction Area	Med	174	Y	48,344	4,491	0.00005	0.00004	0.00005	0.00003	0.00004	0.00004	0.00003	0.00003	513,112	47,670	1	2	0.00081
Reaction Area	Med	152	Y	42,032	3,905	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002							
Reaction Area	Low	209	M	60,969	5,664	0.00003	0.00008	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	878,998	81,662	4	5	0.0024
Non-Reaction Area	High	62		60,736	5,643	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.00005	0.00005	979,757	91,022	5	6	0.0028
Non-Reaction Area	Med	34		55,632	5,168	0.0002	0.0004	0.0001	0.0001	0.0002	0.0002	0.00015	0.00015	1,413,324	131,302	20	23	0.012
Non-Reaction Area	Med	39		62,100	5,769	0.0003	0.0001	0.0001	0.0002	0.0001	0.0001							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.00006	0.00004	3,859,605	358,569	16	18	0.0092
Non SEM Area													0.00007	942,020	87,517	6	7	0.0034
Total														12,905,294	1,111,425	**74**	**85**	**0.046**

Average Flux = 0.07 ug/m2-min
6.6E-05 mg/m2-min

Chloromethane
74-87-3

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0013	0.0005	0.0002	0.0001	0.0002	0.0002	0.00024	0.00020	3,878,615	360,335	72	83	0.042
Repeat		160		66,546	6,182	0.0069	0.0001	0.0007	0.0001	0.0003	0.0002							
Reaction Area	High	184	Y	51,245	4,761	0.00004	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	439,863	40,865	2	2	0.0011
Reaction Area	Med	174	Y	48,344	4,491	0.00008	0.00026	0.00007	0.00005	0.00008	0.00008	0.00006	0.00005	513,112	47,670	3	3	0.0015
Reaction Area	Med	152	Y	42,032	3,905	0.00008	0.00003	0.00003	0.00003	0.00003	0.00003							
Reaction Area	Low	209	M	60,969	5,664	0.00004	0.00046	0.00007	0.00007	0.00011	0.00014	0.00011	0.00014	878,998	81,662	11	13	0.0064
Non-Reaction Area	High	62		60,736	5,643	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00008	0.00008	979,757	91,022	7	8	0.0042
Non-Reaction Area	Med	34		55,632	5,168	0.0006	0.0006	0.0002	0.0005	0.0004	0.0004	0.00203	0.00177	1,413,324	131,302	232	269	0.135
Non-Reaction Area	Med	39		62,100	5,769	0.0011	0.0130	0.0031	0.0023	0.0037	0.0031							
Non-Reaction Area	Low	118		45,475	4,225	0.0006	0.0002	0.0002	0.0007	0.0004	0.0003	0.00042	0.00033	3,859,605	358,569	118	137	0.069
Non SEM Area													0.00040	942,020	87,517	35	41	0.020
Total														12,905,294	1,111,425	**445**	**516**	**0.28**

Average Flux = 0.40 ug/m2-min
0.0004 mg/m2-min

Benzene
71-43-2

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0043	0.0006	0.0007	0.0003	0.0005	0.0004	0.00043	0.00039	3,878,615	360,335	142	165	0.082
Repeat		160		66,546	6,182	0.0179	0.0005	0.0005	0.0003	0.0004	0.0004							
Reaction Area	High	184	Y	51,245	4,761	0.00054	0.00018	0.00067	0.00018	0.00038	0.00029	0.00038	0.00029	439,863	40,865	12	14	0.0068
Reaction Area	Med	174	Y	48,344	4,491	0.00027	0.00308	0.00053	0.00018	0.00061	0.00053	0.00040	0.00038	513,112	47,670	18	21	0.010
Reaction Area	Med	152	Y	42,032	3,905	0.00028	0.00011	0.00011	0.00028	0.00020	0.00022							
Reaction Area	Low	209	M	60,969	5,664	0.00014	0.00044	0.00026	0.00023	0.00027	0.00028	0.00027	0.00028	878,998	81,662	23	27	0.013
Non-Reaction Area	High	62		60,736	5,643	0.0004	0.0002	0.0003	0.0003	0.0003	0.0003	0.00030	0.00029	979,757	91,022	26	31	0.015
Non-Reaction Area	Med	34		55,632	5,168	0.0010	0.0020	0.0008	0.0007	0.0009	0.0009	0.00091	0.00091	1,413,324	131,302	119	138	0.069
Non-Reaction Area	Med	39		62,100	5,769	0.0015	0.0025	0.0007	0.0009	0.0009	0.0010							
Non-Reaction Area	Low	118		45,475	4,225	0.0004	0.0001	0.0002	0.0004	0.0003	0.0002	0.00031	0.00024	3,859,605	358,569	87	101	0.051
Non SEM Area													0.00038	942,020	87,517	34	39	0.019
Total														12,905,294	1,111,425	**427**	**495**	**0.27**

Average Flux = 0.38 ug/m2-min
0.00038 mg/m2-min

Isopropyltoluene
99-87-6

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0097	0.0006	0.0007	0.0003	0.0005	0.0004	0.00042	0.00039	3,878,615	360,335	140	162	0.081
Repeat		160		66,546	6,182	0.0329	0.0005	0.0005	0.0003	0.0004	0.0004							
Reaction Area	High	184	Y	51,245	4,761	0.00014	0.00018	0.00014	0.00017	0.00016	0.00017	0.00016	0.00017	439,863	40,865	7	8	0.0040
Reaction Area	Med	174	Y	48,344	4,491	0.00027	0.00455	0.00026	0.00018	0.00065	0.00058	0.00038	0.00035	513,112	47,670	17	19	0.010
Reaction Area	Med	152	Y	42,032	3,905	0.00027	0.00010	0.00011	0.00012	0.00011	0.00011							
Reaction Area	Low	209	M	60,969	5,664	0.00014	0.00043	0.00026	0.00023	0.00026	0.00028	0.00026	0.00028	878,998	81,662	23	26	0.013
Non-Reaction Area	High	62		60,736	5,643	0.0004	0.0002	0.0002	0.0003	0.0003	0.0003	0.00029	0.00028	979,757	91,022	26	30	0.015
Non-Reaction Area	Med	34		55,632	5,168	0.0010	0.0020	0.0008	0.0007	0.0008	0.0008	0.00079	0.00082	1,413,324	131,302	108	125	0.062
Non-Reaction Area	Med	39		62,100	5,769	0.0015	0.0005	0.0006	0.0009	0.0007	0.0008							
Non-Reaction Area	Low	118		45,475	4,225	0.0004	0.0001	0.0002	0.0004	0.0003	0.0002	0.00030	0.00024	3,859,605	358,569	86	99	0.050
Non SEM Area													0.00036	942,020	87,517	32	37	0.018
Total														12,905,294	1,111,425	**405**	**469**	**0.25**

Average Flux = 0.36 ug/m2-min
0.00036 mg/m2-min

Acrolein
107-02-8

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0008	0.0007	0.0005	0.0002	0.0004	0.0003	0.00022	0.00021	3,878,615	360,335	75	87	0.044
Repeat		160		66,546	6,182	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001							
Reaction Area	High	184	Y	51,245	4,761	0.00003	0.00004	0.00003	0.00004	0.00003	0.00004	0.00003	0.00004	439,863	40,865	1	2	0.0008
Reaction Area	Med	174	Y	48,344	4,491	0.00006	0.00004	0.00005	0.00004	0.00005	0.00004	0.00003	0.00003	513,112	47,670	2	2	0.001
Reaction Area	Med	152	Y	42,032	3,905	0.00006	0.00002	0.00002	0.00002	0.00002	0.00002							
Reaction Area	Low	209	M	60,969	5,664	0.00003	0.00009	0.00005	0.00005	0.00005	0.00006	0.00005	0.00006	878,998	81,662	5	5	0.003
Non-Reaction Area	High	62		60,736	5,643	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.00006	0.00006	979,757	91,022	5	6	0.003
Non-Reaction Area	Med	34		55,632	5,168	0.0002	0.0004	0.0002	0.0007	0.0005	0.0005	0.00031	0.00033	1,413,324	131,302	43	50	0.025
Non-Reaction Area	Med	39		62,100	5,769	0.0003	0.0001	0.0001	0.0002	0.0002	0.0002							
Non-Reaction Area	Low	118		45,475	4,225	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.00006	0.00005	3,859,605	358,569	18	21	0.010
Non SEM Area													0.00013	942,020	87,517	12	14	0.007
Total														12,905,294	1,111,425	**150**	**173**	**0.09**

Average Flux = 0.13 ug/m2-min
0.00013 mg/m2-min

TO-14
Toluene
108-88-3

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.1926	0.0018	0.0004	0.0001	0.0004	0.0005	0.0004	0.0005	3,878,615	360,335	165	192	0.10
Repeat		160		66,546	6,182	0.2288	0.0012	0.0005	0.0001	0.0004	0.0004							
Reaction Area	High	184	Y	51,245	4,761	0.00013	0.00007	0.00006	0.00034	0.00020	0.00024	0.0002	0.0002	439,863	40,865	10	11	0.0057
Reaction Area	Med	174	Y	48,344	4,491	0.00012	0.00246	0.00012	0.00008	0.00034	0.00030	0.0002	0.0002	513,112	47,670	8	10	0.0048
Reaction Area	Med	152	Y	42,032	3,905	0.00012	0.00005	0.00005	0.00005	0.00005	0.00005							
Reaction Area	Low	209	M	60,969	5,664	0.00006	0.00092	0.00011	0.00010	0.00019	0.00024	0.0002	0.0002	878,998	81,662	20	23	0.011
Non-Reaction Area	High	62		60,736	5,643	0.0009	0.0009	0.0001	0.0002	0.0002	0.0003	0.0002	0.0003	979,757	91,022	31	35	0.018
Non-Reaction Area	Med	34		55,632	5,168	0.0006	0.0012	0.0003	0.0003	0.0004	0.0004	0.0012	0.0010	1,413,324	131,302	127	147	0.074
Non-Reaction Area	Med	39		62,100	5,769	0.0006	0.0171	0.0003	0.0004	0.0020	0.0015							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	3,859,605	358,569	37	42	0.021
Non SEM Area													0.0004	942,020	87,517	31	36	0.018
Total														12,905,294	1,111,425	**398**	**461**	**0.25**

Average Flux = 0.36 ug/m2-min
0.0004 mg/m2-min

TO-14
Propylene
115-07-1

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0206	0.0004	0.0004	0.0002	0.0003	0.0003	0.0002	0.0002	3,878,615	360,335	77	90	0.04
Repeat		160		66,546	6,182	0.0828	0.0002	0.0002	0.0001	0.0002	0.0002							
Reaction Area	High	184	Y	51,245	4,761	0.00007	0.00008	0.00007	0.00008	0.00007	0.00008	0.0001	0.0001	439,863	40,865	3	4	0.00
Reaction Area	Med	174	Y	48,344	4,491	0.00013	0.00010	0.00013	0.00009	0.00011	0.00010	0.0001	0.0001	513,112	47,670	4	4	0.00
Reaction Area	Med	152	Y	42,032	3,905	0.00013	0.00005	0.00005	0.00005	0.00005	0.00005							
Reaction Area	Low	209	M	60,969	5,664	0.00007	0.00073	0.00012	0.00010	0.00017	0.00021	0.0002	0.0002	878,998	81,662	17	20	0.01
Non-Reaction Area	High	62		60,736	5,643	0.0037	0.0139	0.0079	0.0002	0.0046	0.0061	0.0046	0.0061	979,757	91,022	555	643	0.32
Non-Reaction Area	Med	34		55,632	5,168	0.0006	0.0012	0.0004	0.0007	0.0006	0.0006	0.0037	0.0029	1,413,324	131,302	375	435	0.22
Non-Reaction Area	Med	39		62,100	5,769	0.0128	0.0622	0.0003	0.0009	0.0068	0.0051							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	3,859,605	358,569	39	45	0.02
Non SEM Area													0.0010	942,020	87,517	84	98	0.05
Total														12,905,294	1,111,425	**1,071**	**1,241**	**0.67**

Average Flux = 0.96 ug/m2-min
0.001 mg/m2-min

TO-14

m,p-xylene

108-38-3

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0891	0.0003	0.0004	0.0002	0.0003	0.0002	0.0004	0.0004	3,878,615	360,335	151	175	0.087
Repeat		160		66,546	6,182	0.1716	0.0021	0.0007	0.0001	0.0005	0.0006							
Reaction Area	High	184	Y	51,245	4,761	0.00006	0.00090	0.00006	0.00071	0.00047	0.00060	0.0005	0.0006	439,863	40,865	25	28	0.014
Reaction Area	Med	174	Y	48,344	4,491	0.00012	0.00223	0.00012	0.00008	0.00031	0.00028	0.0002	0.0002	513,112	47,670	8	9	0.0045
Reaction Area	Med	152	Y	42,032	3,905	0.00012	0.00005	0.00005	0.00005	0.00005	0.00005							
Reaction Area	Low	209	M	60,969	5,664	0.00006	0.00162	0.00027	0.00010	0.00032	0.00040	0.0003	0.0004	878,998	81,662	33	38	0.019
Non-Reaction Area	High	62		60,736	5,643	0.0002	0.0013	0.0001	0.0002	0.0003	0.0004	0.0003	0.0004	979,757	91,022	40	47	0.023
Non-Reaction Area	Med	34		55,632	5,168	0.0006	0.0012	0.0004	0.0003	0.0004	0.0004	0.0080	0.0057	1,413,324	131,302	745	863	0.43
Non-Reaction Area	Med	39		62,100	5,769	0.0006	0.1518	0.0003	0.0004	0.0155	0.0109							
Non-Reaction Area	Low	118		45,475	4,225	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	3,859,605	358,569	37	43	0.021
Non SEM Area													0.0009	942,020	87,517	82	95	0.047
Total														12,905,294	1,111,425	**1,038**	**1,202**	**0.65**

Average Flux = 0.93 ug/m2-min

0.0009 mg/m2-min

Total Reduced Sulfurs

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.1695	0.0009	0.0052	0.0004	0.0024	0.0016	0.0054	0.0035	3,878,615	360,335	1,248	1,447	0.723
Repeat		160		66,546	6,182	0.2931	0.0042	0.0194	0.0004	0.0084	0.0054							
Reaction Area	High	184	Y	51,245	4,761	0.00020	0.00024	0.00020	0.00024	0.00023	0.00023	0.0002	0.0002	439,863	40,865	10	11	0.0055
Reaction Area	Med	174	Y	48,344	4,491	0.00040	0.00031	0.00039	0.00027	0.00032	0.00031	0.0002	0.0002	513,112	47,670	11	13	0.0064
Reaction Area	Med	152	Y	42,032	3,905	0.00038	0.00015	0.00016	0.00016	0.00016	0.00016							
Reaction Area	Low	209	M	60,969	5,664	0.00020	0.00527	0.00036	0.00032	0.00083	0.00116	0.0008	0.0012	878,998	81,662	95	110	0.055
Non-Reaction Area	High	62		60,736	5,643	0.0104	0.0003	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	979,757	91,022	38	44	0.022
Non-Reaction Area	Med	34		55,632	5,168	0.0171	0.0192	0.0011	0.0010	0.0029	0.0027	0.0020	0.0020	1,413,324	131,302	260	301	0.15
Non-Reaction Area	Med	39		62,100	5,769	0.0020	0.0016	0.0010	0.0012	0.0012	0.0012							
Non-Reaction Area	Low	118		45,475	4,225	0.0005	0.0002	0.0003	0.0006	0.0004	0.0003	0.0004	0.0003	3,859,605	358,569	118	137	0.069
Non SEM Area													0.0016	942,020	87,517	140	162	0.081
Total														12,905,294	1,111,425	**1,780**	**2,063**	**1.11**

Average Flux = 1.60 ug/m2-min
0.002 mg/m2-min

Carbonyl sulfide (COS)
463-58-1

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0010	0.0015	0.0018	0.0007	0.0012	0.0011	0.0174	0.0102	3,878,615	360,335	3,670	4,252	2.126
Repeat		160		66,546	6,182	0.1310	0.0012	0.0829	0.0007	0.0336	0.0193							
Reaction Area	High	184	Y	51,245	4,761	0.00035	0.00042	0.00036	0.00043	0.00040	0.00041	0.0004	0.0004	439,863	40,865	17	20	0.0098
Reaction Area	Med	174	Y	48,344	4,491	0.00070	0.00054	0.00068	0.00048	0.00056	0.00054	0.0004	0.0004	513,112	47,670	19	23	0.0113
Reaction Area	Med	152	Y	42,032	3,905	0.00067	0.00026	0.00027	0.00028	0.00028	0.00028							
Reaction Area	Low	209	M	60,969	5,664	0.00035	0.03846	0.00064	0.00056	0.00438	0.00691	0.0044	0.0069	878,998	81,662	564	654	0.327
Non-Reaction Area	High	62		60,736	5,643	0.0072	0.0006	0.0007	0.0009	0.0008	0.0007	0.0008	0.0007	979,757	91,022	67	78	0.039
Non-Reaction Area	Med	34		55,632	5,168	0.0025	0.0053	0.0020	0.0017	0.0022	0.0022	0.0020	0.0021	1,413,324	131,302	276	320	0.16
Non-Reaction Area	Med	39		62,100	5,769	0.0036	0.0012	0.0017	0.0022	0.0019	0.0020							
Non-Reaction Area	Low	118		45,475	4,225	0.0009	0.0003	0.0005	0.0010	0.0007	0.0006	0.0007	0.0006	3,859,605	358,569	209	242	0.121
Non SEM Area													0.0043	942,020	87,517	380	440	0.220
Total														12,905,294	1,111,425	**4,823**	**5,588**	**3.01**

Average Flux = 4.34 ug/m2-min
0.00434 mg/m2-min

Methanethiol (MeSH)
74-93-1

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0360	0.0012	0.0014	0.0006	0.0010	0.0009	0.0011	0.0009	3,878,615	360,335	332	385	0.192
Repeat		160		66,546	6,182	0.1169	0.0009	0.0021	0.0006	0.0012	0.0010							
Reaction Area	High	184	Y	51,245	4,761	0.00028	0.00034	0.00028	0.00034	0.00032	0.00033	0.0003	0.0003	439,863	40,865	13	16	0.0078
Reaction Area	Med	174	Y	48,344	4,491	0.00056	0.00044	0.00055	0.00038	0.00045	0.00043	0.0003	0.0003	513,112	47,670	16	18	0.0090
Reaction Area	Med	152	Y	42,032	3,905	0.00054	0.00021	0.00022	0.00023	0.00022	0.00022							
Reaction Area	Low	209	M	60,969	5,664	0.00028	0.00085	0.00051	0.00045	0.00051	0.00054	0.0005	0.0005	878,998	81,662	44	51	0.026
Non-Reaction Area	High	62		60,736	5,643	0.0009	0.0005	0.0005	0.0007	0.0006	0.0006	0.0006	0.0006	979,757	91,022	54	62	0.031
Non-Reaction Area	Med	34		55,632	5,168	0.0020	0.0042	0.0016	0.0014	0.0018	0.0017	0.0016	0.0017	1,413,324	131,302	221	256	0.13
Non-Reaction Area	Med	39		62,100	5,769	0.0029	0.0009	0.0014	0.0018	0.0015	0.0016							
Non-Reaction Area	Low	118		45,475	4,225	0.0007	0.0003	0.0004	0.0008	0.0006	0.0005	0.0006	0.0005	3,859,605	358,569	167	194	0.097
Non SEM Area													0.0008	942,020	87,517	67	77	0.039
Total														12,905,294	1,111,425	**847**	**982**	**0.53**

Average Flux = 0.76 ug/m2-min
0.00076 mg/m2-min

Carbon disulfide (CS2)
75-15-0

						Flux (mg/m2-min)												
		Rep		Cell Area						Weighted Avg.		Used		Area Rep		Emissions		
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.1352	0.0019	0.0023	0.0009	0.0015	0.0014	0.0014	0.0013	3,878,615	360,335	459	532	0.266
Repeat		160		66,546	6,182	0.1093	0.0015	0.0016	0.0009	0.0013	0.0012							
Reaction Area	High	184	Y	51,245	4,761	0.00044	0.00053	0.00045	0.00054	0.00051	0.00052	0.0005	0.0005	439,863	40,865	21	25	0.0124
Reaction Area	Med	174	Y	48,344	4,491	0.00089	0.00069	0.00086	0.00060	0.00072	0.00068	0.0005	0.0005	513,112	47,670	25	29	0.0143
Reaction Area	Med	152	Y	42,032	3,905	0.00085	0.00033	0.00035	0.00036	0.00035	0.00035							
Reaction Area	Low	209	M	60,969	5,664	0.00044	0.00134	0.00081	0.00071	0.00081	0.00086	0.0008	0.0009	878,998	81,662	70	81	0.041
Non-Reaction Area	High	62		60,736	5,643	0.0049	0.0008	0.0008	0.0011	0.0010	0.0009	0.0010	0.0009	979,757	91,022	85	99	0.049
Non-Reaction Area	Med	34		55,632	5,168	0.0032	0.0067	0.0025	0.0022	0.0028	0.0027	0.0027	0.0027	1,413,324	131,302	360	417	0.21
Non-Reaction Area	Med	39		62,100	5,769	0.0046	0.0036	0.0021	0.0028	0.0026	0.0027							
Non-Reaction Area	Low	118		45,475	4,225	0.0011	0.0004	0.0006	0.0013	0.0009	0.0007	0.0009	0.0007	3,859,605	358,569	265	307	0.153
Non SEM Area													0.0012	942,020	87,517	101	117	0.059
Total														12,905,294	1,111,425	**1,284**	**1,488**	**0.80**

Average Flux = 1.16 ug/m2-min
0.00116 mg/m2-min

Hydrogen sulfide (H2S)
7783-06-4

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0088	0.0009	0.0052	0.0004	0.0024	0.0016	0.0024	0.0018	3,878,615	360,335	639	740	0.370
Repeat		160		66,546	6,182	0.0659	0.0042	0.0044	0.0004	0.0024	0.0020							
Reaction Area	High	184	Y	51,245	4,761	0.00020	0.00024	0.00020	0.00024	0.00023	0.00023	0.0002	0.0002	439,863	40,865	10	11	0.0055
Reaction Area	Med	174	Y	48,344	4,491	0.00040	0.00031	0.00039	0.00027	0.00032	0.00031	0.0002	0.0002	513,112	47,670	11	13	0.0064
Reaction Area	Med	152	Y	42,032	3,905	0.00038	0.00015	0.00016	0.00016	0.00016	0.00016							
Reaction Area	Low	209	M	60,969	5,664	0.00020	0.00408	0.00036	0.00032	0.00071	0.00096	0.0007	0.0010	878,998	81,662	79	91	0.046
Non-Reaction Area	High	62		60,736	5,643	0.0082	0.0003	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	979,757	91,022	38	44	0.022
Non-Reaction Area	Med	34		55,632	5,168	0.0171	0.0192	0.0011	0.0010	0.0029	0.0027	0.0020	0.0019	1,413,324	131,302	256	296	0.15
Non-Reaction Area	Med	39		62,100	5,769	0.0020	0.0007	0.0010	0.0012	0.0011	0.0012							
Non-Reaction Area	Low	118		45,475	4,225	0.0005	0.0002	0.0003	0.0006	0.0004	0.0003	0.0004	0.0003	3,859,605	358,569	118	137	0.069
Non SEM Area													0.0010	942,020	87,517	91	105	0.052
Total														12,905,294	1,111,425	**1,150**	**1,333**	**0.72**

Average Flux = 1.03 ug/m2-min
0.00103 mg/m2-min

Dimethylsulfide (DMS)
75-18-3

		Rep		Cell Area		Flux (mg/m2-min)								Area Rep		Emissions		
										Weighted Avg.		Used						
Category	**Subset**	**Cell**	**M?**	**(ft2)**	**(m2)**	**Max**	**High**	**Med**	**Low**	**Target**	**Actual**	**Target**	**Actual**	**(ft2)**	**(m2)**	**(mg/min)**	**(lbs/yr)**	**(TPY)**
Exceedance Area		160		66,546	6,182	0.0369	0.0016	0.0018	0.0007	0.0012	0.0011	0.0033	0.0023	3,878,615	360,335	819	949	0.475
Repeat		160		66,546	6,182	0.0509	0.0012	0.0123	0.0007	0.0054	0.0034							
Reaction Area	High	184	Y	51,245	4,761	0.00036	0.00044	0.00037	0.00044	0.00041	0.00043	0.0004	0.0004	439,863	40,865	17	20	0.0101
Reaction Area	Med	174	Y	48,344	4,491	0.00072	0.00056	0.00070	0.00049	0.00058	0.00056	0.0004	0.0004	513,112	47,670	20	23	0.0117
Reaction Area	Med	152	Y	42,032	3,905	0.00069	0.00027	0.00028	0.00029	0.00029	0.00029							
Reaction Area	Low	209	M	60,969	5,664	0.00036	0.00109	0.00066	0.00058	0.00066	0.00070	0.0007	0.0007	878,998	81,662	57	66	0.033
Non-Reaction Area	High	62		60,736	5,643	0.0011	0.0006	0.0007	0.0009	0.0008	0.0008	0.0008	0.0008	979,757	91,022	69	80	0.040
Non-Reaction Area	Med	34		55,632	5,168	0.0026	0.0055	0.0021	0.0018	0.0023	0.0022	0.0021	0.0022	1,413,324	131,302	286	331	0.17
Non-Reaction Area	Med	39		62,100	5,769	0.0037	0.0012	0.0017	0.0023	0.0020	0.0021							
Non-Reaction Area	Low	118		45,475	4,225	0.0009	0.0003	0.0005	0.0010	0.0007	0.0006	0.0007	0.0006	3,859,605	358,569	216	250	0.125
Non SEM Area													0.0013	942,020	87,517	117	135	0.068
Total														12,905,294	1,111,425	**1,485**	**1,720**	**0.93**

Average Flux = 1.34 ug/m2-min
0.00134 mg/m2-min

Attachment 1
Data Validation Technical Memorandum

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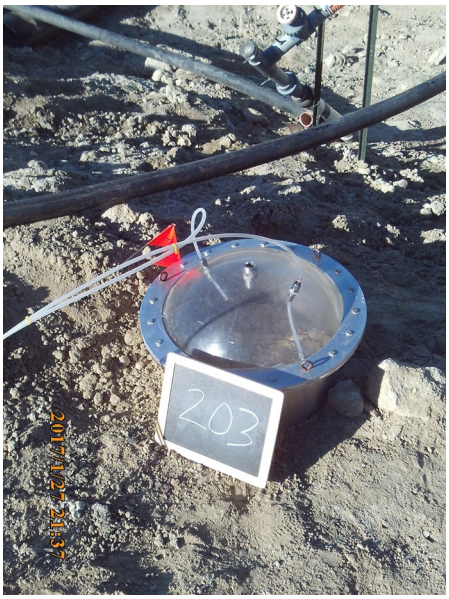
TECHNICAL MEMORANDUM

TEST EVENT #3: Flux Chamber Assessment of Air Emissions from the Chiquita Canyon Landfill Located in Castaic, California



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January 2025

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C - Lab Reports
D - Calibration Records

References

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EXECUTIVE SUMMARY

This Technical Memorandum documents the third air emissions testing event at the Chiquita Canyon Landfill (CCLF or Landfill). Field measurements were conducted by landfill screening experts at the CCLF facility located at 29201 Henry Mayo Drive in Castaic, California on November 18– 21 2024, to measure surface air emissions from the Landfill. Testing was performed using field screening for methane (total flame ionization detector [FID] response) at the surface. Following screening, in-depth area source testing was also conducted using the U.S. Environmental Protection Agency (USEPA) surface emission isolation flux chamber technology per the USEPA Guidance protocol (February 1986), which provides the guidance for constructing and operating an agency approved area source measurement technology. The average flux (in units of mass per time per unit area) of surface emissions were calculated per category of grid cell (i.e., low, medium, high, highest) and per type of Landfill area (i.e., reaction area and non-reaction area as defined in the Assessment of Air Emissions from Landfill Surfaces – Test Event 3 Report (Emissions Report).) The summation of these grid cell flux data multiplied by the number of grid cells in these categories represents the air emissions of compounds from the Landfill's surface.

The methane surface screening was conducted in similar fashion as the USEPA New Source Performance Standards (NSPS) Title 40 Code of Federal Regulations (CFR) Part 60.755 (c) and (d), CFR Part 60, Appendix A, Method 21, and the surface emissions monitoring (SEM) requirements contained within the California AB 32 Landfill Methane Rule (LMR) under Title 17 California Code of Regulations. The screening utilized the same grid system as is used in the Landfill's regular South Coast Air Quality Management District (SCAQMD) Rule 1150.1 surface emissions monitoring, which consists of nominal 1 acre grid cells (approximately 50,000 square feet). A total vapor analyzer (TVA) instrument fit with a flame ionization detector (FID) was used along with global positioning system (GPS) location recording to map fugitive surface emissions in each grid cell.

As described in the Emissions Report, methane screening was performed by recording data along a traverse pattern that is spaced at 25 feet over the Landfill grid cells. Concentration data and location information was collected and used to generate integrated or average screening concentration of each grid cell. Grid cells were then ranked and divided into three groups: low emission, medium emission, and high emission for both the reaction and non-reaction study areas. Grid cells were selected for testing as described in the Emissions Report. The selected grid cells were screened on a point-by-point basis and representative low, medium, high, and the highest emission locations were selected for flux chamber testing. Samples collected from the flux chamber were sent offsite for laboratory analysis.

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A summary of the sampling program and testing efforts is provided in the summary below.

Summary of Samples Collected

SOURCE	SURFACE CONDITION	SAMPLES
Grid 160	Dry Soil Cover	4
Grid 34	Dry Soil Cover	4
Grid 39	Dry Soil Cover	4
Grid 118	Dry Soil Cover	4
Grid 174	Membrane	4
Grid 152	Membrane	4
Grid 184	Membrane	4
Grid 62	One Location Membrane	4
Grid 160	Dry Soil Cover	4
Grid 209	Dry Soil Cover	4
Blank	NA	3
Replicate	NA	3
TOTAL		46

The samples collected from the flux chamber for each location were used to calculate air emissions. The sample concentration data (mass per time) as received from the labs were reviewed, quality control (QC) data checks were performed, and tables were composed for total non-methane hydrocarbon compounds (TNMHC), hydrocarbon species, hazardous air pollutants (HAPs), TO-15 non-HAP compounds, sulfur containing compounds, fixed gases (CO2, CH4), trace gas species helium (advective flow determination), and olfactory odor flux levels (dilution-to-threshold, DT). This Technical Memorandum reports flux data for these study compounds along with QC evaluation. Emission estimates for the study compounds are provided in the Emissions Report.

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I. INTRODUCTION

This technical memorandum describes the field testing (or flux chamber study) that was conducted to characterize surface or fugitive air emissions at the Chiquita Canyon Landfill (CCLF or Landfill) located at 29201 Henry Mayo Drive, Castaic, California. As discussed in more detail in the Assessment of Air Emissions from Landfill Surfaces – Test Event 3 Report (Emissions Report), testing was conducted on November 18 through November 21, 2024 by Dr. C.E. Schmidt, Mr. Thomas Card, Mr. Josh Abbey, and Mr. Rich Wharton supported by SCS Engineers; and RES Environmental Inc., who performed landfill surface screening for methane prior to the test dates and during the testing program. Preparation for testing included submitting a Sampling Protocol (SP) that was approved by SCS Engineers and representatives of the South Coast Air Quality Management District (SCAQMD).

The objective of the overall flux chamber study (Study) was to measure fugitive air emissions from grid cells that represented areas of the Landfill affected by the subsurface reaction (reaction areas) as well as from areas unaffected by the reaction (non-reaction areas), as defined in the Emissions Report. The Study was conducted by selecting representative test locations and conducting quantitative analysis of air emissions to produce representative air emissions data for the Landfill.

This memorandum includes a discussion of the testing methodology, quality control procedures, and results. This memorandum only reports flux data per study compound and location.

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II. TEST METHODOLOGY

The methodologies used in the study for flux chamber testing, including evacuated canister and Tedlar® bag sample collection are described in this section. Screening was performed following the NSPS landfill screening protocol with additional criteria derived from the California LMR. Testing for surface flux was conducted using the USEPA recommended Surface Isolation Flux Chamber (USEPA, Radian Corporation, February 1986). Flux chamber sampling was performed on pre-selected landfill grids as described in the Emissions Report and as directed by the SP.

Flux Chamber Sampling

As described in the USEPA User's Guide (February 1986), the flux chamber is an environmental or portable chamber also known as a mixed-tank reactor that is used to measure the "flux" or mass transfer of study compounds per surface area of area source per time. Ultra-high purity air (sweep air) from a compressed air cylinder is regulated and added to the flux chamber at a flow of 5 liters per minute (lpm) until the chamber contents are well mixed. The chamber is a 'vented' chamber which releases or exhausts the chamber gas through the pressure equalization port in the top of the chamber to the atmosphere which keeps the chamber contents at atmospheric pressure during the measurement. Chamber mixing is described by a number of 'residence times.' Residence time in the chamber is determined by dividing the chamber volume by the sweep air flow rate. Following the User's Guide and with a chamber volume of 30 liters, the residence time is 6 minutes. Proper mixing in the chamber is achieved after five residence times or 30 minutes. After mixing, or after the chamber contents (sweep air plus compounds emitted into the chamber) are at equilibrium, gas samples are collected per regulatory approved methods described in the SP. Knowing the sweep air flow rate (5 lpm), the area of the flux chamber on the test site (0.13 square meters), and the concentration of the study compounds, the flux of study compounds can be calculated (units of milligrams per square meter per minute, mg/m2,min). This Technical Memorandum reports the directly measured flux data for the study compounds that are used in the Emissions Report.

The basic operation of the flux chamber involved the following:

1. Identifying the test area or test surface
2. Initiating sweep gas flow rate to the flux chamber
3. Operating the chamber for at least five residence times (30 minutes)
4. Collecting sample gas from the chamber for analysis

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5. Decontaminating the chamber

6. Relocating the measurement equipment to the next test area

The specific operating protocol for flux chamber sampling was as follows:

1. Locate the flux chamber, sweep gas, sample collection equipment, and field documents at the test location.
2. Document site information, location information, equipment information, name of sampler, date, and time on the Emissions Measurement Data Sheets. (The data sheets are provided in Attachment A.)
3. Place the flux chamber approximately 1/4 inch into the test surface at the test locations selected as described in the Emissions Report. Seal the chamber along the base to prevent air infiltration-sealing on membrane cover using clean fill soil making a barrier to air flow. Place thermocouples to monitor soil and air temperature inside and outside of the chamber.
4. Initiate the sweep gas flow rate and set the rotometer at 5.0 lpm.
5. Maintain a constant sweep gas flow rate. Record time.
6. Collect instrument background data (thermocouple) and other parameters (see Emissions Measurement Data Sheets) and record data.
7. Connect the purge pump to the flux chamber. Purge the sample line from the flux chamber without exceeding the line purge rate (or sample gas collection rate) of 2.5 lpm to prevent entraining of ambient air into the flux chamber.
8. Operate the flux chamber sweep air flow rate at 5.0 lpm and record data every residence time (6 minutes) for five residence times (30 minutes). Record the flow rate and time data. Maintain the flux chamber at steady state. Purge the sample line and Tedlar bags from the flux chamber with at least 10 line-volumes of air as part of the odor bag sampling protocol using the decompression lung device, preparing the sample line for the balance of the sample media collection.
9. Connect the sample media sequentially (odor bag, sulfur bag, and evacuated canister) to the purged sample line and collect the gas sample. Do not exceed a collection rate of 2.5 lpm at any time to prevent unwanted dilution of flux chamber exhaust gas by ambient air. Both the odor and sulfur bags are purged prior to sample collection; the evacuated canister is not purged.
10. Label sample bag and record sample collection on the data sheet (see Attachment A).
11. Store the sample(s) in the appropriate storage and/or shipping container as specified

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in the SP.

12. Document sample collection on the Chain of Custody form.
13. Discontinue the flux measurement, shut off the sweep air, remove flux chamber, and secure equipment.
14. Decontaminate the flux chamber where contact was made with the liquid or solid material using a clean paper towel and water (if needed) to remove any soil and condensation from the inside of the flux chamber.
15. Relocate equipment to the next test location and repeat steps 1 through 13.

Tedlar® Bag Sampling
Grab samples were collected from the sample line from the flux chamber using Tedlar® bags at steady-state conditions after five residence times (or 30 minutes) in the chamber for analysis for olfactory odor and sulfur containing species. Sampling rate was maintained at less than 2.5 lpm from the flux chamber. Bag samples were collected by connecting the sampling line from the flux chamber using 1/4-inch Swage-lock® fittings fit inside the decompression lung or pressure fittings, drawing a vacuum on the decompression lung, and filling the Tedlar® bag. Both the odor bag and the sulfur bag were purged and evacuated prior to sample collection in order to minimize sample bag interaction. Note two Tedlar® bags were collected for sulfur species analysis according to the method.

Canister Sampling
Grab samples using Summa® polished, evacuated stainless steel canisters were collected from the exhaust line of the flux chamber at steady-state conditions after five residence times (or 30 minutes) in the chamber for speciation by gas chromatography. Sampling rate was maintained at less than 2.5 lpm from the flux chamber. Canister samples were collected by connecting the canister to the sampling line from the flux chamber using 1/4-inch Swage-lock® fittings, drawing a vacuum from the canister, and filling the canister. All canisters were batch certified by the laboratory according to USEPA Methods TO-15/TO-12/fixed gases/helium and sampled to full capacity (atmospheric pressure).

III. QUALITY CONTROL

Control procedures that were used to assure that data of sufficient quality resulted from the flux chamber study are listed and described below. The application and frequency of these procedures were developed to meet the program data quality objectives as described in the SP for all analytical methods used in this Study. Method detection limits for all sample data are provided in the attached laboratory reports.

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Field Documentation – A field notebook containing data forms, including sample chain-of-custody (COC) forms, was maintained for the testing program. Attachment A contains the Emissions Measurement Data Sheets collected through field documentation.

Chain-of-Custody (COC) forms – COC forms were used for field data collection. Field data were recorded on the COC forms provided in Attachment B. Calibration records and certifications are found in Attachment D.

Total VOC as TNMNC by Analysis through USEPA Method TO-12

Method QC Requirements – Method QC procedures were completed as per method requirements. These data are reported in the method specific lab reports (footnoted as applicable on the lab report showing compliance with the methods).

Laboratory Method Blank – A total of seven laboratory method blank samples were performed by the laboratory. TNHMC compounds were not detected in the blank samples at the method detection limit (MDL) level of 0.13 mg/m^3. These data indicate acceptable method performance.

Laboratory Precision – A total of seven laboratory control duplicate (LCD) samples including nine compounds were performed by the laboratory. The LCD samples were reported within the criteria of less than 25%. These data indicate acceptable method performance.

Laboratory Accuracy – A total of seven laboratory control samples (LCS) or blank spike samples, including nine compounds, were performed by the laboratory. The LCS samples were reported within the criteria of 70 to 130% recovery. These data indicate acceptable method performance.

Field System Blank – Three media (field) blank samples were prepared in the field (T-418, T-514, T-614) and were analyzed as field samples (blind QC sample). All three field blank samples show non detect. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate (second sample taken immediately after the first sample for method precision data) and analyzed for the flux chamber testing (T-416/-417, T-512/-513, and T-612/-613). On sample/replicate pair showed a J value and a non-detect and did not provide precision data. The other two sample/replicate pairs showed relative percent difference (RPD) values for TNMHC of 45 and 52, with one sample/replicate pair just exceeding criteria (QC criteria 50RPD). Despite one exceedance, these data indicate acceptable method performance.

Hydrocarbon Species Analysis by USEPA Method TO-14

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Method QC Requirements – Method QC procedures were completed as per method requirements. These data are reported in the method specific lab reports (footnoted as applicable on the lab report showing compliance with the methods).

Laboratory Method Blank – A total of seven laboratory method blank samples were performed by the laboratory. Hydrocarbon compounds were not detected in the blank samples at the method detection limit (MDL) level of 0.13 mg/m^3. These data indicate acceptable method performance.

Laboratory Precision – A total of seven laboratory control duplicate (LCD) samples including 18 compounds were performed by the laboratory. The LCD samples were reported within the criteria of less than 25%. These data indicate acceptable method performance.

Laboratory Accuracy – A total of seven laboratory control samples (LCS) or blank spike samples including 18 compounds were performed by the laboratory. The LCS samples were reported within the criteria of 70 to 130% recovery. These data indicate acceptable method performance.

Field System Blank – Three media (field) blank samples were prepared in the field (T-418, T-514, T-614) and were analyzed as field samples (blind QC sample). All three field blank samples show non detect. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate (second sample taken immediately after the first sample for method precision data) and analyzed for the flux chamber testing (T-416/-417, T-512/-513, and T-612/-613). On sample/replicate pair showed a J value and a non-detect and did not provide precision data. The other two sample/replicate pairs showed RPD values for TNMHC of 45 and 52, with one sample/replicate pair just exceeding criteria (QC criteria 50RPD). Despite one exceedance, these data indicate acceptable method performance.

Individual HAP Analysis by USEPA Method TO-15

Method QC Requirements – Method QC procedures were completed as per method requirements including recovery of surrogate compounds. These data are reported in the method specific lab reports.

Laboratory Method Blank – A total of five laboratory method blank samples were performed by the laboratory. Most compounds were not detected in the blank samples above the compound specific MDL levels (range of 0.010 to 0.064 mg/m^3). These data indicate acceptable method performance.

Laboratory Precision – A total of five laboratory LCD samples including 18 compounds were

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performed by the laboratory. All LCD samples were reported within the criteria of less than 25%. These data indicate acceptable method performance.

Laboratory Accuracy – A total of five laboratory LCS samples including 18 compounds were performed by the laboratory. All LCS samples were reported within the criteria of 70 to 130% recovery. These data indicate acceptable method performance.

Field System Blank – Three media (field) blank samples were prepared in the field (T-418, T-514, T-614) and were analyzed as a field sample (blind QC sample). No compounds were detected above MDL (range of 0.010 to 69 mg/m^3) in the three field blank samples. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate and analyzed for the flux chamber testing (T-416/-417, T-512/-513, and T-612/-613). The sample/replicate pair T-416/-417 showed 2 compound pairs above reporting limits with an RPD range of 7.2 to 33; no compound pairs exceeded criteria. The sample/replicate pair T-512/-513 showed 2 compound pairs above reporting limits with an RPD range of 1.5 to 25; no compound pairs exceeded criteria. The sample/replicate pair T-612/-613 showed 1 compound pair above reporting limits with an RPD of 27; no compound pairs exceeded criteria. These data indicate acceptable method performance.

SCAQMD 307.91 Analysis for Hydrogen Sulfide

Method QC Requirements – Method QC procedures were completed as per method requirements. These data are reported in the method specific lab reports. Two QC standard QC data sets were run on the samples for each instrument used in analyzing the samples. In summary, the opening calibration verification standard and duplicate analysis QC (95%-105%, <5 RPD), method blank QC (<pql), standard and duplicate standard analysis QC (95%-105%, <10%), matrix spike/ QC (<10%), and closing calibration curve verification standard QC (90-110%) for both instruments used in the analyses were within the method requirements. These data indicate acceptable performance. Note that each sample was collected in duplicate (a, b) and samples labeled 'a' were analyzed.

Field System Blank – Three media (field) blank samples were prepared in the field (S-418, S-514, S-614) and were analyzed as field samples (blind QC sample). Hydrogen sulfide was not detected in the three blank samples at a level of 0.005 ppmv. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate and analyzed for the flux chamber testing (S-416/-417, S-512/-513, and S-612/-613). In each case, sample and replicate

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pair, both were non-detect for all three pairs, thus no information could be obtained regarding precision for the method. However, the laboratory precision data was acceptable. These data indicate acceptable method performance.

USEPA 3C for Fixed Gases (methane and carbon dioxide)

Method QC Requirements – Method QC procedures were completed as per method requirements.

Laboratory Method Blank – A total of one laboratory method blank sample was performed by the laboratory. Fixed gases were not detected in the blank samples above the MDL that ranged between 0.01% to 0.05%. These data indicate acceptable method performance.

Laboratory Precision – Two LCD samples were performed by the laboratory. The LCD samples were reported within the criteria of less than 25%. These data indicate acceptable method performance.

Laboratory Accuracy – Two LCS samples were performed by the laboratory. The LCS samples were reported within the criteria of 70 to 130% recovery. These data indicate acceptable method performance.

Field System Blank (accuracy) – Three media (field) blank samples were prepared in the field (T-418, T-514, T-614) and were analyzed as field samples (blind QC sample). Carbon dioxide and methane were both not detected above the method detection limit. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate and analyzed for the flux chamber testing (T-416/-417, T-512/-513, and T-612/-613). Most of the sample/replicate pairs for methane and carbon dioxide were non-detect with the exception of one sample/replicate pair for methane, which had a RPD of 12 (QC criteria (50 RPD).) These data indicate acceptable method performance.

USEPA 3CM for Helium (trace gas detection)

Method QC Requirements – Method QC procedures were completed as per method requirements.

Laboratory Method Blank – A total of one laboratory method blank sample was performed by the laboratory. Helium was not detected in the blank samples at the MDL of 0.02% . These data indicate acceptable method performance.

Laboratory Precision – Two LCD samples were performed by the laboratory. The LCD samples

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were reported within the criteria of less than 25%. These data indicate acceptable method performance.

Laboratory Accuracy – Two LCS samples were performed by the laboratory. The LCS samples were reported within the criteria of 70 to 130% recovery. These data indicate acceptable method performance.

Field System Blank – Three media (field) blank samples were prepared in the field (T-418, T-514, T-614) and were analyzed as field samples (blind QC sample). Given that these blank samples were taken from a calibration standard gas, these data serve as accuracy data or sample recovery QC data (±30%). The range of percent recovery for the three samples was 95.6% to 106.4%. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate and analyzed for the flux chamber testing (T-416/-417, T-512/-513, and T-612/-613). The RPD values ranged from 37 to 61 (QC criteria (50 RPD) with one pair exceeding precision criteria. These data indicate acceptable method performance.

ASTM E-679 for Olfactory Odor
Method QC Requirements – Method QC procedures were completed as per method requirements.

Field System Blank – Three media (field) blank samples were prepared in the field (O-418/-514/-614) and were analyzed as field samples (blind QC sample). The blank data showed typical MDL levels at DT values of 13, 9, and 9, respectively. Typical blank levels range from about 6 to 20 DT. These data demonstrate acceptable method performance.

Field Method Precision – Three field samples were collected in replicate and analyzed for the flux chamber testing (O-418-419, O-512/-513, and O-612/-613). The RPD values for olfactory odor were 63, 27, and 9.5, respectively (QC criteria (50 RPD). One of the three pairs showed a RPD greater than QC criteria, which is not uncommon at these low DT levels (DT less than 20). These data indicate acceptable method performance.

Field Calibration of the TVA-1000; Screening for Total Hydrocarbon Concentration
Pre-Use and Post-Use Instrument Response to Span (calibration) Gas and Zero Air (pure air)
The TVA-1000 instrument with an FID detector was pre-use and post-use calibrated each day of use using certified methane span gas standard at 100 ppmv. Zero air checks were acceptable with instrument response near the instrument detection, and all span checks were within 70% to 130% accuracy, indicating acceptable instrument performance. The cold morning startups did cause

higher blank levels and recalibration during the day as the ambient temperature increased, however the instrument did provide useful screening data. The instrument also came with a photo ionization detector (PID) detector, which was not used for the screening activities. No field data (TVA FID or PID) were used in the emissions calculations; these data were only used in the field for directive purposes.

Field Calibration of the J-631X; Screening for Hydrogen Sulfide

Pre-Use and Post-Use Instrument Response to Zero Air

The two J-631X hydrogen sulfide analyzers were pre-use and post-use zero air checked and re-zeroed without incident. These field screening instruments performed well as compared to pre and post zero air checks. The cold morning startups did cause higher blank levels and high/low response recalibration during the day as the ambient temperature increased, however the instrument did provide useful screening data. No field data (J-631X) were used in the emissions calculations; these data were only used in the field for directive purposes.

IV. RESULTS AND DISCUSSIONS

A summary of the field sample collection information and field data for the field testing is shown in Table 1. All field data for the surface flux chamber testing and sample identification information are presented in Table 2. Table 2 provides both concentration (%, ppmv, ug/m3, DT) and flux (mg/m^2,min, DT/m2,min) data. All laboratory data, including quality control data, are presented in Attachment C to this memorandum. Fixed gas data is presented in Table 3, TO-15 data is presented in Table 4, TO-14 data is presented in Table 5, and SCAQMD 307-91 data is presented in Table 6.

Surface flux data are shown in flux units for compound emissions (mg/m^2,min and DT/m2,min). Surface flux for a surface area source is calculated using measured target compound concentrations/odor DT and flux chamber operating parameter data (sweep air flow rate of 5.0 lpm [or 0.005 cubic meters per minute (m^3/min) plus advective flow], surface area of 0.13 square meters [m^2]). The site emissions can be calculated by multiplying the flux by the surface area of the grid cell or source tested. The flux (Fi, mg/m2,min or DT/m2,min) is calculated from the sweep air flow rate (Q, m^3/min)), the compound concentration (Yi, mg/m^3 or DT), and exposure to the chamber surface area (A, m^2)), as follows:

$$Fi = (Q)\ (Yi) / (A)$$

Emission rate (mass per time) from a source tested using the flux chamber technology can be obtained by multiplying unit or average flux data per compound by the surface area of the source.

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Note that advective flow at each test location was determined by the dilution of the 10% helium trace gas as is the protocol for SCAQMD Rule 1133.3, Attachment A.

The flux of VOCs as TNMHC, HAPs compounds, non-HAP VOC, olfactory odor, sulfur containing compounds, and fixed gases (methane and carbon dioxide) from the landfill grid cells tested is provided in this Technical Memorandum and is used in the Emissions Report.

The data set met the QC requirements provided in the SP and the laboratory methods employed.

V. SUMMARY

A focused air emissions assessment was performed on the CCLF at the facility located in Castaic, California. Areas of the Landfill that were tested included grid cells representative of both areas of the Landfill affected by the reaction and areas of the Landfill not affected by the reaction. The following is a summary of activities and results associated with this Technical Memorandum:

- Surface flux measurements of VOCs as TNMHC, hydrocarbon species, HAP compounds, non-HAP VOC compounds, olfactory odor, sulfur containing compounds, and fixed gases (methane, carbon dioxide, helium) were measured on nine selected landfill grid cells; one grid cell was tested twice for field QC compliance (comparison purposes). Four flux chamber measurements were taken from each grid cell.

- Grid selection was based on the areas of interest (i.e., reaction area and non-reaction area) and methane surface screening data.

- Emissions testing was performed using the USEPA recommended surface flux chamber technology as described in the USEPA User's Guide for assessing fugitive air emissions from area sources. Surface advective flow was determined at each location by the dilution of a trace gas (10% helium) used as the chamber sweep air. Study compounds were tested following regulatory approved sampling and analytical methods. These technologies were used to quantitatively measure flux at the test surface of the listed study compounds.

- Field and laboratory quality control data indicate acceptable data quality for all of the analytical methods used. Lab method samples and media/field blank levels for the analytical methods were found to be common for this application of the test method and acceptable. Method precision for the lab replicates and spike samples (LCD and LCS) met the method criteria. The data set is of acceptable data quality for the purpose of assessing compound emissions from the landfill.

- The flux data generated in this field study can be used to estimate emission factors from

the landfill area sources tested.

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REFERENCES

USEPA. 1986. "Measurement of Gaseous Emission Rates from Land Surfaces Using an Emission Isolation Flux Chamber, Users Guide." EPA Environmental Monitoring Systems Laboratory, Las Vegas, Nevada, EPA Contract No. 68-02-3889, Work Assignment No. 18, Radian Corporation, February 1986. NTIS # PB 86-223161.

Card, T.R. and C.E. Schmidt. ***"Assessment of Air Emissions from the Landfill Surfaces, Sampling Protocol, Revision 1",*** prepared for SCS Engineers and the Chiquita Canyon Landfill, Castaic, CA, August 2023.

Table 1. Summary of Field Sampling data for Chiquita Canyon Air Emission Assessment, November 19-21, 2024.

DATE	TIME	Test Site	LOC	TO-15	SRS	Odor	J 631X In	J 631X Out	FID In	FID Filter In	FID Out	FID Filter Out	He	IN SURF	IN AIR	OUT SURF	OUT AIR	Coordinates		COMMENT
				ID	ID	ID	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(%)	°F	°F	°F	°F	11 S 34	381	
11/19/2024	816	Grid 160 L1	1	T-401	S-401	O-401	0.000	0.000	25,000	21,000	1,300	1,200	5.0	59	56	55	55	8,606	1,444	Exceedance Cell
11/19/2024	816	Grid 160 L2	2	T-402	S-402	O-402	0.000	0.000	8,000	23,000	27	21	1.9	60	57	54	54	8,614	1,445	Membrane Covered Grid Cell
11/19/2024	812	Grid 160 L3	3	T-403	S-403	O-403	0.000	0.000	160	114	200	180	2.4	52	53	52	54	8,601	1,459	
11/19/2024	812	Grid 160 L4	4	T-404	S-404	O-404	0.000	0.000	8	24	30	25	6.5	51	51	52	51	8,614	1,460	
11/19/2024	946	Grid 34 L1	1	T-405	S-405	O-405	0.000	0.000	211	27	78	100	0.8	74	69	70	62	8,836	1,473	Normal Mid-Level
11/19/2024	946	Grid 34 L2	2	T-406	S-406	O-406	0.000	0.000	31	37	26	32	0.0	59	59	59	61	8,843	1,474	
11/19/2024	948	Grid 34 L3	3	T-407	S-407	O-407	0.000	0.000	33	29	35	24	1.3	89	82	73	62	8,873	1,478	
11/19/2024	948	Grid 34 L4	4	T-408	S-408	O-408	0.000	0.000	-0.3	1.2	9.4	8.3	1.5	79	79	79	63	8,884	1,463	
11/19/2024	1130	Grid 39 L1	1	T-409	S-409	O-409	0.000	0.013	35	27	40	40	3.2	96	87	90	73	9,001	1,398	Mid-Level Grid
11/19/2024	1130	Grid 39 L2	2	T-410	S-410	O-410	0.000	0.000	5,500	5,100	71	400	1.6	108	92	79	73	9,006	1,400	
11/19/2024	1128	Grid 39 L3	3	T-411	S-411	O-411	0.000	0.024	22	24	45	37	0.9	100	85	77	68	8,978	1,380	
11/19/2024	1128	Grid 39 L4	4	T-412	S-412	O-412	0.000	0.017	42	36	112	58	0.6	93	75	82	62	8,969	1,378	
11/19/2024	1302	Grid 118 L1	1	T-413	S-413	O-413	0.015	0.027	5	4.3	32	22	3.9	109	89	79	77	8,848	0,908	Nomal Low-Level
11/19/2024	1302	Grid 118 L2	2	T-414	S-414	O-414	0.012	0.025	-3	-3	47	34	8.0	88	84	80	71	8,860	0.915	
11/19/2024	1305	Grid 118 L3	3	T-415	S-415	O-415	0.007	0.021	15	-3	150	81	8.2	91	75	70	67	8,878	0,918	
11/19/2024	1305	Grid 118 L4	4	T-416	S-416	O-416	0.000	0.020	24	22	58	54	3.5	95	82	74	71	8,885	0,927	
11/19/2024	1305	Grid 118 L4	4	T-417	S-417	O-417	0.000	0.020	24	22	58	54	3.5	95	82	74	71	8,885	0,927	Replicate Sample
11/19/2024	1402	Media Blank	NA	T-418	S-418	O-418	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	UHP Media Blank; 10.07%
11/20/2024	817	Grid 174 L1	1	T-501	S-501	O-501	0.010	0.022	-10	-5	2	-1	6.6	48	48	48	48	8,352	1,517	Reaction Area- Mid-Level
11/20/2024	820	Grid 174 L2	2	T-502	S-502	O-502	0.022	0.025	-14	-11	-0.1	-3	8.8	54	53	54	50	8,330	1,547	
11/20/2024	817	Grid 174 L3	3	T-503	S-503	O-503	0.022	0.010	-15	-10	15	7	8.9	51	51	51	51	8,330	1,540	
11/20/2024	817	Grid 174 L4	4	T-504	S-504	O-504	0.014	0.020	-16	-11	-3	-3	9.1	52	52	52	52	8,357	1,540	
11/20/2024	1025	Grid 152 L1	1	T-505	S-505	O-505	0.004	0.021	0.9	1.6	12	11	5.8	60	62	60	64	8,579	1,653	Reaction Area- Mid-Level
11/20/2024	1025	Grid 152 L2	2	T-506	S-506	O-506	0.000	0.000	0.5	-1.5	11	9.6	8.8	76	72	67	67	8,596	1,660	
11/20/2024	1030	Grid 152 L3	3	T-507	S-507	O-507	0.000	0.000	-1.5	-1.1	9.4	8.4	8.9	84	82	73	65	8,622	1,665	
11/20/2024	1030	Grid 152 L4	4	T-508	S-508	O-508	0.000	0.000	-1	-1	10	-9.5	8.9	79	76	71	67	8,603	1,657	
11/20/2024	1206	Grid 184 L1	1	T-509	S-509	O-509	0.000	0.000	11	5.2	65	43	8.2	78	73	78	71	8,414	1,745	Reaction Area- High Level
11/20/2024	1204	Grid 184 L2	2	T-510	S-510	O-510	0.000	0.000	4.1	2.1	45	33.0	9.1	91	92	85	75	8,427	1,763	
11/20/2024	1206	Grid 184 L3	3	T-511	S-511	O-511	0.000	0.000	5.3	4.2	71	36	8.1	80	83	80	75	8,409	1,752	
11/20/2024	1204	Grid 184 L4	L4	T-512	S-512	O-512	0.000	0.000	2.4	1.1	26	23	8.7	90	93	83	76	8,427	1,715	
11/20/2024	1204	Grid 184 L4	4	T-513	S-513	O-513	0.000	0.000	2.4	1.1	26	23	8.7	90	93	83	76	8,427	1,715	Replicate Sample
11/20/2024	1300	Media Blank	NA	T-514	S-514	O-514	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	UHP Media Blank, He 9.99%
11/21/2024	801	Grid 62 L1	1	T-601	S-601	O-601	0.000	0.000	8700	8000	4000	3000	4.1	54	52	54	52	9,035	1,675	Normal High Level
11/21/2024	810	Grid 62 L2	2	T-602	S-602	O-602	0.000	0.000	4300	4200	82	100	7.9	51	51	51	52	9,057	1,695	
11/21/2024	810	Grid 62 L3	3	T-603	S-603	O-603	0.000	0.000	2,000	2,000	50	50	8.2	48	47	50	46	9,055	1,705	
11/21/2024	801	Grid 62 L4	4	T-604	S-604	O-604	0.000	0.000	12	14	17	13	5.1	NA	NA	NA	NA	9,036	1,682	
11/21/2024	928	Grid 160 L1	1	T-605	S-605	O-605	1.600	0.130	58,000	54,000	2,000	1000	6.5	71	65	73	61	8,607	1,444	Repeat Exceedance- Membrane
11/21/2024	931	Grid 160 L2	2	T-606	S-606	O-606	0.019	0.073	270	220	100	120	3.4	68	64	70	58	8,603	1,458	Covered Grid
11/21/2024	928	Grid 160 L3	3	T-607	S-607	O-607	0.000	0.22	7.2	7.5	7.2	7.5	3.5	64	61	74	58	8,615	1,440	
11/21/2024	931	Grid 160 L4	4	T-608	S-608	O-608	0.006	0.000	3.4	6.1	14	15	7.6	70	69	60	60	8,614	1,460	
11/21/2024	1055	Grid 209 L1	1	T-609	S-609	O-609	0.018	0.028	-1.3	-1.3	13	12.6	NA	90	85	94	73	8,465	1,354	
11/21/2024	1054	Grid 209 L2	2	T-610	S0610	O-610	0.016	0.030	5.2	4.7	7.2	29	2.4	65	67	65	67	8,448	1,324	
11/21/2024	1055	Grid 209 L3	3	T-611	S-611	O-611	0.011	0.031	-1.5	-1.2	7.6	7.6	8.4	106	78	90	73	8,,457	1,339	
11/21/2024	1054	Grid 209 L4	4	T-612	S-612	O-612	0.010	0.030	-1	-0.4	7.1	8.4	8.3	81	80	84	74	8,443	1,330	
11/21/2024	1054	Grid 209 L4	4	T-613	S-613	O-613	0.000	0.000	-1	-0.4	7.1	8.4	8.3	81	80	84	74	8,443	1,330	Replicate Sample
11/21/2024	1142	Media Blank	NA	T-614	S-614	O-614	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	UHP Media Blank; 10.01%

NA- not applicable
UHP- ultra high purity air
H2S and FID for Grid 175 L104 was off-scale for the J631X at 50 ppmv and FID at 10%
FO- instrument Flame Out, no data

Table 2. Summary of Flux Data for Odor, Methane, and TNMHC.

Test Site	LOC	TO-15	SRS	Odor	Methane		Carbon Dioxide		H2	Odor	TO-12 TNMHC C1				He	Total Flow	Total Flow	Odor Flux	Methane Flux		TNMHC Flux		CO2 Flux		COMMENT
		ID	ID	ID	(ppmv)		(%)		(%)	DT	(ppbv}		(ug/m3)		(%)	(lpm)	(m3/min)	Flux	Flux		Flux		Flux		
Grid 160 L1	1	T-401	S-401	O-401	12,100		1.54		ND	3,894	26,641		18,132		2.53	19.74	0.0197	591	820		2.753		4,363		Exceedance Cell- Membrane
Grid 160 L2	2	T-402	S-402	O-402	4		0.20		ND	30	6,717		4,563		1.63	30.66	0.0307	7.07	0.4		1.076		862		
Grid 160 L3	3	T-403	S-403	O-403	135		ND	U	ND	89	99	J	68	J	1.39	36.00	0.0360	24.6	16.8		0.019	J	33	U	
Grid 160 L4	4	T-404	S-404	O-404	1	J	0.34		ND	27	77	J	53	J	3.60	13.89	0.0139	2.88	0.1	J	0.006	J	680		
Grid 34 L1	1	T-405	S-405	O-405	122		ND	U	ND	45	88	J	58	J	0.96	52.36	0.0524	18.1	21.4		0.023	J	47	U	Normal Mid-Level
Grid 34 L2	2	T-406	S-406	O-406	12		ND	U	ND	69	ND	U	19	U	0.46	108.2	0.108	57.4	4.5		0.016	U	98	U	
Grid 34 L3	3	T-407	S-407	O-407	28		ND	U	ND	38	ND	U	15	U	1.17	42.59	0.0426	12.4	3.9		0.005	U	39	U	
Grid 34 L4	4	T-408	S-408	O-408	2		ND	U	ND	35	85	J	55	J	1.35	36.95	0.0370	9.95	0.2		0.016	J	33	U	
Grid 39 L1	1	T-409	S-409	O-409	9		ND	U	ND	25	83	J	53	J	0.64	77.88	0.0779	15.0	2.4		0.032	J	72	U	Mid-Level Grid
Grid 39 L2	2	T-410	S-410	O-410	3,864		2.49		ND	12	67,413		42,889		1.96	25.52	0.0255	2.36	316.5		8.420		8,552		
Grid 39 L3	3	T-411	S-411	O-411	3		0.07		ND	21	504		325		1.38	36.26	0.0363	5.86	0.3		0.091		348		
Grid 39 L4	4	T-412	S-412	O-412	6		0.22		ND	19	359		235		1.08	46.21	0.0462	6.75	0.9		0.084		1,400		
Grid 118 L1	1	T-413	S-413	O-413	1	J	ND	D	ND	17	57	J	37	J	2.62	19.09	0.0191	2.50	0.06	J	0.005	J	17	D	Nomal Low-Level
Grid 118 L2	2	T-414	S-414	O-414	ND	U	ND	U	ND	10	46	J	30	J	7.38	6.777	0.00678	0.521	0.01	U	0.002	J	6	U	
Grid 118 L3	3	T-415	S-415	O-415	ND	U	ND	U	ND	11	ND	U	15	U	4.90	10.20	0.0102	0.863	0.01	U	0.001	U	9	U	
Grid 118 L4	4	T-416	S-416	O-416	1	J	ND	U	ND	23	82	J	53	J	2.34	21.34	0.0213	3.78	0.07	J	0.009	J	21	U	
Grid 118 L4	4	T-417	S-417	O-417	1	J	ND	U	ND	12	ND	U	15	U	1.25	40.06	0.0401	3.70	0.15	J	0.004	U	36	U	Replicate Sample
Media Blank	NA	T-418	S-418	O-418	ND	U	ND	U	ND	13	ND	U	15	U	9.63	5.191	0.00519	0.519	0.01	U	0.001	U	5	U	UHP Media Blank; 10.07%
Grid 174 L1	1	T-501	S-501	O-501	3		ND	U	ND	45	ND	U	16	U	3.57	13.99	0.0140	4.84	0.17		0.002	U	13	U	Reaction Area- Mid-Level
Grid 174 L2	2	T-502	S-502	O-502	ND	U	ND	U	ND	82	707		484		4.54	11.02	0.0110	6.95	0.01	U	0.041		11	U	
Grid 174 L3	3	T-503	S-503	O-503	1	J	ND	U	ND	10	51	J	35	J	3.64	13.73	0.0137	1.06	0.06	J	0.004	J	13	U	
Grid 174 L4	4	T-504	S-504	O-504	ND	U	ND	U	ND	9	ND	U	15	U	5.21	9.60	0.00960	0.664	0.01	U	0.001	U	9	U	
Grid 152 L1	1	T-505	S-505	O-505	1	J	ND	U	ND	12	66	J	44	J	3.62	13.81	0.0138	1.27	0.07	J	0.005	J	13	U	Reaction Area- Mid-Level
Grid 152 L2	2	T-506	S-506	O-506	ND	U	ND	U	ND	19	275		181		9.24	5.4	0.00541	0.791	0.01	U	0.008		5	U	
Grid 152 L3	3	T-507	S-507	O-507	ND	U	ND	U	ND	9	57	J	37	J	8.53	5.86	0.00586	0.406	0.01	U	0.002	J	6	U	
Grid 152 L4	4	T-508	S-508	O-508	ND	U	ND	U	ND	12	58	J	38	J	8.37	5.97	0.00597	0.551	0.01	U	0.002	J	6	U	
Grid 184 L1	1	T-509	S-509	O-509	ND	U	ND	U	ND	11	66	J	44	J	6.82	7.33	0.00733	0.620	0.01	U	0.002	J	7	U	Reaction Area- High Level
Grid 184 L2	2	T-510	S-510	O-510	ND	U	ND	U	ND	11	85	J	54	J	5.46	9.16	0.00916	0.775	0.01	U	0.004	J	9	U	
Grid 184 L3	3	T-511	S-511	O-511	ND	U	ND	U	ND	25	130	J	84	J	6.58	7.60	0.00760	1.46	0.01	U	0.005	J	7	U	
Grid 184 L4	L4	T-512	S-512	O-512	ND	U	ND	U	ND	17	570		362		5.33	9.38	0.00938	1.23	0.01	U	0.026		9	U	
Grid 184 L4	4	T-513	S-513	O-513	ND	U	ND	U	ND	13	359		228		7.98	6.27	0.00627	0.627	0.01	U	0.011		6	U	Replicate Sample
Media Blank	NA	T-514	S-514	O-514	ND	U	ND	U	ND	9	ND	U	15	U	10.03	4.985	0.00499	0.345	0.01	U	0.001	U	5	U	UHP Media Blank, He 9.99%
Grid 62 L1	1	T-601	S-601	O-601	6.000.6		0.61		ND	163	1,717		1,177		2.33	21.51	0.0215	27.0	446		0.195		1,916		Normal High Level
Grid 62 L2	2	T-602	S-602	O-602	1,159		0.35		ND	9	3,163		2,174		4.10	12.20	0.0122	0.844	49		0.204		624		
Grid 62 L3	3	T-603	S-603	O-603	16,670		0.25		ND	15	387		268		3.76	13.32	0.0133	1.54	78		0.027		495		
Grid 62 L4	4	T-604	S-604	O-604	11		0.10		ND	8	169		117		2.86	17.46	0.0175	1.07	0.6		0.016		250		
Grid 160 L1	1	T-605	S-605	O-605	28,823		3.16		ND	2,885	58,141		38,893		3.10	16.11	0.0161	357	1,567		4.819		7,202		Repeat Exceedance- Membrane
Grid 160 L2	2	T-606	S-606	O-606	563		0.08		ND	49	663		444		2.08	24.10	0.0241	9.08	46		0.082		287		
Grid 160 L3	3	T-607	S-607	O-607	6		0.18		ND	115	570		384		1.88	26.61	0.0266	23.5	0.51		0.079		684		
Grid 160 L4	4	T-608	S-608	O-608	3		0.20		ND	11	179		119		3.34	14.97	0.0150	1.27	0.14		0.014		414		
Grid 209 L1	1	T-609	S-609	O-609	ND	U	ND	U	ND	15	110	J	71	J	6.63	7.545	0.00754	0.871	0.01	U	0.004	J	7	U	
Grid 209 L2	2	T-610	S0610	O-610	8		ND	U	ND	75	523		348		2.28	21.96	0.0220	12.7	0.61		0.059		21	U	
Grid 209 L3	3	T-611	S-611	O-611	ND	U	ND	U	ND	58	154		101		3.71	13.48	0.0135	6.01	0.01	U	0.010		13	U	
Grid 209 L4	4	T-612	S-612	O-612	ND	U	ND	U	ND	11	66	J	43	J	4.21	11.87	0.0119	1.00	0.01	U	0.004	J	11	U	
Grid 209 L4	4	T-613	S-613	O-613	ND	U	ND	U	ND	10	93	J	61	J	6.10	8.19	0.00819	0.630	0.01	U	0.004	J	8	U	Replicate Sample
Media Blank	NA	T-614	S-614	O-614	ND	U	ND	U	ND	9	ND	U	15	U	10.65	4.693	0.00469	0.325	0.01	U	0.001	U	4	U	UHP Media Blank; 10.01%

ND- Not detected

U- Below method detection limit

J- above method detection limit but below reporting limit

Flux = mg/m2-min or OU/m2-min

Table 3 - Fixed Gases

Sample ID	Compound	Hydrogen	Oxygen	Carbon Monoxide	Carbon Dioxide
	CAS	1333-74-0	7782-44-7	630-08-0	124-38-9
	MW	2	32	28	44
		Lab Data (ppmv)			
T-401		ND	157,856	ND	15,351
T-402		ND	166,418	ND	1,957
T-403		ND	169,973	ND	ND
T-404		ND	160,498	ND	3,370
T-405		ND	170,901	ND	ND
T-406		ND	170,657	ND	ND
T-407		ND	167,463	ND	ND
T-408		ND	169,849	ND	ND
T-409		ND	173,340	ND	ND
T-410		ND	151,323	ND	24,897
T-411		ND	164,804	ND	705
T-412		ND	167,160	ND	2,182
T-413		ND	167,402	ND	ND
T-414		ND	161,411	ND	ND
T-415		ND	159,853	ND	ND
T-416		ND	167,492	ND	ND
T-417		ND	166,680	ND	ND
T-418		ND	157,027	ND	ND
T-501		ND	164,771	ND	ND
T-502		ND	159,859	ND	ND
T-503		ND	159,207	ND	ND
T-504		ND	160,523	ND	ND
T-505		ND	164,945	ND	ND
T-506		ND	161,187	ND	ND
T-507		ND	160,571	ND	ND
T-508		ND	159,373	ND	ND
T-509		ND	161,282	ND	ND
T-510		ND	159,515	ND	ND
T-511		ND	160,798	ND	ND
T-512		ND	162,934	ND	ND
T-513		ND	161,335	ND	ND
T-514		ND	160,463	ND	ND
T-601		ND	166,612	ND	6,140
T-602		ND	161,578	ND	3,521
T-603		ND	160,009	ND	2,539
T-604		ND	164,647	ND	981
T-605		ND	159,813	ND	31,595
T-606		ND	168,113	ND	840
T-607		ND	168,644	ND	1,802
T-608		ND	161,285	ND	1,967
T-609		ND	161,921	ND	ND
T-610		ND	171,263	ND	ND
T-611		ND	160,711	ND	ND
T-612		ND	162,277	ND	ND
T-613		ND	162,367	ND	ND
T-614		ND	158,368	ND	ND

Table 3 - Fixed Gases

Sample ID	Compound	Hydrogen	Oxygen	Carbon Monoxide	Carbon Dioxide
	CAS	1333-74-0	7782-44-7	630-08-0	124-38-9
	MW	2	32	28	44
		MDL (ppmv)			
T-401		375	625	125	125
T-402		375	625	125	125
T-403		381	635	127	127
T-404		372	620	124	124
T-405		384	640	128	128
T-406		378	630	126	126
T-407		396	660	132	132
T-408		393	655	131	131
T-409		408	680	136	136
T-410		408	680	136	136
T-411		384	640	128	128
T-412		396	660	132	132
T-413		402	670	134	134
T-414		396	660	132	132
T-415		393	655	131	131
T-416		426	710	142	142
T-417		390	650	130	130
T-418		375	625	125	125
T-501		384	640	128	128
T-502		399	665	133	133
T-503		384	640	128	128
T-504		384	640	128	128
T-505		405	675	135	135
T-506		408	680	136	136
T-507		414	690	138	138
T-508		414	690	138	138
T-509		420	700	140	140
T-510		426	710	142	142
T-511		411	685	137	137
T-512		408	680	136	136
T-513		408	680	136	136
T-514		414	690	138	138
T-601		390	650	130	130
T-602		384	640	128	128
T-603		372	620	124	124
T-604		399	665	133	133
T-605		393	655	131	131
T-606		414	690	138	138
T-607		393	655	131	131
T-608		405	675	135	135
T-609		393	655	131	131
T-610		411	685	137	137
T-611		405	675	135	135
T-612		417	695	139	139
T-613		417	695	139	139
T-614		414	690	138	138

Table 3 - Fixed Gases

Sample ID	Compound	Hydrogen	Oxygen	Carbon Monoxide	Carbon Dioxide
	CAS	1333-74-0	7782-44-7	630-08-0	124-38-9
	MW	2	32	28	44
		Data Used (mg/l)			
T-401		16	214,879	74	28,732
T-402		16	226,096	74	3,656
T-403		16	232,727	76	120
T-404		16	220,615	75	6,369
T-405		16	226,916	74	117
T-406		16	230,961	75	117
T-407		16	217,015	75	118
T-408		16	221,332	75	117
T-409		16	222,576	76	120
T-410		16	192,544	76	43,559
T-411		15	212,393	72	1,249
T-412		16	219,458	76	3,939
T-413		16	214,168	75	118
T-414		16	208,402	75	117
T-415		16	209,865	75	118
T-416		17	217,052	81	127
T-417		16	216,000	74	116
T-418		15	206,155	72	113
T-501		17	227,826	77	122
T-502		17	218,879	80	125
T-503		16	218,840	77	121
T-504		16	220,218	77	121
T-505		17	221,946	79	125
T-506		17	212,810	79	123
T-507		17	208,083	78	123
T-508		17	208,844	79	124
T-509		17	212,536	81	127
T-510		17	202,968	79	124
T-511		17	207,993	78	122
T-512		16	206,943	76	119
T-513		16	204,912	76	119
T-514		17	210,666	79	125
T-601		17	228,571	78	11,582
T-602		16	222,099	77	6,655
T-603		16	221,679	75	4,837
T-604		17	226,762	80	1,858
T-605		16	213,811	77	58,122
T-606		17	225,345	81	1,548
T-607		17	227,360	77	3,340
T-608		17	214,148	78	3,591
T-609		16	208,677	74	116
T-610		17	228,260	80	126
T-611		17	209,814	77	121
T-612		17	211,073	79	124
T-613		17	211,191	79	124
T-614		17	207,915	79	125

Table 3 - Fixed Gases

Sample ID	Compound	Hydrogen	Oxygen	Carbon Monoxide	Carbon Dioxide
	CAS	1333-74-0	7782-44-7	630-08-0	124-38-9
	MW	2	32	28	44
		Flux (mg/m2-min)			
T-401		2.4	32,628	11.3	4,363
T-402		3.8	53,317	17.5	862.1
T-403		4.5	64,442	21.1	33.1
T-404		1.7	23,570	8.0	680.5
T-405		6.4	91,388	29.9	47.1
T-406		13.3	192,275	62.1	97.6
T-407		5.3	71,096	24.5	38.5
T-408		4.5	62,918	21.2	33.4
T-409		9.8	133,343	45.8	71.9
T-410		3.2	37,803	14.9	8,552
T-411		4.3	59,238	20.1	348.4
T-412		5.8	78,010	27.0	1,400
T-413		2.4	31,452	11.0	17.3
T-414		0.8	10,864	3.9	6.1
T-415		1.3	16,470	5.9	9.3
T-416		2.8	35,630	13.2	20.8
T-417		4.9	66,568	22.7	35.7
T-418		0.6	8,232	2.9	4.5
T-501		1.8	24,518	8.3	13.1
T-502		1.4	18,547	6.8	10.6
T-503		1.7	23,111	8.1	12.8
T-504		1.2	16,257	5.7	8.9
T-505		1.8	23,581	8.4	13.3
T-506		0.7	8,861	3.3	5.1
T-507		0.8	9,378	3.5	5.5
T-508		0.8	9,598	3.6	5.7
T-509		1.0	11,984	4.6	7.2
T-510		1.2	14,305	5.6	8.8
T-511		1.0	12,167	4.5	7.1
T-512		1.2	14,928	5.5	8.6
T-513		0.8	9,876	3.6	5.7
T-514		0.7	8,078	3.0	4.8
T-601		2.8	37,812	12.9	1,916
T-602		1.5	20,840	7.2	624.4
T-603		1.6	22,706	7.7	495.4
T-604		2.3	30,463	10.8	249.6
T-605		2.0	26,493	9.5	7,202
T-606		3.2	41,769	15.0	287.0
T-607		3.4	46,539	15.8	683.8
T-608		1.9	24,660	9.0	413.5
T-609		0.9	12,111	4.3	6.7
T-610		2.9	38,556	13.5	21.2
T-611		1.7	21,757	8.0	12.6
T-612		1.5	19,269	7.2	11.3
T-613		1.1	13,307	5.0	7.8
T-614		0.6	7,506	2.9	4.5

Table 4 TO-15

Sample ID	Compound	2-Butanone (MEK)	Acetone	Propylene	2-propanol (isopro	Toluene	m,p-Xylenes	Carbon disulfide	Ethanol	Tetrahydrofuran	Ethylbenzene	n-Heptane	o-Xylene	Methanol	Nonane	Cyclohexane	Bromomethane	1,2-Dichloroethane	Chloromethane	Benzene	Isopropyltoluene	Octane	4-Methyl-2-pentano	Decane	Styrene	2,2,4-Trimethylpent
	CAS	78-93-3	67-64-1	115-07-1	67-63-0	108-88-3	1330-20-7	75-15-0	64-17-5	109-99-9	100-41-4	142-82-5	95-47-6	67-56-1	111-84-2	110-82-7	74-83-9	107-06-2	74-87-3	71-43-2	99-87-6	111-65-9	108-10-1	124-18-5	100-42-5	540-84-1
	MW	72.1	58.1	42.08	60.1	92.1	106.2	76.1	46.1	72.1	106.2	100.2	106.2	32	128.3	84.2	94.9	99	50.5	78.1	134.2	114.2	100.2	142.3	104.2	114.2
Lab Data (ppbv)																										
T-401		2687.69	1410.81	418.33	27.28	72.89	59.67	51.56	2.12	21.58	33.77	22.48	24.38	6.71	16.17	10.43	5.61	12.2	3.86	8.58	11.17	10.65	4.81	7.4	5.74	ND
T-402		3.04	7.07	1.32	2.38	1.03	0.6	ND	ND	ND	ND	ND	ND	5.41	ND	0.36	ND	ND	1	ND	ND	ND	ND	ND	ND	ND
T-403		1.23	4.88	1.1	ND	0.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-404		0.6	5.82	1.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-405		ND	3.49	2.38	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43	ND	ND	0.71	ND	ND	ND	ND	ND	ND	ND
T-406		ND	3.07	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-407		ND	3.38	0.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-408		0.54	6.52	1.11	2.4	ND	ND	ND	ND	ND	ND	ND	ND	4.49	ND	ND	ND	ND	0.85	ND	ND	ND	ND	ND	ND	ND
T-409		ND	ND	16.16	ND	ND	ND	ND	ND	ND	ND	ND	0.55	ND	ND	ND	ND	ND	0.93	ND	ND	ND	ND	ND	0.75	ND
T-410		2.22	6.67	135.08	ND	5.52	26.32	2.19	ND	2.45	27.89	6.57	8.11	7	ND	27.33	50.1	ND	32.94	4.1	ND	ND	ND	2.21	0.89	5.71
T-411		ND	4.83	0.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.93	ND	ND	ND	ND	5.44	ND	ND	ND	ND	ND	ND	ND
T-412		ND	2.91	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.15	ND	ND	3.36	ND	3.08	ND	ND	ND	ND	ND	ND	ND
T-413		ND	2.6	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND
T-414		ND	ND	0.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.79	ND	1.42	ND	ND	ND	ND	ND	ND	ND
T-415		ND	2.3	0.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.14	ND	ND	ND	ND	ND	ND	ND
T-416		ND	ND	0.83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.98	ND	ND	ND	ND	ND	ND	ND
T-417		ND	ND	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.52	ND	ND	ND	ND	ND	ND	ND
T-418		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-501		ND	2.85	1.36	3.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-502		ND	2.69	0.91	ND	5.03	2.71	ND	ND	ND	2.15	ND	0.58	ND	0.56	ND	ND	ND	1.43	10.89	9.35	0.45	ND	ND	ND	ND
T-503		ND	ND	0.79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND
T-504		ND	ND	ND	ND	ND	0.59	ND	32.76	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND
T-505		ND	2.5	ND	ND	ND	ND	ND	20.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-506		ND	14.07	1.17	32.68	ND	ND	ND	19.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-507		ND	2.34	ND	ND	ND	ND	ND	10.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-508		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.89	ND	ND	ND	ND	ND	ND
T-509		ND	ND	1.08	ND	1.1	0.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.98	ND	ND	ND	ND	ND	ND
T-510		ND	ND	ND	ND	ND	1.65	ND	ND	ND	ND	ND	0.93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-511		ND	2.63	ND	ND	1.39	0.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.65	ND	ND	ND	ND	ND	ND
T-512		ND	2.76	ND	ND	ND	0.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-513		ND	3.55	ND	ND	ND	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-514		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-601		ND	6.95	12.7	ND	ND	ND	1.51	ND	0.65	ND	ND	ND	3.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-602		ND	6.33	139.95	ND	0.87	ND	2.2	ND	ND	ND	ND	0.62	ND	ND	0.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-603		ND	2.93	5.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-604		ND	4.36	1.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-605		5258.46	5090.2	963.74	1208.68	722.35	365.32	378.07	311.94	208.13	136.76	141.13	106.83	28.95	108.02	78.41	28.41	76.52	26.44	44.2	47.29	48.14	45.74	32.1	23.75	21.7
T-606		ND	9.82	2.59	ND	ND	ND	0.5	3.81	ND	ND	ND	ND	6.21	ND	2.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-607		4.01	25.56	1.16	ND	ND	ND	ND	14.5	1.74	ND	ND	ND	4.8	ND	ND	ND	ND	1.54	ND	ND	ND	ND	ND	ND	ND
T-608		ND	5.4	1.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-609		ND	7.23	1.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-610		2.58	7.91	2.66	ND	1.22	0.67	ND	ND	ND	ND	ND	ND	7.31	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND
T-611		3.59	6.62	1.44	2.61	ND	ND	ND	ND	ND	ND	ND	ND	3.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-612		ND	5.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-613		ND	3.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-614		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)																										
T-401		5	25	5	0.83	0.83	0.42	0.42	2.08	0.21	0.42	0.42	0.42	2.08	0.42	0.21	0.42	0.21	0.63	1.46	0.83	0.42	0.42	0.83	0.63	0.21
T-402		0.42	2.08	0.42	0.83	0.83	0.42	0.42	2.08	0.21	0.42	0.42	0.42	2.08	0.42	0.21	0.42	0.21	0.63	1.46	0.83	0.42	0.42	0.83	0.63	0.21
T-403		0.42	2.12	0.42	0.85	0.85	0.42	0.42	2.12	0.21	0.42	0.42	0.42	2.12	0.42	0.21	0.42	0.21	0.64	1.48	0.85	0.42	0.42	0.85	0.64	0.21
T-404		0.41	2.07	0.41	0.83	0.83	0.41	0.41	2.07	0.21	0.41	0.41	0.41	2.07	0.41	0.21	0.41	0.21	0.62	1.45	0.83	0.41	0.41	0.83	0.62	0.21
T-405		0.43	2.13	0.43	0.85	0.85	0.43	0.43	2.13	0.21	0.43	0.43	0.43	2.13	0.43	0.21	0.43	0.21	0.64	1.49	0.85	0.43	0.43	0.85	0.64	0.21
T-406		0.42	2.1	0.42	0.84	0.84	0.42	0.42	2.1	0.21	0.42	0.42	0.42	2.1	0.42	0.21	0.42	0.21	0.63	1.47	0.84	0.42	0.42	0.84	0.63	0.21
T-407		0.44	2.2	0.44	0.88	0.88	0.44	0.44	2.2	0.22	0.44	0.44	0.44	2.2	0.44	0.22	0.44	0.22	0.66	1.54	0.88	0.44	0.44	0.88	0.66	0.22
T-408		0.44	2.18	0.44	0.87	0.87	0.44	0.44	2.18	0.22	0.44	0.44	0.44	2.18	0.44	0.22	0.44	0.22	0.66	1.53	0.87	0.44	0.44	0.87	0.66	0.22
T-409		0.45	2.27	0.45	0.91	0.91	0.45	0.45	2.27	0.23	0.45	0.45	0.45	2.27	0.45	0.23	0.45	0.23	0.68	1.59	0.91	0.45	0.45	0.91	0.68	0.23
T-410		0.45	2.27	0.45	0.91	0.91	0.45	0.45	2.27	0.23	0.45	0.45	0.45	2.27	0.45	0.23	0.45	0.23	0.68	1.59	0.91	0.45	0.45	0.91	0.68	0.23
T-411		0.43	2.13	0.43	0.85	0.85	0.43	0.43	2.13	0.21	0.43	0.43	0.43	2.13	0.43	0.21	0.43	0.21	0.64	1.49	0.85	0.43	0.43	0.85	0.64	0.21
T-412		0.44	2.2	0.44	0.88	0.88	0.44	0.44	2.2	0.22	0.44	0.44	0.44	2.2	0.44	0.22	0.44	0.22	0.66	1.54	0.88	0.44	0.44	0.88	0.66	0.22
T-413		0.45	2.23	0.45	0.89	0.89	0.45	0.45	2.23	0.22	0.45	0.45	0.45	2.23	0.45	0.22	0.45	0.22	0.67	1.56	0.89	0.45	0.45	0.89	0.67	0.22
T-414		0.44	2.2	0.44	0.88	0.88	0.44	0.44	2.2	0.22	0.44	0.44	0.44	2.2	0.44	0.22	0.44	0.22	0.66	1.54	0.88	0.44	0.44	0.88	0.66	0.22
T-415		0.44	2.18	0.44	0.87	0.87	0.44	0.44	2.18	0.22	0.44	0.44	0.44	2.18	0.44	0.22	0.44	0.22	0.66	1.53	0.87	0.44	0.44	0.87	0.66	0.22
T-416		0.47	2.37	0.47	0.95	0.95	0.47	0.47	2.37	0.24	0.47	0.47	0.47	2.37	0.47	0.24	0.47	0.24	0.71	1.66	0.95	0.47	0.47	0.95	0.71	0.24
T-417		0.43	2.17	0.43	0.87	0.87	0.43	0.43	2.17	0.22	0.43	0.43	0.43	2.17	0.43	0.22	0.43	0.22	0.65	1.52	0.87	0.43	0.43	0.87	0.65	0.22
T-418		0.42	2.08	0.42	0.83	0.83	0.42	0.42	2.08	0.21	0.42	0.42	0.42	2.08	0.42	0.21	0.42	0.21	0.63	1.46	0.83	0.42	0.42	0.83	0.63	0.21
T-501		0.43	2.13	0.43	0.85	0.85	0.43	0.43	2.13	0.21	0.43	0.43	0.43	2.13	0.43	0.21	0.43	0.21	0.64	1.49	0.85	0.43	0.43	0.85	0.64	0.21
T-502		0.44	2.22	0.44	0.89	0.89	0.44	0.44	2.22	0.22	0.44	0.44	0.44	2.22	0.44	0.22	0.44	0.22	0.67	1.55	0.89	0.44	0.44	0.89	0.67	0.22
T-503		0.43	2.13	0.43	0.85	0.85	0.43	0.43	2.13	0.21	0.43	0.43	0.43	2.13	0.43	0.21	0.43	0.21	0.64	1.49	0.85	0.43	0.43	0.85	0.64	0.21
T-504		0.43	2.13	0.43	0.85	0.85	0.43	0.43	2.13	0.21	0.43	0.43	0.43	2.13	0.43	0.21	0.43	0.21	0.64	1.49	0.85	0.43	0.43	0.85	0.64	0.21
T-505		0.45	2.25	0.45	0.9	0.9	0.45	0.45	2.25	0.23	0.45	0.45	0.45	2.25	0.45	0.23	0.45	0.23	0.68	1.58	0.9	0.45	0.45	0.9	0.68	0.23
T-506		0.45	2.27	0.45	0.91	0.91	0.45	0.45	2.27	0.23	0.45	0.45	0.45	2.27	0.45	0.23	0.45	0.23	0.68	1.59	0.91	0.45	0.45	0.91	0.68	0.23
T-507		0.46	2.3	0.46	0.92	0.92	0.46	0.46	2.3	0.23	0.46	0.46	0.46	2.3	0.46	0.23	0.46	0.23	0.69	1.61	0.92	0.46	0.46	0.92	0.69	0.23
T-508		0.46	2.3	0.46	0.92	0.92	0.46	0.46	2.3	0.23	0.46	0.46	0.46	2.3	0.46	0.23	0.46	0.23	0.69	1.61	0.92	0.46	0.46	0.92	0.69	0.23
T-509		0.47	2.33	0.47	0.93	0.93	0.47	0.47	2.33	0.23	0.47	0.47	0.47	2.33	0.47	0.23	0.47	0.23	0.7	1.63	0.93	0.47	0.47	0.93	0.7	0.23
T-510		0.47	2.37	0.47	0.95	0.95	0.47	0.47	2.37	0.24	0.47	0.47	0.47	2.37	0.47	0.24	0.47	0.24	0.71	1.66	0.95	0.47	0.47	0.95	0.71	0.24
T-511		0.46	2.28	0.46	0.91	0.91	0.46	0.46	2.28	0.23	0.46	0.46	0.46	2.28	0.46	0.23	0.46	0.23	0.69	1.6	0.91	0.46	0.46	0.91	0.69	0.23
T-512		0.45	2.27	0.45	0.91	0.91	0.45	0.45	2.27	0.23	0.45	0.45	0.45	2.27	0.45	0.23	0.45	0.23	0.68	1.59	0.91	0.45	0.45	0.91	0.68	0.23
T-513		0.45	2.27	0.45	0.91	0.91	0.45	0.45	2.27	0.23	0.45	0.45	0.45	2.27	0.45	0.23	0.45	0.23	0.68	1.59	0.91	0.45	0.45	0.91	0.68	0.23
T-514		0.46	2.3	0.46	0.92	0.92	0.46	0.46	2.3	0.23	0.46	0.46	0.46	2.3	0.46	0.23	0.46	0.23	0.69	1.61	0.92	0.46	0.46	0.92	0.69	0.23
T-601		0.43	2.17	0.43	0.87	0.87	0.43	0.43	2.17	0.22	0.43	0.43	0.43	2.17	0.43	0.22	0.43	0.22	0.65	1.52	0.87	0.43	0.43	0.87	0.65	0.22
T-602		0.43	2.13	0.43	0.85	0.85	0.43	0.43	2.13	0.21	0.43	0.43	0.43	2.13	0.43	0.21	0.43	0.21	0.64	1.49	0.85	0.43	0.43	0.85	0.64	0.21
T-603		0.41	2.07	0.41	0.83	0.83	0.41	0.41	2.07	0.21	0.41	0.41	0.41	2.07	0.41	0.21	0.41	0.21	0.62	1.45	0.83	0.41	0.41	0.83	0.62	0.21
T-604		0.44	2.22	0.44	0.89	0.89	0.44	0.44	2.22	0.22	0.44	0.44	0.44	2.22	0.44	0.22	0.44	0.22	0.67	1.55	0.89	0.44	0.44	0.89	0.67	0.22
T-605		26.2	131	26.2	52.4	52.4	26.2	26.2	131	13.18	0.44	0.44	0.44	2.18	0.44	0.22	0.44	0.22	0.66	1.53	0.87	0.44	0.44	0.87	0.66	0.22
T-606		0.46	2.3	0.46	0.92	0.92	0.46	0.46	2.3	0.23	0.46	0.46	0.46	2.3	0.46	0.23	0.46	0.23	0.69	1.61	0.92	0.46	0.46	0.92	0.69	0.23
T-607		0.44	2.18	0.44	0.87	0.87	0.44	0.44	2.18	0.22	0.44	0.44	0.44	2.18	0.44	0.22	0.44	0.22	0.66	1.53	0.87	0.44	0.44	0.87	0.66	0.22
T-608		0.45	2.25	0.45	0.9	0.9	0.45	0.45	2.25	0.23	0.45	0.45	0.45	2.25	0.45	0.23	0.45	0.23	0.68	1.58	0.9	0.45	0.45	0.9	0.68	0.23
T-609		0.44	2.18	0.44	0.87	0.87	0.44	0.44	2.18	0.22	0.44	0.44	0.44	2.18	0.44	0.22	0.44	0.22	0.66	1.53	0.87	0.44	0.44	0.87	0.66	0.22
T-610		0.46	2.28	0.46	0.91	0.91	0.46	0.46	2.28	0.23	0.46	0.46	0.46	2.28	0.46	0.23	0.46	0.23	0.69	1.6	0.91	0.46	0.46	0.91	0.69	0.23
T-611		0.45	2.25	0.45	0.9	0.9	0.45	0.45	2.25	0.23	0.45	0.45	0.45	2.25	0.45	0.23	0.45	0.23	0.68	1.58	0.9	0.45	0.45	0.9	0.68	0.23
T-612		0.46	2.32	0.46	0.93	0.93	0.46	0.46	2.32	0.23	0.46	0.46	0.46	2.32	0.46	0.23	0.46	0.23	0.7	1.62	0.93	0.46	0.46	0.93	0.7	0.23
T-613		0.46	2.32	0.46	0.93	0.93	0.46	0.46	2.32	0.23	0.46	0.46	0.46	2.32	0.46	0.23	0.46	0.23	0.7	1.62	0.93	0.46	0.46	0.93	0.7	0.23
T-614		0.46	2.3	0.46	0.92	0.92	0.46	0.46	2.3	0.23	0.46	0.46	0.46	2.3	0.46	0.23	0.46	0.23	0.69	1.61	0.92	0.46	0.46	0.92	0.69	0.23

Table 4 TO-15

Sample ID / Compound	2-Butanone (MEK)	Acetone	Propylene	2-propanol (isopro	Toluene	m,p-Xylenes	Carbon disulfide	Ethanol	Tetrahydrofuran	Ethylbenzene	n-Heptane	o-Xylene	Methanol	Nonane	Cyclohexane	Bromomethane	1,2-Dichloroethane	Chloromethane	Benzene	Isopropyltoluene	Octane	4-Methyl-2-pentano	Decane	Styrene	2,2,4-Trimethylpent
CAS	78-93-3	67-64-1	115-07-1	67-63-0	108-88-3	1330-20-7	75-15-0	64-17-5	109-99-9	100-41-4	142-82-5	95-47-6	67-56-1	111-84-2	110-82-7	74-83-9	107-06-2	74-87-3	71-43-2	99-87-6	111-65-9	108-10-1	124-18-5	100-42-5	540-84-1
MW	72.1	58.1	42.08	60.1	92.1	106.2	76.1	46.1	72.1	106.2	100.2	106.2	32	128.3	84.2	94.9	99	50.5	78.1	134.2	114.2	100.2	142.3	104.2	114.2
Data Used (ug/l)																									
T-401	8,243	3,487	749	69.7	286	270	167	4.2	66.2	153	95.8	110	9.1	88.3	37.4	22.6	51.4	8.3	28.5	63.8	51.7	20.5	44.8	25.4	0.5
T-402	9.31	17.4	2.4	6.1	4.0	2.7	0.7	2.0	0.3	0.9	0.9	0.9	7.4	1.1	1.3	0.8	0.4	2.1	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-403	3.79	12.1	2.0	1.1	3.6	1.0	0.7	2.1	0.3	1.0	0.9	1.0	1.5	1.2	1.4	0.9	0.4	0.7	2.5	2.4	1.0	0.9	2.6	1.4	0.5
T-404	1.86	14.5	2.3	1.1	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	3.0	1.1	0.4	0.8	0.4	0.7	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-405	0.64	8.4	4.2	1.1	4.3	0.9	0.7	2.0	0.3	0.9	0.9	0.9	1.4	1.1	1.5	0.8	0.4	1.5	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-406	0.64	7.5	1.4	1.1	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	1.4	1.1	1.0	0.8	0.4	0.7	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-407	0.64	8.0	1.3	1.1	1.6	0.9	0.7	2.1	0.3	0.9	0.9	0.9	6.2	1.1	0.4	0.8	0.4	0.7	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-408	1.59	15.4	1.9	5.9	1.6	1.0	0.7	2.0	0.3	1.0	0.9	1.0	5.9	1.1	0.4	0.9	0.4	1.7	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-409	0.65	2.6	27.3	1.1	1.7	1.0	0.7	2.1	0.3	1.0	0.9	2.3	1.5	1.2	0.4	0.9	0.5	1.9	2.5	2.5	1.0	0.9	2.6	3.1	0.5
T-410	6.36	15.4	226	1.1	20.2	111	6.6	2.1	7.0	118	26.2	34.2	8.9	1.1	91.5	189	0.5	66.1	12.7	2.4	1.0	0.9	12.5	3.7	25.9
T-411	0.62	11.3	1.3	1.0	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	20.5	1.1	0.4	0.8	0.4	11.1	2.3	2.3	1.0	0.9	2.4	1.3	0.5
T-412	0.65	6.9	3.3	1.1	1.7	1.0	0.7	2.1	0.3	1.0	0.9	1.0	9.4	1.2	0.4	13.1	0.4	6.4	2.5	2.4	1.0	0.9	2.6	1.4	0.5
T-413	0.65	6.0	1.2	1.1	1.6	1.0	0.7	2.1	0.3	1.0	0.9	1.0	1.4	1.2	0.4	0.9	0.4	3.9	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-414	0.64	2.6	1.1	1.1	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	1.4	1.1	0.4	6.9	0.4	2.9	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-415	0.65	5.5	1.4	1.1	1.6	1.0	0.7	2.1	0.3	1.0	0.9	1.0	1.4	1.2	0.4	0.9	0.4	2.4	2.5	2.4	1.0	0.9	2.5	1.4	0.5
T-416	0.69	2.8	1.4	1.2	1.8	1.0	0.7	2.2	0.4	1.0	1.0	1.0	1.5	1.2	0.4	0.9	0.5	4.0	2.6	2.6	1.1	1.0	2.7	1.5	0.6
T-417	0.63	2.6	1.4	1.1	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	1.4	1.1	0.4	0.8	0.4	3.1	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-418	0.62	2.5	0.4	1.0	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	1.4	1.1	0.4	0.8	0.4	0.7	2.3	2.3	1.0	0.9	2.4	1.3	0.5
T-501	0.67	7.2	2.5	9.1	1.7	1.0	0.7	2.1	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.4	0.7	2.5	2.5	1.1	0.9	2.6	1.4	0.5
T-502	0.68	6.7	1.6	1.1	19.8	12.3	0.7	2.2	0.3	9.8	0.9	2.6	1.5	3.1	0.4	0.9	0.5	3.1	36.4	53.7	2.2	0.9	2.7	1.5	0.5
T-503	0.67	2.7	1.4	1.1	1.7	1.0	0.7	2.1	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.4	0.7	5.0	2.4	1.1	0.9	2.6	1.4	0.5
T-504	0.66	2.7	0.4	1.1	1.7	2.7	0.7	64.7	0.3	1.0	0.9	2.4	1.5	1.2	0.4	0.9	0.4	0.7	2.5	2.4	1.1	0.9	2.6	3.1	0.5
T-505	0.68	6.1	0.4	1.1	1.7	1.0	0.7	39.8	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.6
T-506	0.67	33.7	2.0	81.0	1.7	1.0	0.7	37.0	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
T-507	0.67	5.5	0.4	1.1	1.7	1.0	0.7	18.7	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	2.5	2.5	1.1	0.9	2.7	1.5	0.5
T-508	0.68	2.7	0.4	1.1	1.7	1.0	0.7	2.2	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	6.0	2.5	1.1	0.9	2.7	1.5	0.5
T-509	0.70	2.8	1.9	1.2	4.2	2.3	0.7	2.2	0.3	1.0	1.0	1.0	1.5	1.2	0.4	0.9	0.5	0.7	9.6	2.6	1.1	1.0	2.7	1.5	0.5
T-510	0.67	2.7	0.4	1.1	1.7	7.0	0.7	2.2	0.3	1.0	0.9	3.9	1.5	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
T-511	0.67	6.2	0.4	1.1	5.2	2.7	0.7	2.1	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	11.5	2.5	1.1	0.9	2.6	1.5	0.5
T-512	0.64	6.4	0.4	1.1	1.7	1.9	0.7	2.1	0.3	0.9	0.9	0.9	1.4	1.1	0.4	0.8	0.5	0.7	2.5	2.4	1.0	0.9	2.6	1.4	0.5
T-513	0.64	8.2	0.4	1.1	1.7	2.0	0.7	2.1	0.3	0.9	0.9	0.9	1.4	1.1	0.4	0.8	0.5	0.7	2.5	2.4	1.0	0.9	2.6	1.4	0.5
T-514	0.68	2.7	0.4	1.1	1.7	1.0	0.7	2.2	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
T-601	0.66	17.3	22.9	1.1	1.7	1.0	4.9	2.1	2.0	1.0	0.9	1.0	4.3	1.2	0.4	0.9	0.5	0.7	2.5	2.5	1.1	0.9	2.7	1.5	0.5
T-602	0.67	15.8	253	1.1	3.4	1.0	7.2	2.1	0.3	1.0	0.9	2.8	1.5	1.2	2.7	0.9	0.4	0.7	2.5	2.4	1.1	0.9	2.6	1.4	0.5
T-603	0.64	7.4	9.6	1.1	1.7	0.9	0.7	2.1	0.3	0.9	0.9	0.9	1.4	1.1	0.4	0.8	0.5	0.7	2.5	2.4	1.0	0.9	2.6	1.4	0.5
T-604	0.68	10.9	2.2	1.2	1.8	1.0	0.7	2.2	0.3	1.0	0.9	1.0	5.0	1.2	0.4	0.9	0.5	0.7	2.6	2.6	1.1	0.9	2.7	1.5	0.5
T-605	15,851	12,365	1,696	3,037	2,781	1,622	1,203	601	627	607	591	474	39	579	276	113	317	56	144	265	230	192	191	103	104
T-606	0.69	23.9	4.6	1.2	1.8	1.0	1.6	7.4	0.3	1.0	1.0	1.0	8.3	1.2	7.2	0.9	0.5	0.7	2.6	2.6	1.1	1.0	2.7	1.5	0.6
T-607	12.18	62.6	2.1	1.1	1.7	1.0	0.7	28.2	5.3	1.0	0.9	1.0	6.5	1.2	0.4	0.9	0.5	3.3	2.5	2.5	1.1	0.9	2.6	1.4	0.5
T-608	0.67	13.0	2.3	1.1	1.7	1.0	0.7	2.2	0.3	1.0	0.9	1.0	8.6	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
T-609	0.64	16.9	2.2	1.1	1.6	0.9	0.7	2.0	0.3	0.9	0.9	0.9	1.4	1.1	0.4	0.8	0.4	0.7	2.4	2.4	1.0	0.9	2.5	1.4	0.5
T-610	7.75	19.1	4.7	1.1	4.7	3.0	0.7	2.2	0.3	1.0	1.0	1.0	9.7	1.2	0.4	0.9	0.5	2.7	2.6	2.5	1.1	1.0	2.7	1.5	0.5
T-611	10.56	15.7	2.5	6.4	1.7	1.0	0.7	2.1	0.3	1.0	0.9	1.0	4.3	1.2	0.4	0.9	0.5	0.7	2.5	2.5	1.0	0.9	2.6	1.4	0.5
T-612	0.67	12.1	0.4	1.1	1.7	1.0	0.7	2.2	0.3	1.0	0.9	1.0	5.3	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
T-613	0.67	8.6	0.4	1.1	1.7	1.0	0.7	2.2	0.3	1.0	0.9	1.0	4.9	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
T-614	0.68	2.7	0.4	1.1	1.7	1.0	0.7	2.2	0.3	1.0	0.9	1.0	1.5	1.2	0.4	0.9	0.5	0.7	2.6	2.5	1.1	0.9	2.7	1.5	0.5
	0.13																								

Flux (mg/m2-min)

T-401	1.25167	0.52944	0.11370	0.01059	0.04336	0.04093	0.02534	0.00063	0.01005	0.02316	0.01455	0.01672	0.00139	0.01340	0.00567	0.00344	0.00780	0.00126	0.00433	0.00968	0.00786	0.00311	0.00680	0.00386	0.00008
T-402	0.00219	0.00411	0.00056	0.00143	0.00095	0.00064	0.00016	0.00048	0.00008	0.00022	0.00021	0.00022	0.00173	0.00027	0.00030	0.00020	0.00010	0.00051	0.00057	0.00056	0.00024	0.00021	0.00059	0.00033	0.00012
T-403	0.00105	0.00336	0.00055	0.00030	0.00099	0.00026	0.00019	0.00058	0.00009	0.00026	0.00025	0.00026	0.00040	0.00032	0.00040	0.00024	0.00012	0.00019	0.00068	0.00068	0.00028	0.00025	0.00072	0.00040	0.00014
T-404	0.00020	0.00155	0.00024	0.00011	0.00018	0.00010	0.00007	0.00022	0.00003	0.00010	0.00009	0.00010	0.00032	0.00012	0.00004	0.00009	0.00005	0.00007	0.00026	0.00026	0.00011	0.00009	0.00027	0.00015	0.00006
T-405	0.00026	0.00339	0.00167	0.00043	0.00172	0.00038	0.00027	0.00082	0.00013	0.00038	0.00036	0.00038	0.00057	0.00046	0.00061	0.00034	0.00017	0.00060	0.00097	0.00095	0.00041	0.00036	0.00101	0.00056	0.00020
T-406	0.00053	0.00628	0.00119	0.00089	0.00136	0.00079	0.00056	0.00170	0.00027	0.00079	0.00074	0.00079	0.00118	0.00095	0.00083	0.00070	0.00037	0.00056	0.00202	0.00198	0.00084	0.00074	0.00210	0.00116	0.00042
T-407	0.00021	0.00261	0.00043	0.00035	0.00054	0.00031	0.00022	0.00067	0.00011	0.00031	0.00029	0.00031	0.00203	0.00037	0.00012	0.00028	0.00014	0.00022	0.00080	0.00078	0.00033	0.00029	0.00083	0.00046	0.00017
T-408	0.00045	0.00439	0.00054	0.00167	0.00046	0.00027	0.00019	0.00058	0.00009	0.00027	0.00026	0.00027	0.00166	0.00033	0.00011	0.00024	0.00013	0.00050	0.00069	0.00068	0.00029	0.00026	0.00072	0.00040	0.00015
T-409	0.00039	0.00159	0.01635	0.00066	0.00101	0.00057	0.00041	0.00126	0.00020	0.00057	0.00054	0.00140	0.00087	0.00069	0.00023	0.00051	0.00027	0.00113	0.00149	0.00147	0.00062	0.00054	0.00156	0.00188	0.00032
T-410	0.00125	0.00303	0.04437	0.00021	0.00397	0.02182	0.00130	0.00041	0.00138	0.02312	0.00514	0.00672	0.00175	0.00023	0.01796	0.03712	0.00009	0.01299	0.00250	0.00048	0.00020	0.00018	0.00246	0.00072	0.00509
T-411	0.00017	0.00315	0.00036	0.00029	0.00044	0.00026	0.00018	0.00055	0.00009	0.00026	0.00024	0.00026	0.00573	0.00031	0.00010	0.00023	0.00012	0.00309	0.00065	0.00064	0.00028	0.00024	0.00068	0.00037	0.00013
T-412	0.00023	0.00247	0.00117	0.00039	0.00059	0.00034	0.00024	0.00074	0.00012	0.00034	0.00032	0.00034	0.00334	0.00041	0.00014	0.00465	0.00016	0.00227	0.00088	0.00086	0.00037	0.00032	0.00091	0.00050	0.00018
T-413	0.00010	0.00089	0.00017	0.00016	0.00024	0.00014	0.00010	0.00030	0.00005	0.00014	0.00013	0.00014	0.00021	0.00017	0.00005	0.00013	0.00006	0.00057	0.00036	0.00035	0.00015	0.00013	0.00037	0.00020	0.00007
T-414	0.00003	0.00013	0.00006	0.00006	0.00009	0.00005	0.00004	0.00011	0.00002	0.00005	0.00005	0.00005	0.00007	0.00006	0.00002	0.00036	0.00002	0.00015	0.00013	0.00012	0.00005	0.00005	0.00013	0.00007	0.00003
T-415	0.00005	0.00043	0.00011	0.00008	0.00013	0.00008	0.00005	0.00016	0.00003	0.00008	0.00007	0.00008	0.00011	0.00009	0.00003	0.00007	0.00004	0.00019	0.00019	0.00019	0.00008	0.00007	0.00020	0.00011	0.00004
T-416	0.00011	0.00046	0.00023	0.00019	0.00029	0.00017	0.00012	0.00036	0.00006	0.00017	0.00016	0.00017	0.00025	0.00020	0.00007	0.00015	0.00008	0.00066	0.00043	0.00042	0.00018	0.00016	0.00045	0.00025	0.00009
T-417	0.00019	0.00079	0.00042	0.00033	0.00050	0.00028	0.00020	0.00062	0.00010	0.00028	0.00027	0.00028	0.00043	0.00034	0.00012	0.00025	0.00014	0.00096	0.00074	0.00073	0.00031	0.00027	0.00077	0.00042	0.00016
T-418	0.00002	0.00010	0.00001	0.00004	0.00006	0.00004	0.00003	0.00008	0.00001	0.00004	0.00003	0.00004	0.00005	0.00004	0.00001	0.00003	0.00002	0.00003	0.00009	0.00009	0.00004	0.00003	0.00010	0.00005	0.00002
T-501	0.00007	0.00077	0.00027	0.00098	0.00018	0.00011	0.00008	0.00023	0.00004	0.00011	0.00010	0.00011	0.00016	0.00013	0.00004	0.00009	0.00005	0.00008	0.00027	0.00027	0.00011	0.00010	0.00028	0.00016	0.00006
T-502	0.00006	0.00057	0.00014	0.00010	0.00168	0.00104	0.00006	0.00019	0.00003	0.00083	0.00008	0.00022	0.00013	0.00026	0.00003	0.00008	0.00004	0.00026	0.00308	0.00455	0.00019	0.00008	0.00023	0.00013	0.00005
T-503	0.00007	0.00028	0.00015	0.00012	0.00018	0.00010	0.00007	0.00022	0.00003	0.00010	0.00010	0.00010	0.00015	0.00013	0.00004	0.00009	0.00005	0.00007	0.00053	0.00026	0.00011	0.00010	0.00027	0.00015	0.00005
T-504	0.00005	0.00020	0.00003	0.00008	0.00012	0.00020	0.00005	0.00478	0.00002	0.00007	0.00007	0.00017	0.00011	0.00009	0.00003	0.00006	0.00003	0.00005	0.00018	0.00018	0.00008	0.00007	0.00019	0.00023	0.00004
T-505	0.00007	0.00065	0.00004	0.00012	0.00019	0.00011	0.00008	0.00423	0.00004	0.00011	0.00010	0.00011	0.00016	0.00013	0.00004	0.00010	0.00005	0.00008	0.00028	0.00027	0.00011	0.00010	0.00029	0.00016	0.00006
T-506	0.00003	0.00140	0.00008	0.00337	0.00007	0.00004	0.00003	0.00154	0.00001	0.00004	0.00004	0.00004	0.00006	0.00005	0.00002	0.00004	0.00002	0.00003	0.00011	0.00010	0.00004	0.00004	0.00011	0.00006	0.00002
T-507	0.00003	0.00025	0.00002	0.00005	0.00008	0.00004	0.00003	0.00084	0.00002	0.00004	0.00004	0.00004	0.00007	0.00005	0.00002	0.00004	0.00002	0.00003	0.00011	0.00011	0.00005	0.00004	0.00012	0.00007	0.00002
T-508	0.00003	0.00013	0.00002	0.00005	0.00008	0.00005	0.00003	0.00010	0.00002	0.00005	0.00004	0.00005	0.00007	0.00006	0.00002	0.00004	0.00002	0.00003	0.00028	0.00012	0.00005	0.00004	0.00012	0.00007	0.00002
T-509	0.00004	0.00016	0.00011	0.00006	0.00024	0.00013	0.00004	0.00012	0.00002	0.00006	0.00005	0.00006	0.00009	0.00007	0.00002	0.00005	0.00003	0.00004	0.00054	0.00014	0.00006	0.00005	0.00015	0.00008	0.00003
T-510	0.00005	0.00019	0.00003	0.00008	0.00012	0.00049	0.00005	0.00015	0.00002	0.00007	0.00007	0.00028	0.00011	0.00008	0.00003	0.00006	0.00003	0.00005	0.00018	0.00018	0.00008	0.00007	0.00019	0.00010	0.00004
T-511	0.00004	0.00036	0.00002	0.00006	0.00030	0.00016	0.00004	0.00012	0.00002	0.00006	0.00005	0.00006	0.00009	0.00007	0.00002	0.00005	0.00003	0.00004	0.00067	0.00014	0.00006	0.00005	0.00015	0.00009	0.00003
T-512	0.00005	0.00046	0.00003	0.00008	0.00012	0.00014	0.00005	0.00015	0.00002	0.00007	0.00006	0.00007	0.00010	0.00008	0.00003	0.00006	0.00003	0.00005	0.00018	0.00017	0.00007	0.00006	0.00019	0.00010	0.00004
T-513	0.00003	0.00039	0.00002	0.00005	0.00008	0.00010	0.00003	0.00010	0.00002	0.00005	0.00004	0.00005	0.00007	0.00006	0.00002	0.00004	0.00002	0.00003	0.00012	0.00012	0.00005	0.00004	0.00012	0.00007	0.00003
T-514	0.00003	0.00011	0.00002	0.00004	0.00007	0.00004	0.00003	0.00008	0.00001	0.00004	0.00004	0.00004	0.00006	0.00005	0.00002	0.00003	0.00002	0.00003	0.00010	0.00010	0.00004	0.00004	0.00010	0.00006	0.00002
T-601	0.00011	0.00286	0.00379	0.00019	0.00028	0.00016	0.00081	0.00035	0.00033	0.00016	0.00015	0.00016	0.00071	0.00020	0.00007	0.00014	0.00008	0.00012	0.00042	0.00041	0.00017	0.00015	0.00044	0.00024	0.00009
T-602	0.00006	0.00148	0.02374	0.00010	0.00032	0.00009	0.00067	0.00020	0.00003	0.00009	0.00009	0.00027	0.00014	0.00011	0.00026	0.00008	0.00004	0.00007	0.00023	0.00023	0.00010	0.00009	0.00024	0.00013	0.00005
T-603	0.00007	0.00075	0.00098	0.00011	0.00017	0.00010	0.00007	0.00021	0.00003	0.00010	0.00009	0.00010	0.00015	0.00012	0.00004	0.00009	0.00005	0.00007	0.00025	0.00025	0.00010	0.00009	0.00026	0.00014	0.00005
T-604	0.00009	0.00146	0.00029	0.00015	0.00024	0.00014	0.00010	0.00030	0.00005	0.00014	0.00013	0.00014	0.00067	0.00016	0.00005	0.00012	0.00006	0.00010	0.00035	0.00035	0.00015	0.00013	0.00037	0.00020	0.00007
T-605	1.96412	1.53209	0.21009	0.37632	0.34465	0.20099	0.14905	0.07450	0.07774	0.07524	0.07326	0.05877	0.00480	0.07180	0.03420	0.01397	0.03924	0.00692	0.01788	0.03288	0.02848	0.02374	0.02366	0.01282	0.01284
T-606	0.00013	0.00443	0.00085	0.00021	0.00033	0.00019	0.00030	0.00136	0.00006	0.00019	0.00018	0.00019	0.00154	0.00023	0.00133	0.00017	0.00009	0.00014	0.00049	0.00048	0.00020	0.00018	0.00051	0.00028	0.00010
T-607	0.00249	0.01281	0.00042	0.00023	0.00035	0.00020	0.00014	0.00576	0.00108	0.00020	0.00019	0.00020	0.00132	0.00024	0.00008	0.00018	0.00009	0.00067	0.00052	0.00050	0.00022	0.00019	0.00053	0.00030	0.00011
T-608	0.00008	0.00150	0.00027	0.00013	0.00020	0.00011	0.00008	0.00025	0.00004	0.00011	0.00011	0.00011	0.00100	0.00014	0.00005	0.00010	0.00005	0.00008	0.00029	0.00029	0.00012	0.00011	0.00031	0.00017	0.00006
T-609	0.00004	0.00098	0.00013	0.00006	0.00009	0.00005	0.00004	0.00012	0.00002	0.00005	0.00005	0.00005	0.00008	0.00007	0.00002	0.00005	0.00003	0.00004	0.00014	0.00014	0.00006	0.00005	0.00014	0.00008	0.00003
T-610	0.00131	0.00323	0.00079	0.00019	0.00079	0.00050	0.00012	0.00037	0.00006	0.00017	0.00016	0.00017	0.00165	0.00021	0.00007	0.00015	0.00008	0.00046	0.00044	0.00043	0.00018	0.00016	0.00046	0.00025	0.00009
T-611	0.00110	0.00163	0.00026	0.00066	0.00018	0.00010	0.00007	0.00022	0.00004	0.00010	0.00010	0.00010	0.00044	0.00012	0.00004	0.00009	0.00005	0.00007	0.00026	0.00026	0.00011	0.00010	0.00027	0.00015	0.00006
T-612	0.00006	0.00111	0.00004	0.00010	0.00016	0.00009	0.00006	0.00020	0.00003	0.00009	0.00009	0.00009	0.00048	0.00011	0.00004	0.00008	0.00004	0.00007	0.00023	0.00023	0.00010	0.00009	0.00025	0.00014	0.00005
T-613	0.00004	0.00054	0.00002	0.00007	0.00011	0.00006	0.00004	0.00014	0.00002	0.00006	0.00006	0.00006	0.00031	0.00008	0.00002	0.00006	0.00003	0.00005	0.00016	0.00016	0.00007	0.00006	0.00017	0.00009	0.00003
T-614	0.00002	0.00010	0.00001	0.00004	0.00006	0.00004	0.00003	0.00008	0.00001	0.00004	0.00003	0.00004	0.00005	0.00004	0.00001	0.00003	0.00002	0.00003	0.00009	0.00009	0.00004	0.00003	0.00010	0.00005	0.00002

Table 4 TO-15

Sample ID	Compound	4-Ethyltoluene	Hexane	1,2,4-Trimethylbenz	Chloroethane	1,3,5-Trimethylbenz	Tetrachloroethene	Acrolein	Methylene chloride	1,2-Dichloropropan	cis-1,2-Dichloroeth	Naphthalene	Trichloroethene (T	Chloroform	Trichlorofluoromet	2-Hexanone	Isopropylbenzene	n-Butylbenzene	Methyl iodide	1,1-Dichloroethane	Dichlorodifluorome	1,2-Dichlorotetraflu	Vinyl chloride	1,3-Butadiene	t-Butyl alcohol	1,1-Dichloroethene
	CAS	622-96-8	110-54-3	95-63-6	75-00-3	108-67-8	127-18-4	107-02-8	75-09-2	78-87-5	156-59-2	91-20-3	79-01-6	67-66-3	75-69-4	591-78-6	98-82-8	104-51-8	4227-95-6	75-34-3	75-71-8	76-14-2	75-01-4	106-99-0	75-65-0	75-35-4
	MW	120.2	86.2	120.2	64.5	120.2	165.8	56.1	84.9	113	96.9	128.2	131.4	119.4	137.4	100.2	120.2	134.2	142.9	99	120.9	170.9	62.5	54.1	74.1	96.9
Lab Data (ppbv)																										
T-401		2.52	11.36	3.28	1.78	1.91	2.51	2.16	1.21	ND	ND	ND	ND	0.32	ND	1.79	1.35	1.17	ND	ND	ND	ND	ND	ND	ND	ND
T-402		ND	ND	ND	ND	ND	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-403		ND	0.49	ND	ND	ND	ND	0.74	ND	ND	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-404		ND	ND	ND	ND	ND	ND	0.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-405		ND	0.45	ND	ND	ND	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-406		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-407		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-408		ND	ND	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-409		1.57	ND	1.37	ND	ND	0.13	ND	ND	ND	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-410		5.3	11.52	4.14	ND	7.72	1.9	ND	ND	ND	ND	3.4	0.87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-411		0.91	ND	1.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-412		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-413		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-414		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-415		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-416		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-417		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-418		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-501		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-502		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-503		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-504		1.65	ND	1.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-505		1.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-506		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-507		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-508		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-509		0.95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-510		ND	ND	ND	ND	0.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-511		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-512		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-513		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-514		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-601		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-602		ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-603		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-604		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-605		11.89	ND	5.77	13.79	3.37	6.26	3.52	6.91	7	6.58	2.27	3.96	1.27	2.69	ND	ND	ND	0.73	0.57	ND	ND	ND	ND	ND	ND
T-606		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-607		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-608		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-609		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-610		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-611		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-612		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-613		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-614		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)																										
T-401		0.83	0.42	0.83	0.42	0.83	0.1	0.42	0.21	0.21	0.21	2.08	0.1	0.21	0.42	0.42	0.83	0.83	0.42	0.21	0.63	0.42	0.21	0.21	0.42	0.21
T-402		0.83	0.42	0.83	0.42	0.83	0.1	0.42	0.21	0.21	0.21	2.08	0.1	0.21	0.42	0.42	0.83	0.83	0.42	0.21	0.63	0.42	0.21	0.21	0.42	0.21
T-403		0.85	0.42	0.85	0.42	0.85	0.11	0.42	0.21	0.21	0.21	2.12	0.11	0.21	0.42	0.42	0.85	0.85	0.42	0.21	0.64	0.42	0.21	0.21	0.42	0.21
T-404		0.83	0.41	0.83	0.41	0.83	0.1	0.41	0.21	0.21	0.21	2.07	0.1	0.21	0.41	0.41	0.83	0.83	0.41	0.21	0.62	0.41	0.21	0.21	0.41	0.21
T-405		0.85	0.43	0.85	0.43	0.85	0.11	0.43	0.21	0.21	0.21	2.13	0.11	0.21	0.43	0.43	0.85	0.85	0.43	0.21	0.64	0.43	0.21	0.21	0.43	0.21
T-406		0.84	0.42	0.84	0.42	0.84	0.11	0.42	0.21	0.21	0.21	2.1	0.11	0.21	0.42	0.42	0.84	0.84	0.42	0.21	0.63	0.42	0.21	0.21	0.42	0.21
T-407		0.88	0.44	0.88	0.44	0.88	0.11	0.44	0.22	0.22	0.22	2.2	0.11	0.22	0.44	0.44	0.88	0.88	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-408		0.87	0.44	0.87	0.44	0.87	0.11	0.44	0.22	0.22	0.22	2.18	0.11	0.22	0.44	0.44	0.87	0.87	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-409		0.91	0.45	0.91	0.45	0.91	0.11	0.45	0.23	0.23	0.23	2.27	0.11	0.23	0.45	0.45	0.91	0.91	0.45	0.23	0.68	0.45	0.23	0.23	0.45	0.23
T-410		0.91	0.45	0.91	0.45	0.91	0.11	0.45	0.23	0.23	0.23	2.27	0.11	0.23	0.45	0.45	0.91	0.91	0.45	0.23	0.68	0.45	0.23	0.23	0.45	0.23
T-411		0.85	0.43	0.85	0.43	0.85	0.11	0.43	0.21	0.21	0.21	2.13	0.11	0.21	0.43	0.43	0.85	0.85	0.43	0.21	0.64	0.43	0.21	0.21	0.43	0.21
T-412		0.88	0.44	0.88	0.44	0.88	0.11	0.44	0.22	0.22	0.22	2.2	0.11	0.22	0.44	0.44	0.88	0.88	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-413		0.89	0.45	0.89	0.45	0.89	0.11	0.45	0.22	0.22	0.22	2.23	0.11	0.22	0.45	0.45	0.89	0.89	0.45	0.22	0.67	0.45	0.22	0.22	0.45	0.22
T-414		0.88	0.44	0.88	0.44	0.88	0.11	0.44	0.22	0.22	0.22	2.2	0.11	0.22	0.44	0.44	0.88	0.88	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-415		0.87	0.44	0.87	0.44	0.87	0.11	0.44	0.22	0.22	0.22	2.18	0.11	0.22	0.44	0.44	0.87	0.87	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-416		0.95	0.47	0.95	0.47	0.95	0.12	0.47	0.24	0.24	0.24	2.37	0.12	0.24	0.47	0.47	0.95	0.95	0.47	0.24	0.71	0.47	0.24	0.24	0.47	0.24
T-417		0.87	0.43	0.87	0.43	0.87	0.11	0.43	0.22	0.22	0.22	2.17	0.11	0.22	0.43	0.43	0.87	0.87	0.43	0.22	0.65	0.43	0.22	0.22	0.43	0.22
T-418		0.83	0.42	0.83	0.42	0.83	0.1	0.42	0.21	0.21	0.21	2.08	0.1	0.21	0.42	0.42	0.83	0.83	0.42	0.21	0.63	0.42	0.21	0.21	0.42	0.21
T-501		0.85	0.43	0.85	0.43	0.85	0.11	0.43	0.21	0.21	0.21	2.13	0.11	0.21	0.43	0.43	0.85	0.85	0.43	0.21	0.64	0.43	0.21	0.21	0.43	0.21
T-502		0.89	0.44	0.89	0.44	0.89	0.11	0.44	0.22	0.22	0.22	2.22	0.11	0.22	0.44	0.44	0.89	0.89	0.44	0.22	0.67	0.44	0.22	0.22	0.44	0.22
T-503		0.85	0.43	0.85	0.43	0.85	0.11	0.43	0.21	0.21	0.21	2.13	0.11	0.21	0.43	0.43	0.85	0.85	0.43	0.21	0.64	0.43	0.21	0.21	0.43	0.21
T-504		0.85	0.43	0.85	0.43	0.85	0.11	0.43	0.21	0.21	0.21	2.13	0.11	0.21	0.43	0.43	0.85	0.85	0.43	0.21	0.64	0.43	0.21	0.21	0.43	0.21
T-505		0.9	0.45	0.9	0.45	0.9	0.11	0.45	0.23	0.23	0.23	2.25	0.11	0.23	0.45	0.45	0.9	0.9	0.45	0.22	0.68	0.45	0.23	0.23	0.45	0.23
T-506		0.91	0.45	0.91	0.45	0.91	0.11	0.45	0.23	0.23	0.23	2.27	0.11	0.23	0.45	0.45	0.91	0.91	0.45	0.23	0.68	0.45	0.23	0.23	0.45	0.23
T-507		0.92	0.46	0.92	0.46	0.92	0.12	0.46	0.23	0.23	0.23	2.3	0.12	0.23	0.46	0.46	0.92	0.92	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23
T-508		0.92	0.46	0.92	0.46	0.92	0.12	0.46	0.23	0.23	0.23	2.3	0.12	0.23	0.46	0.46	0.92	0.92	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23
T-509		0.93	0.47	0.93	0.47	0.93	0.12	0.47	0.23	0.23	0.23	2.33	0.12	0.23	0.47	0.47	0.93	0.93	0.47	0.23	0.7	0.47	0.23	0.23	0.47	0.23
T-510		0.95	0.47	0.95	0.47	0.95	0.12	0.47	0.24	0.24	0.24	2.37	0.12	0.24	0.47	0.47	0.95	0.95	0.47	0.24	0.71	0.47	0.24	0.24	0.47	0.24
T-511		0.91	0.46	0.91	0.46	0.91	0.11	0.46	0.23	0.23	0.23	2.28	0.11	0.23	0.46	0.46	0.91	0.91	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23
T-512		0.91	0.45	0.91	0.45	0.91	0.11	0.45	0.23	0.23	0.23	2.27	0.11	0.23	0.45	0.45	0.91	0.91	0.45	0.23	0.68	0.45	0.23	0.23	0.45	0.23
T-513		0.91	0.45	0.91	0.45	0.91	0.11	0.45	0.23	0.23	0.23	2.27	0.11	0.23	0.45	0.45	0.91	0.91	0.45	0.23	0.68	0.45	0.23	0.23	0.45	0.23
T-514		0.92	0.46	0.92	0.46	0.92	0.12	0.46	0.23	0.23	0.23	2.3	0.12	0.23	0.46	0.46	0.92	0.92	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23
T-601		0.87	0.43	0.87	0.43	0.87	0.11	0.43	0.22	0.22	0.22	2.17	0.11	0.22	0.43	0.43	0.87	0.87	0.43	0.22	0.65	0.43	0.22	0.22	0.43	0.22
T-602		0.85	0.43	0.85	0.43	0.85	0.11	0.43	0.21	0.21	0.21	2.13	0.11	0.21	0.43	0.43	0.85	0.85	0.43	0.21	0.64	0.43	0.21	0.21	0.43	0.21
T-603		0.83	0.41	0.83	0.41	0.83	0.1	0.41	0.21	0.21	0.21	2.07	0.1	0.21	0.41	0.41	0.83	0.83	0.41	0.21	0.62	0.41	0.21	0.21	0.41	0.21
T-604		0.89	0.44	0.89	0.44	0.89	0.11	0.44	0.22	0.22	0.22	2.22	0.11	0.22	0.44	0.44	0.89	0.89	0.44	0.22	0.67	0.44	0.22	0.22	0.44	0.22
T-605		0.87	0.44	0.87	0.44	0.87	0.11	0.44	0.22	0.22	0.22	2.18	0.11	0.22	0.44	0.44	0.87	0.87	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-606		0.92	0.46	0.92	0.46	0.92	0.12	0.46	0.23	0.23	0.23	2.3	0.12	0.23	0.46	0.46	0.92	0.92	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23
T-607		0.87	0.44	0.87	0.44	0.87	0.11	0.44	0.22	0.22	0.22	2.18	0.11	0.22	0.44	0.44	0.87	0.87	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-608		0.9	0.45	0.9	0.45	0.9	0.11	0.45	0.23	0.23	0.23	2.25	0.11	0.23	0.45	0.45	0.9	0.9	0.45	0.22	0.68	0.45	0.23	0.23	0.45	0.23
T-609		0.87	0.44	0.87	0.44	0.87	0.11	0.44	0.22	0.22	0.22	2.18	0.11	0.22	0.44	0.44	0.87	0.87	0.44	0.22	0.66	0.44	0.22	0.22	0.44	0.22
T-610		0.91	0.46	0.91	0.46	0.91	0.11	0.46	0.23	0.23	0.23	2.28	0.11	0.23	0.46	0.46	0.91	0.91	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23
T-611		0.9	0.45	0.9	0.45	0.9	0.11	0.45	0.23	0.23	0.23	2.25	0.11	0.23	0.45	0.45	0.9	0.9	0.45	0.22	0.68	0.45	0.23	0.23	0.45	0.23
T-612		0.93	0.46	0.93	0.46	0.93	0.12	0.46	0.23	0.23	0.23	2.32	0.12	0.23	0.46	0.46	0.93	0.93	0.46	0.23	0.7	0.46	0.23	0.23	0.46	0.23
T-613		0.93	0.46	0.93	0.46	0.93	0.12	0.46	0.23	0.23	0.23	2.32	0.12	0.23	0.46	0.46	0.93	0.93	0.46	0.23	0.7	0.46	0.23	0.23	0.46	0.23
T-614		0.92	0.46	0.92	0.46	0.92	0.12	0.46	0.23	0.23	0.23	2.3	0.12	0.23	0.46	0.46	0.92	0.92	0.46	0.23	0.69	0.46	0.23	0.23	0.46	0.23

Table 4 TO-15

Sample ID	4-Ethyltoluene	Hexane	1,2,4-Trimethylbenz	Chloroethane	1,3,5-Trimethylbenz	Tetrachloroethene	Acrolein	Methylene chloride	1,2-Dichloropropan	cis-1,2-Dichloroeth	Naphthalene	Trichloroethene (TC	Chloroform	Trichlorofluorometh	2-Hexanone	Isopropylbenzene	n-Butylbenzene	Methyl iodide	1,1-Dichloroethane	Dichlorodifluorome	1,2-Dichlorotetraflu	Vinyl chloride	1,3-Butadiene	t-Butyl alcohol	1,1-Dichloroethene
CAS	622-96-8	110-54-3	95-63-6	75-00-3	108-67-8	127-18-4	107-02-8	75-09-2	78-87-5	156-59-2	91-20-3	79-01-6	67-66-3	75-69-4	591-78-6	98-82-8	104-51-8	4227-95-6	75-34-3	75-71-8	76-14-2	75-01-4	106-99-0	75-65-0	75-35-4
MW	120.2	86.2	120.2	64.5	120.2	165.8	56.1	84.9	113	96.9	128.2	131.4	119.4	137.4	100.2	120.2	134.2	142.9	99	120.9	170.9	62.5	54.1	74.1	96.9
Data Used (ug/l)																									
T-401	12.9	41.7	16.8	4.9	9.8	17.7	5.2	4.4	0.5	0.4	5.7	0.3	1.6	1.2	7.63	6.90	6.68	1.28	0.44	1.62	1.53	0.28	0.24	0.66	0.43
T-402	2.1	0.8	2.1	0.6	2.1	0.4	3.0	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.89	2.12	2.36	1.27	0.44	1.62	1.52	0.28	0.24	0.66	0.43
T-403	2.2	1.8	2.2	0.6	2.2	0.4	1.8	0.4	0.5	0.4	5.8	0.3	1.2	1.2	0.90	2.19	2.44	1.28	0.44	1.66	1.54	0.28	0.24	0.67	0.44
T-404	2.1	0.8	2.1	0.6	2.1	0.4	1.6	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.88	2.14	2.39	1.26	0.45	1.61	1.50	0.28	0.24	0.65	0.44
T-405	2.1	1.6	2.1	0.6	2.1	0.9	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.89	2.12	2.37	1.27	0.43	1.61	1.52	0.27	0.24	0.66	0.42
T-406	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.89	2.14	2.38	1.27	0.44	1.61	1.52	0.28	0.24	0.66	0.43
T-407	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.89	2.14	2.39	1.27	0.44	1.62	1.52	0.28	0.24	0.66	0.43
T-408	2.1	0.8	2.1	0.6	2.1	0.4	2.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.90	2.13	2.38	1.28	0.44	1.62	1.53	0.28	0.24	0.66	0.43
T-409	7.6	0.8	6.6	0.6	2.2	0.9	0.5	0.4	0.5	0.4	5.8	0.8	0.6	1.2	0.90	2.19	2.45	1.29	0.46	1.65	1.54	0.29	0.25	0.67	0.45
T-410	25.3	39.5	19.8	0.6	36.9	12.5	0.5	0.4	0.5	0.4	17.3	4.5	0.5	1.2	0.90	2.17	2.43	1.28	0.45	1.63	1.53	0.29	0.25	0.66	0.44
T-411	4.4	0.7	4.9	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.5	0.3	0.5	1.2	0.87	2.06	2.30	1.24	0.42	1.56	1.48	0.26	0.23	0.64	0.41
T-412	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.8	0.3	0.5	1.2	0.90	2.17	2.42	1.29	0.45	1.64	1.54	0.28	0.24	0.67	0.44
T-413	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.90	2.14	2.39	1.29	0.44	1.62	1.54	0.27	0.24	0.67	0.43
T-414	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.89	2.13	2.38	1.27	0.44	1.61	1.52	0.28	0.24	0.66	0.43
T-415	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.90	2.15	2.40	1.29	0.45	1.64	1.54	0.28	0.24	0.67	0.44
T-416	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.2	0.3	0.6	1.3	0.95	2.31	2.58	1.36	0.48	1.74	1.63	0.30	0.26	0.71	0.47
T-417	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.6	0.3	0.5	1.2	0.87	2.12	2.36	1.24	0.44	1.59	1.49	0.28	0.24	0.65	0.43
T-418	2.0	0.7	2.0	0.6	2.0	0.3	0.5	0.4	0.5	0.4	5.5	0.3	0.5	1.2	0.86	2.05	2.28	1.23	0.43	1.56	1.47	0.27	0.23	0.64	0.42
T-501	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.9	0.3	0.5	1.3	0.93	2.21	2.46	1.33	0.45	1.67	1.59	0.28	0.25	0.69	0.44
T-502	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.1	0.3	0.6	1.3	0.94	2.29	2.56	1.35	0.47	1.73	1.61	0.29	0.25	0.70	0.46
T-503	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.9	0.3	0.5	1.3	0.93	2.19	2.45	1.32	0.45	1.66	1.58	0.28	0.24	0.68	0.44
T-504	8.5	0.8	6.0	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.9	0.3	0.5	1.3	0.92	2.19	2.45	1.32	0.45	1.66	1.58	0.28	0.24	0.68	0.44
T-505	5.4	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.1	0.3	0.6	1.3	0.95	2.27	2.54	1.35	0.46	1.73	1.62	0.30	0.26	0.70	0.47
T-506	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.93	2.26	2.52	1.33	0.47	1.70	1.59	0.30	0.26	0.69	0.46
T-507	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.93	2.24	2.50	1.33	0.46	1.69	1.59	0.29	0.25	0.69	0.45
T-508	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.94	2.26	2.53	1.35	0.47	1.71	1.61	0.29	0.25	0.70	0.46
T-509	4.7	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.2	0.3	0.6	1.3	0.97	2.30	2.57	1.38	0.47	1.74	1.65	0.30	0.26	0.72	0.46
T-510	2.3	0.8	2.3	0.6	4.7	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.94	2.27	2.53	1.34	0.47	1.71	1.60	0.30	0.26	0.69	0.46
T-511	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.5	5.9	0.3	0.6	1.3	0.93	2.21	2.47	1.33	0.46	1.69	1.59	0.29	0.25	0.69	0.45
T-512	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.8	0.3	0.5	1.2	0.89	2.17	2.42	1.28	0.45	1.63	1.53	0.29	0.25	0.66	0.44
T-513	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.8	0.3	0.5	1.2	0.89	2.17	2.42	1.28	0.45	1.63	1.53	0.29	0.25	0.66	0.44
T-514	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.95	2.27	2.53	1.35	0.47	1.71	1.61	0.29	0.26	0.70	0.46
T-601	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.92	2.24	2.50	1.32	0.47	1.68	1.58	0.29	0.26	0.68	0.46
T-602	2.2	0.8	2.2	0.6	2.2	1.4	0.5	0.4	0.5	0.4	5.9	0.8	0.5	1.3	0.93	2.19	2.45	1.32	0.45	1.66	1.58	0.28	0.24	0.68	0.44
T-603	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.7	0.3	0.5	1.2	0.89	2.16	2.41	1.27	0.45	1.62	1.52	0.28	0.25	0.66	0.44
T-604	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.1	0.3	0.6	1.3	0.95	2.30	2.57	1.35	0.47	1.74	1.62	0.30	0.26	0.70	0.46
T-605	59.8	0.8	29.0	37.2	16.9	43.4	8.3	24.5	33.1	26.7	12.2	21.8	6.3	15.5	0.92	2.19	2.44	4.36	2.36	1.67	1.57	0.29	0.25	0.68	0.45
T-606	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.2	0.3	7.8	1.3	0.97	2.32	2.59	1.38	0.48	1.75	1.65	0.30	0.26	0.71	0.47
T-607	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.4	5.9	0.3	0.6	1.3	0.93	2.20	2.46	1.32	0.46	1.68	1.58	0.29	0.25	0.69	0.45
T-608	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.94	2.24	2.51	1.33	0.45	1.71	1.60	0.30	0.26	0.69	0.46
T-609	2.1	0.8	2.1	0.6	2.1	0.4	0.5	0.4	0.5	0.4	5.6	0.3	0.5	1.2	0.89	2.11	2.35	1.27	0.44	1.61	1.51	0.28	0.24	0.66	0.43
T-610	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.1	0.3	0.6	1.3	0.96	2.28	2.54	1.37	0.47	1.74	1.64	0.30	0.26	0.71	0.46
T-611	2.2	0.8	2.2	0.6	2.2	0.4	0.5	0.4	0.5	0.5	5.9	0.3	0.6	1.3	0.92	2.21	2.46	1.31	0.44	1.68	1.57	0.29	0.25	0.68	0.45
T-612	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.94	2.27	2.54	1.34	0.46	1.72	1.60	0.29	0.25	0.69	0.45
T-613	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.94	2.27	2.54	1.34	0.46	1.72	1.60	0.29	0.25	0.69	0.45
T-614	2.3	0.8	2.3	0.6	2.3	0.4	0.5	0.4	0.5	0.5	6.0	0.3	0.6	1.3	0.95	2.27	2.53	1.35	0.47	1.71	1.61	0.29	0.26	0.70	0.46
Flux (mg/m2-min)																									
T-401	0.00196	0.00632	0.00255	0.00074	0.00148	0.00269	0.00078	0.00066	0.00008	0.00007	0.00086	0.00004	0.00025	0.00019	0.00116	0.00105	0.00101	0.00019	0.00007	0.0002	0.0002	0.0000	0.0000	0.0001	0.0001
T-402	0.00050	0.00018	0.00050	0.00014	0.00050	0.00008	0.00071	0.00009	0.00012	0.00010	0.00133	0.00007	0.00013	0.00029	0.00021	0.00050	0.00056	0.00030	0.00010	0.0004	0.0004	0.0001	0.0001	0.0002	0.0001
T-403	0.00061	0.00050	0.00061	0.00016	0.00061	0.00011	0.00049	0.00011	0.00014	0.00012	0.00161	0.00009	0.00034	0.00034	0.00025	0.00061	0.00068	0.00036	0.00012	0.0005	0.0004	0.0001	0.0001	0.0002	0.0001
T-404	0.00023	0.00008	0.00023	0.00006	0.00023	0.00004	0.00018	0.00004	0.00005	0.00005	0.00061	0.00003	0.00006	0.00013	0.00009	0.00023	0.00026	0.00013	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0000
T-405	0.00085	0.00065	0.00085	0.00023	0.00085	0.00036	0.00020	0.00015	0.00020	0.00017	0.00228	0.00012	0.00021	0.00049	0.00036	0.00085	0.00095	0.00051	0.00017	0.0006	0.0006	0.0001	0.0001	0.0003	0.0002
T-406	0.00178	0.00064	0.00178	0.00048	0.00178	0.00032	0.00041	0.00031	0.00042	0.00036	0.00474	0.00025	0.00044	0.00102	0.00074	0.00178	0.00198	0.00106	0.00037	0.0013	0.0013	0.0002	0.0002	0.0005	0.0004
T-407	0.00070	0.00025	0.00070	0.00019	0.00070	0.00012	0.00016	0.00012	0.00016	0.00014	0.00187	0.00010	0.00017	0.00040	0.00029	0.00070	0.00078	0.00042	0.00014	0.0005	0.0005	0.0001	0.0001	0.0002	0.0001
T-408	0.00061	0.00022	0.00061	0.00016	0.00061	0.00011	0.00071	0.00011	0.00014	0.00012	0.00162	0.00008	0.00015	0.00035	0.00026	0.00061	0.00068	0.00036	0.00013	0.0005	0.0004	0.0001	0.0001	0.0002	0.0001
T-409	0.00454	0.00047	0.00396	0.00035	0.00131	0.00052	0.00030	0.00023	0.00031	0.00027	0.00350	0.00051	0.00033	0.00074	0.00054	0.00131	0.00147	0.00077	0.00027	0.0010	0.0009	0.0002	0.0001	0.0004	0.0003
T-410	0.00497	0.00775	0.00388	0.00011	0.00724	0.00246	0.00010	0.00008	0.00010	0.00009	0.00340	0.00089	0.00011	0.00024	0.00018	0.00043	0.00048	0.00025	0.00009	0.0003	0.0003	0.0001	0.0000	0.0001	0.0001
T-411	0.00123	0.00021	0.00136	0.00016	0.00057	0.00010	0.00014	0.00010	0.00013	0.00011	0.00153	0.00008	0.00014	0.00033	0.00024	0.00057	0.00064	0.00035	0.00012	0.0004	0.0004	0.0001	0.0001	0.0002	0.0001
T-412	0.00077	0.00028	0.00077	0.00021	0.00077	0.00013	0.00018	0.00014	0.00018	0.00016	0.00206	0.00011	0.00019	0.00044	0.00032	0.00077	0.00086	0.00046	0.00016	0.0006	0.0005	0.0001	0.0001	0.0002	0.0002
T-413	0.00031	0.00011	0.00031	0.00009	0.00031	0.00005	0.00007	0.00005	0.00007	0.00006	0.00084	0.00004	0.00008	0.00018	0.00013	0.00031	0.00035	0.00019	0.00006	0.0002	0.0002	0.0000	0.0000	0.0001	0.0001
T-414	0.00011	0.00004	0.00011	0.00003	0.00011	0.00002	0.00003	0.00002	0.00003	0.00002	0.00030	0.00002	0.00003	0.00006	0.00005	0.00011	0.00012	0.00007	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-415	0.00017	0.00006	0.00017	0.00005	0.00017	0.00003	0.00004	0.00003	0.00004	0.00003	0.00045	0.00002	0.00004	0.00010	0.00007	0.00017	0.00019	0.00010	0.00004	0.0001	0.0001	0.0000	0.0000	0.0001	0.0000
T-416	0.00038	0.00013	0.00038	0.00010	0.00038	0.00007	0.00009	0.00007	0.00009	0.00008	0.00101	0.00005	0.00010	0.00021	0.00016	0.00038	0.00042	0.00022	0.00008	0.0003	0.0003	0.0000	0.0000	0.0001	0.0001
T-417	0.00065	0.00023	0.00065	0.00017	0.00065	0.00011	0.00015	0.00012	0.00016	0.00013	0.00174	0.00009	0.00016	0.00037	0.00027	0.00065	0.00073	0.00038	0.00014	0.0005	0.0005	0.0001	0.0001	0.0002	0.0001
T-418	0.00008	0.00003	0.00008	0.00002	0.00008	0.00001	0.00002	0.00001	0.00002	0.00002	0.00022	0.00001	0.00002	0.00005	0.00003	0.00008	0.00009	0.00005	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-501	0.00024	0.00009	0.00024	0.00006	0.00024	0.00004	0.00006	0.00004	0.00006	0.00005	0.00063	0.00003	0.00006	0.00014	0.00010	0.00024	0.00027	0.00014	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0000
T-502	0.00019	0.00007	0.00019	0.00005	0.00019	0.00003	0.00004	0.00003	0.00005	0.00004	0.00052	0.00003	0.00005	0.00011	0.00008	0.00019	0.00022	0.00011	0.00004	0.0001	0.0001	0.0000	0.0000	0.0001	0.0000
T-503	0.00023	0.00008	0.00023	0.00006	0.00023	0.00004	0.00005	0.00004	0.00005	0.00005	0.00062	0.00003	0.00006	0.00013	0.00010	0.00023	0.00026	0.00014	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0000
T-504	0.00063	0.00006	0.00045	0.00004	0.00016	0.00003	0.00004	0.00003	0.00004	0.00003	0.00043	0.00002	0.00004	0.00009	0.00007	0.00016	0.00018	0.00010	0.00003	0.0001	0.0001	0.0000	0.0000	0.0001	0.0000
T-505	0.00057	0.00009	0.00024	0.00006	0.00024	0.00004	0.00006	0.00004	0.00006	0.00005	0.00064	0.00003	0.00006	0.00014	0.00010	0.00024	0.00027	0.00014	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0000
T-506	0.00009	0.00003	0.00009	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00025	0.00001	0.00002	0.00005	0.00004	0.00009	0.00010	0.00006	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-507	0.00010	0.00004	0.00010	0.00003	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00027	0.00001	0.00003	0.00006	0.00004	0.00010	0.00011	0.00006	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-508	0.00010	0.00004	0.00010	0.00003	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00028	0.00001	0.00003	0.00006	0.00004	0.00010	0.00012	0.00006	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-509	0.00027	0.00005	0.00013	0.00004	0.00013	0.00002	0.00003	0.00002	0.00003	0.00003	0.00035	0.00002	0.00003	0.00007	0.00005	0.00013	0.00014	0.00008	0.00003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-510	0.00016	0.00006	0.00016	0.00004	0.00033	0.00003	0.00004	0.00003	0.00004	0.00003	0.00043	0.00002	0.00004	0.00009	0.00007	0.00016	0.00018	0.00009	0.00003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-511	0.00013	0.00005	0.00013	0.00004	0.00013	0.00002	0.00003	0.00002	0.00003	0.00003	0.00035	0.00002	0.00003	0.00007	0.00005	0.00013	0.00014	0.00008	0.00003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-512	0.00016	0.00006	0.00016	0.00004	0.00016	0.00003	0.00004	0.00003	0.00004	0.00003	0.00042	0.00002	0.00004	0.00009	0.00006	0.00016	0.00017	0.00009	0.00003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-513	0.00010	0.00004	0.00010	0.00003	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00028	0.00001	0.00003	0.00006	0.00004	0.00010	0.00012	0.00006	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-514	0.00009	0.00003	0.00009	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00023	0.00001	0.00002	0.00005	0.00004	0.00009	0.00010	0.00005	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-601	0.00037	0.00013	0.00037	0.00010	0.00037	0.00006	0.00009	0.00007	0.00009	0.00008	0.00099	0.00005	0.00009	0.00021	0.00015	0.00037	0.00041	0.00022	0.00008	0.0003	0.0003	0.0000	0.0000	0.0001	0.0001
T-602	0.00021	0.00007	0.00021	0.00006	0.00021	0.00013	0.00005	0.00004	0.00005	0.00004	0.00055	0.00008	0.00005	0.00012	0.00009	0.00021	0.00023	0.00012	0.00004	0.0002	0.0001	0.0000	0.0000	0.0001	0.0000
T-603	0.00022	0.00008	0.00022	0.00006	0.00022	0.00004	0.00005	0.00004	0.00005	0.00005	0.00059	0.00003	0.00006	0.00012	0.00009	0.00022	0.00025	0.00013	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0000
T-604	0.00031	0.00011	0.00031	0.00008	0.00031	0.00005	0.00007	0.00005	0.00007	0.00006	0.00082	0.00004	0.00008	0.00017	0.00013	0.00031	0.00035	0.00018	0.00006	0.0002	0.0002	0.0000	0.0000	0.0001	0.0001
T-605	0.00740	0.00010	0.00359	0.00461	0.00210	0.00538	0.00102	0.00304	0.00410	0.00330	0.00151	0.00270	0.00079	0.00191	0.00011	0.00027	0.00030	0.00054	0.00029	0.0002	0.0002	0.0000	0.0000	0.0001	0.0001
T-606	0.00043	0.00015	0.00043	0.00012	0.00043	0.00008	0.00010	0.00008	0.00010	0.00009	0.00114	0.00006	0.00144	0.00025	0.00018	0.00043	0.00048	0.00026	0.00009	0.0003	0.0003	0.0001	0.0000	0.0001	0.0001
T-607	0.00045	0.00016	0.00045	0.00012	0.00045	0.00008	0.00011	0.00008	0.00011	0.00009	0.00121	0.00006	0.00011	0.00026	0.00019	0.00045	0.00050	0.00027	0.00009	0.0003	0.0003	0.0001	0.0001	0.0001	0.0001
T-608	0.00026	0.00009	0.00026	0.00007	0.00026	0.00004	0.00006	0.00005	0.00006	0.00005	0.00069	0.00003	0.00007	0.00015	0.00011	0.00026	0.00029	0.00015	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0001
T-609	0.00012	0.00004	0.00012	0.00003	0.00012	0.00002	0.00003	0.00002	0.00003	0.00002	0.00033	0.00002	0.00003	0.00007	0.00005	0.00012	0.00014	0.00007	0.00003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-610	0.00038	0.00014	0.00038	0.00010	0.00038	0.00006	0.00009	0.00007	0.00009	0.00008	0.00103	0.00005	0.00010	0.00022	0.00016	0.00038	0.00043	0.00023	0.00008	0.0003	0.0003	0.0001	0.0000	0.0001	0.0001
T-611	0.00023	0.00008	0.00023	0.00006	0.00023	0.00004	0.00005	0.00004	0.00005	0.00005	0.00061	0.00003	0.00006	0.00013	0.00010	0.00023	0.00026	0.00014	0.00005	0.0002	0.0002	0.0000	0.0000	0.0001	0.0000
T-612	0.00021	0.00007	0.00021	0.00006	0.00021	0.00004	0.00005	0.00004	0.00005	0.00004	0.00055	0.00003	0.00005	0.00012	0.00009	0.00021	0.00023	0.00012	0.00004	0.0002	0.0001	0.0000	0.0000	0.0001	0.0000
T-613	0.00014	0.00005	0.00014	0.00004	0.00014	0.00003	0.00003	0.00003	0.00003	0.00003	0.00038	0.00002	0.00004	0.00008	0.00006	0.00014	0.00016	0.00008	0.00003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
T-614	0.00008	0.00003	0.00008	0.00002	0.00008	0.00001	0.00002	0.00001	0.00002	0.00002	0.00022	0.00001	0.00002	0.00005	0.00003	0.00008	0.00009	0.00005	0.00002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000

Table 4 TO-15

Sample ID / Compound	Acrylonitrile	1,1,2-Trichlorotriflu	Allyl chloride	trans-1,2-Dichloroe	Methyl tert butyl eth	Propionitrile	Ethyl tert butyl ethe	Vinyl acetate	Diisopropyl ether	Methacrylonitrile	Ethyl acetate	Bromochlorometha	Methyl acrylate	Isobutyl alcohol	2,2-Dichloropropan	1,1,1-Trichloroetha	1,1-Dichloropropen	Carbon tetrachlorid	t-Amyl methyl ethe	1,4 Dioxane	Dibromomethane	Bromodichlorometh	Methyl methacrylat	cis-1,3-Dichloropro	trans-1,3-Dichlorop	1,1,2-Trichloroetha
CAS	107-13-1	76-13-1	107-05-1	156-60-5	1634-04-4	107-12-0	637-92-3	108-05-4	108-20-3	126-98-7	141-78-6	74-97-5	96-33-3	78-83-1	594-20-7	71-55-6	563-58-6	56-23-5	994-05-8	123-91-1	74-95-3	75-27-4	80-62-6	10061-01-5	10061-02-6	79-00-5
MW	53.1	187.4	76.5	96.9	88.1	55.1	102.2	86.1	102.2	67.1	88.1	129.4	86.1	74.1	113	133.4	111	153.8	102.2	88.1	173.83	163.8	100.1	111	111	133.4
Lab Data (ppbv)																										
T-401	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-402	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-403	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-404	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-405	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-406	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-407	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-408	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-409	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-411	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-412	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-413	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-414	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-415	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-416	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-417	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-418	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-501	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-502	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-503	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-504	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-505	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-506	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-507	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-508	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-509	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-510	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-511	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-512	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-513	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-601	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-602	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-603	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-604	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-605	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-606	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-607	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-608	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-609	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-610	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-611	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-612	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-613	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-614	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)																										
T-401	0.83	0.21	0.21	0.21	0.42	1.04	0.42	0.21	0.42	0.42	0.42	0.21	0.42	0.83	0.21	0.21	0.21	0.21	0.42	0.42	0.21	0.21	0.42	0.21	0.21	0.21
T-402	0.83	0.21	0.21	0.21	0.42	1.04	0.42	0.21	0.42	0.42	0.42	0.21	0.42	0.83	0.21	0.21	0.21	0.21	0.42	0.42	0.21	0.21	0.42	0.21	0.21	0.21
T-403	0.85	0.21	0.21	0.21	0.42	1.06	0.42	0.21	0.42	0.42	0.42	0.21	0.42	0.85	0.21	0.21	0.21	0.21	0.42	0.42	0.21	0.21	0.42	0.21	0.21	0.21
T-404	0.83	0.21	0.21	0.21	0.41	1.03	0.41	0.21	0.41	0.41	0.41	0.21	0.41	0.83	0.21	0.21	0.21	0.21	0.41	0.41	0.21	0.21	0.41	0.21	0.21	0.21
T-405	0.85	0.21	0.21	0.21	0.43	1.07	0.43	0.21	0.43	0.43	0.43	0.21	0.43	0.85	0.21	0.21	0.21	0.21	0.43	0.43	0.21	0.21	0.43	0.21	0.21	0.21
T-406	0.84	0.21	0.21	0.21	0.42	1.05	0.42	0.21	0.42	0.42	0.42	0.21	0.42	0.84	0.21	0.21	0.21	0.21	0.42	0.42	0.21	0.21	0.42	0.21	0.21	0.21
T-407	0.88	0.22	0.22	0.22	0.44	1.1	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.88	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-408	0.87	0.22	0.22	0.22	0.44	1.09	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.87	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-409	0.91	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.91	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-410	0.91	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.91	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-411	0.85	0.21	0.21	0.21	0.43	1.07	0.43	0.21	0.43	0.43	0.43	0.21	0.43	0.85	0.21	0.21	0.21	0.21	0.43	0.43	0.21	0.21	0.43	0.21	0.21	0.21
T-412	0.88	0.22	0.22	0.22	0.44	1.1	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.88	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-413	0.89	0.22	0.22	0.22	0.45	1.12	0.45	0.22	0.45	0.45	0.45	0.22	0.45	0.89	0.22	0.22	0.22	0.22	0.45	0.45	0.22	0.22	0.45	0.22	0.22	0.22
T-414	0.88	0.22	0.22	0.22	0.44	1.1	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.88	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-415	0.87	0.22	0.22	0.22	0.44	1.09	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.87	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-416	0.95	0.24	0.24	0.24	0.47	1.18	0.47	0.24	0.47	0.47	0.47	0.24	0.47	0.95	0.24	0.24	0.24	0.24	0.47	0.47	0.24	0.24	0.47	0.24	0.24	0.24
T-417	0.87	0.22	0.22	0.22	0.43	1.08	0.43	0.22	0.43	0.43	0.43	0.22	0.43	0.87	0.22	0.22	0.22	0.22	0.43	0.43	0.22	0.22	0.43	0.22	0.22	0.22
T-418	0.83	0.21	0.21	0.21	0.42	1.04	0.42	0.21	0.42	0.42	0.42	0.21	0.42	0.83	0.21	0.21	0.21	0.21	0.42	0.42	0.21	0.21	0.42	0.21	0.21	0.21
T-501	0.85	0.21	0.21	0.21	0.43	1.07	0.43	0.21	0.43	0.43	0.43	0.21	0.43	0.85	0.21	0.21	0.21	0.21	0.43	0.43	0.21	0.21	0.43	0.21	0.21	0.21
T-502	0.89	0.22	0.22	0.22	0.44	1.11	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.89	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-503	0.85	0.21	0.21	0.21	0.43	1.07	0.43	0.21	0.43	0.43	0.43	0.21	0.43	0.85	0.21	0.21	0.21	0.21	0.43	0.43	0.21	0.21	0.43	0.21	0.21	0.21
T-504	0.85	0.21	0.21	0.21	0.43	1.07	0.43	0.21	0.43	0.43	0.43	0.21	0.43	0.85	0.21	0.21	0.21	0.21	0.43	0.43	0.21	0.21	0.43	0.21	0.21	0.21
T-505	0.9	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.9	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-506	0.91	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.91	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-507	0.92	0.23	0.23	0.23	0.46	1.15	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.92	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-508	0.92	0.23	0.23	0.23	0.46	1.15	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.92	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-509	0.93	0.23	0.23	0.23	0.47	1.17	0.47	0.23	0.47	0.47	0.47	0.23	0.47	0.93	0.23	0.23	0.23	0.23	0.47	0.47	0.23	0.23	0.47	0.23	0.23	0.23
T-510	0.95	0.24	0.24	0.24	0.47	1.18	0.47	0.24	0.47	0.47	0.47	0.24	0.47	0.95	0.24	0.24	0.24	0.24	0.47	0.47	0.24	0.24	0.47	0.24	0.24	0.24
T-511	0.91	0.23	0.23	0.23	0.46	1.14	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.91	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-512	0.91	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.91	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-513	0.91	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.91	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-514	0.92	0.23	0.23	0.23	0.46	1.15	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.92	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-601	0.87	0.22	0.22	0.22	0.43	1.08	0.43	0.22	0.43	0.43	0.43	0.22	0.43	0.87	0.22	0.22	0.22	0.22	0.43	0.43	0.22	0.22	0.43	0.22	0.22	0.22
T-602	0.85	0.21	0.21	0.21	0.43	1.07	0.43	0.21	0.43	0.43	0.43	0.21	0.43	0.85	0.21	0.21	0.21	0.21	0.43	0.43	0.21	0.21	0.43	0.21	0.21	0.21
T-603	0.83	0.21	0.21	0.21	0.41	1.03	0.41	0.21	0.41	0.41	0.41	0.21	0.41	0.83	0.21	0.21	0.21	0.21	0.41	0.41	0.21	0.21	0.41	0.21	0.21	0.21
T-604	0.89	0.22	0.22	0.22	0.44	1.11	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.89	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-605	0.87	0.22	0.22	0.22	0.44	1.09	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.87	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-606	0.92	0.23	0.23	0.23	0.46	1.15	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.92	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-607	0.87	0.22	0.22	0.22	0.44	1.09	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.87	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-608	0.9	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.9	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-609	0.87	0.22	0.22	0.22	0.44	1.09	0.44	0.22	0.44	0.44	0.44	0.22	0.44	0.87	0.22	0.22	0.22	0.22	0.44	0.44	0.22	0.22	0.44	0.22	0.22	0.22
T-610	0.91	0.23	0.23	0.23	0.46	1.14	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.91	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-611	0.9	0.23	0.23	0.23	0.45	1.13	0.45	0.23	0.45	0.45	0.45	0.23	0.45	0.9	0.23	0.23	0.23	0.23	0.45	0.45	0.23	0.23	0.45	0.23	0.23	0.23
T-612	0.93	0.23	0.23	0.23	0.46	1.16	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.93	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-613	0.93	0.23	0.23	0.23	0.46	1.16	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.93	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23
T-614	0.92	0.23	0.23	0.23	0.46	1.15	0.46	0.23	0.46	0.46	0.46	0.23	0.46	0.92	0.23	0.23	0.23	0.23	0.46	0.46	0.23	0.23	0.46	0.23	0.23	0.23

Table 4 TO-15

Data Used (ug/l)

Sample ID / Compound	Acrylonitrile	1,1,2-Trichlorotriflu	Allyl chloride	trans-1,2-Dichloroe	Methyl tert butyl etl	Propionitrile	Ethyl tert butyl ethe	Vinyl acetate	Diisopropyl ether	Methacrylonitrile	Ethyl acetate	Bromochlorometha	Methyl acrylate	Isobutyl alcohol	2,2-Dichloropropan	1,1,1-Trichloroethai	1,1-Dichloropropen	Carbon tetrachloric	t-Amyl methyl ethe	1,4 Dioxane	Dibromomethane	Bromodichloromet	Methyl methacrylat	cis-1,3-Dichloropro	trans-1,3-Dichlorop	1,1,2-Trichloroethai
CAS	107-13-1	76-13-1	107-05-1	156-60-5	1634-04-4	107-12-0	637-92-3	108-05-4	108-20-3	126-98-7	141-78-6	74-97-5	96-33-3	78-83-1	594-20-7	71-55-6	563-58-6	56-23-5	994-05-8	123-91-1	74-95-3	75-27-4	80-62-6	10061-01-5	10061-02-6	79-00-5
MW	53.1	187.4	76.5	96.9	88.1	55.1	102.2	86.1	102.2	67.1	88.1	129.4	86.1	74.1	113	133.4	111	153.8	102.2	88.1	173.83	163.8	100.1	111	111	133.4
T-401	0.94	0.84	0.34	0.43	0.79	1.22	0.91	0.38	0.91	0.60	0.79	0.58	0.77	1.31	0.50	0.60	0.50	0.69	0.91	0.79	0.78	0.73	0.89	0.50	0.50	0.60
T-402	0.94	0.84	0.34	0.43	0.79	1.22	0.91	0.38	0.91	0.60	0.79	0.58	0.77	1.31	0.50	0.59	0.49	0.69	0.91	0.79	0.77	0.73	0.89	0.49	0.49	0.59
T-403	0.97	0.84	0.34	0.44	0.79	1.25	0.92	0.39	0.92	0.60	0.79	0.58	0.77	1.35	0.51	0.60	0.50	0.69	0.92	0.79	0.78	0.74	0.90	0.50	0.50	0.60
T-404	0.95	0.85	0.35	0.44	0.78	1.22	0.90	0.39	0.90	0.59	0.78	0.58	0.76	1.32	0.51	0.60	0.50	0.69	0.90	0.78	0.78	0.74	0.88	0.50	0.50	0.60
T-405	0.94	0.82	0.33	0.42	0.79	1.22	0.91	0.38	0.91	0.60	0.79	0.56	0.77	1.31	0.49	0.58	0.48	0.67	0.91	0.79	0.76	0.71	0.89	0.48	0.48	0.58
T-406	0.94	0.83	0.34	0.43	0.78	1.22	0.91	0.38	0.91	0.60	0.78	0.57	0.76	1.32	0.50	0.59	0.49	0.68	0.91	0.78	0.77	0.73	0.89	0.49	0.49	0.59
T-407	0.95	0.83	0.34	0.43	0.78	1.23	0.91	0.38	0.91	0.60	0.78	0.58	0.77	1.32	0.50	0.59	0.49	0.69	0.91	0.78	0.77	0.73	0.89	0.49	0.49	0.59
T-408	0.94	0.84	0.34	0.43	0.79	1.22	0.92	0.39	0.92	0.60	0.79	0.58	0.77	1.31	0.51	0.60	0.50	0.69	0.92	0.79	0.78	0.73	0.90	0.50	0.50	0.60
T-409	0.97	0.86	0.35	0.45	0.80	1.25	0.92	0.40	0.92	0.61	0.80	0.60	0.78	1.35	0.52	0.62	0.51	0.71	0.92	0.80	0.80	0.76	0.90	0.51	0.51	0.62
T-410	0.96	0.86	0.35	0.44	0.79	1.24	0.91	0.39	0.91	0.60	0.79	0.59	0.77	1.34	0.52	0.61	0.51	0.70	0.91	0.79	0.79	0.75	0.90	0.51	0.51	0.61
T-411	0.91	0.79	0.32	0.41	0.76	1.19	0.88	0.36	0.88	0.58	0.76	0.55	0.75	1.27	0.48	0.56	0.47	0.65	0.88	0.76	0.74	0.69	0.87	0.47	0.47	0.56
T-412	0.96	0.85	0.35	0.44	0.80	1.24	0.92	0.39	0.92	0.61	0.80	0.58	0.78	1.34	0.51	0.60	0.50	0.69	0.92	0.80	0.78	0.74	0.90	0.50	0.50	0.60
T-413	0.94	0.82	0.34	0.43	0.79	1.23	0.92	0.38	0.92	0.60	0.79	0.57	0.77	1.32	0.50	0.59	0.49	0.68	0.92	0.79	0.76	0.72	0.90	0.49	0.49	0.59
T-414	0.94	0.83	0.34	0.43	0.78	1.22	0.91	0.38	0.91	0.60	0.78	0.57	0.76	1.32	0.50	0.59	0.49	0.68	0.91	0.78	0.77	0.73	0.89	0.49	0.49	0.59
T-415	0.95	0.85	0.35	0.44	0.80	1.23	0.92	0.39	0.92	0.61	0.80	0.58	0.78	1.32	0.51	0.60	0.50	0.69	0.92	0.80	0.78	0.74	0.90	0.50	0.50	0.60
T-416	1.02	0.91	0.37	0.47	0.84	1.32	0.97	0.42	0.97	0.64	0.84	0.63	0.82	1.43	0.55	0.65	0.54	0.75	0.97	0.84	0.84	0.80	0.95	0.54	0.54	0.65
T-417	0.94	0.83	0.34	0.43	0.77	1.20	0.89	0.38	0.89	0.58	0.77	0.58	0.75	1.31	0.50	0.59	0.49	0.69	0.89	0.77	0.77	0.73	0.87	0.49	0.49	0.59
T-418	0.90	0.81	0.33	0.42	0.76	1.18	0.88	0.37	0.88	0.58	0.76	0.56	0.74	1.26	0.49	0.57	0.48	0.66	0.88	0.76	0.75	0.71	0.86	0.48	0.48	0.57
T-501	0.98	0.85	0.35	0.44	0.82	1.27	0.95	0.39	0.95	0.62	0.82	0.59	0.80	1.36	0.51	0.61	0.50	0.70	0.95	0.82	0.79	0.74	0.93	0.50	0.50	0.61
T-502	1.01	0.88	0.36	0.46	0.83	1.31	0.96	0.41	0.96	0.63	0.83	0.61	0.81	1.41	0.53	0.63	0.52	0.72	0.96	0.83	0.82	0.77	0.94	0.52	0.52	0.63
T-503	0.97	0.85	0.35	0.44	0.81	1.27	0.94	0.39	0.94	0.62	0.81	0.58	0.80	1.35	0.51	0.60	0.50	0.69	0.94	0.81	0.78	0.74	0.92	0.50	0.50	0.60
T-504	0.97	0.84	0.34	0.44	0.81	1.26	0.94	0.39	0.94	0.62	0.81	0.58	0.79	1.35	0.51	0.60	0.50	0.69	0.94	0.81	0.78	0.74	0.92	0.50	0.50	0.60
T-505	1.00	0.91	0.37	0.47	0.83	1.31	0.97	0.42	0.97	0.63	0.83	0.63	0.81	1.40	0.55	0.65	0.54	0.74	0.97	0.83	0.84	0.79	0.95	0.54	0.54	0.65
T-506	1.00	0.89	0.36	0.46	0.82	1.28	0.95	0.41	0.95	0.62	0.82	0.61	0.80	1.39	0.54	0.63	0.53	0.73	0.95	0.82	0.82	0.78	0.93	0.53	0.53	0.63
T-507	0.99	0.87	0.36	0.45	0.82	1.28	0.95	0.40	0.95	0.62	0.82	0.60	0.80	1.38	0.53	0.62	0.52	0.72	0.95	0.82	0.81	0.76	0.93	0.52	0.52	0.62
T-508	1.00	0.88	0.36	0.46	0.83	1.30	0.96	0.41	0.96	0.63	0.83	0.61	0.81	1.40	0.53	0.63	0.52	0.72	0.96	0.83	0.82	0.77	0.94	0.52	0.52	0.63
T-509	1.02	0.89	0.36	0.46	0.85	1.33	0.99	0.41	0.99	0.65	0.85	0.61	0.83	1.42	0.54	0.63	0.53	0.73	0.99	0.85	0.82	0.78	0.97	0.53	0.53	0.63
T-510	1.00	0.89	0.37	0.46	0.82	1.29	0.95	0.41	0.95	0.63	0.82	0.62	0.80	1.40	0.54	0.64	0.53	0.73	0.95	0.82	0.83	0.78	0.94	0.53	0.53	0.64
T-511	0.98	0.87	0.36	0.45	0.82	1.27	0.95	0.40	0.95	0.62	0.82	0.60	0.80	1.36	0.53	0.62	0.52	0.71	0.95	0.82	0.81	0.76	0.93	0.52	0.52	0.62
T-512	0.96	0.86	0.35	0.44	0.79	1.24	0.91	0.39	0.91	0.60	0.79	0.59	0.77	1.34	0.52	0.61	0.51	0.70	0.91	0.79	0.79	0.75	0.89	0.51	0.51	0.61
T-513	0.96	0.86	0.35	0.44	0.79	1.24	0.91	0.39	0.91	0.60	0.79	0.59	0.77	1.34	0.52	0.61	0.51	0.70	0.91	0.79	0.79	0.75	0.89	0.51	0.51	0.61
T-514	1.00	0.88	0.36	0.46	0.83	1.30	0.96	0.41	0.96	0.63	0.83	0.61	0.81	1.40	0.53	0.63	0.52	0.73	0.96	0.83	0.82	0.77	0.94	0.52	0.52	0.63
T-601	0.99	0.88	0.36	0.46	0.81	1.28	0.94	0.41	0.94	0.62	0.81	0.61	0.79	1.38	0.53	0.63	0.52	0.73	0.94	0.81	0.82	0.77	0.92	0.52	0.52	0.63
T-602	0.97	0.85	0.35	0.44	0.81	1.27	0.94	0.39	0.94	0.62	0.81	0.58	0.80	1.35	0.51	0.60	0.50	0.69	0.94	0.81	0.78	0.74	0.92	0.50	0.50	0.60
T-603	0.95	0.85	0.35	0.44	0.78	1.23	0.91	0.39	0.91	0.60	0.78	0.59	0.76	1.33	0.51	0.61	0.50	0.70	0.91	0.78	0.79	0.74	0.89	0.50	0.50	0.61
T-604	1.02	0.89	0.36	0.46	0.83	1.32	0.97	0.41	0.97	0.64	0.83	0.61	0.82	1.42	0.53	0.63	0.53	0.73	0.97	0.83	0.82	0.78	0.95	0.53	0.53	0.63
T-605	0.97	0.86	0.35	0.45	0.81	1.26	0.94	0.40	0.94	0.62	0.81	0.60	0.79	1.35	0.52	0.61	0.51	0.71	0.94	0.81	0.80	0.75	0.92	0.51	0.51	0.61
T-606	1.02	0.90	0.37	0.47	0.85	1.33	0.98	0.41	0.98	0.65	0.85	0.62	0.83	1.43	0.54	0.64	0.53	0.74	0.98	0.85	0.84	0.79	0.96	0.53	0.53	0.64
T-607	0.97	0.87	0.35	0.45	0.82	1.27	0.95	0.40	0.95	0.62	0.82	0.60	0.80	1.36	0.52	0.62	0.51	0.71	0.95	0.82	0.81	0.76	0.93	0.51	0.51	0.62
T-608	0.99	0.89	0.37	0.46	0.82	1.29	0.95	0.41	0.95	0.63	0.82	0.62	0.80	1.38	0.54	0.64	0.53	0.73	0.95	0.82	0.83	0.78	0.93	0.53	0.53	0.64
T-609	0.93	0.83	0.34	0.43	0.78	1.21	0.91	0.38	0.91	0.59	0.78	0.57	0.76	1.30	0.50	0.59	0.49	0.68	0.91	0.78	0.77	0.73	0.89	0.49	0.49	0.59
T-610	1.01	0.90	0.37	0.46	0.84	1.31	0.98	0.41	0.98	0.64	0.84	0.62	0.82	1.40	0.54	0.64	0.53	0.74	0.98	0.84	0.83	0.78	0.96	0.53	0.53	0.64
T-611	0.97	0.88	0.36	0.45	0.81	1.27	0.94	0.40	0.94	0.62	0.81	0.61	0.79	1.36	0.53	0.63	0.52	0.72	0.94	0.81	0.82	0.77	0.92	0.52	0.52	0.63
T-612	1.00	0.88	0.36	0.45	0.82	1.30	0.96	0.40	0.96	0.63	0.82	0.60	0.80	1.40	0.53	0.62	0.52	0.72	0.96	0.82	0.81	0.77	0.94	0.52	0.52	0.62
T-613	1.00	0.88	0.36	0.45	0.82	1.30	0.96	0.40	0.96	0.63	0.82	0.60	0.80	1.40	0.53	0.62	0.52	0.72	0.96	0.82	0.81	0.77	0.94	0.52	0.52	0.62
T-614	1.00	0.88	0.36	0.46	0.83	1.30	0.96	0.41	0.96	0.63	0.83	0.61	0.81	1.40	0.53	0.63	0.52	0.73	0.96	0.83	0.82	0.77	0.94	0.52	0.52	0.63

Flux (mg/m2-min)

Sample ID	Acrylonitrile	1,1,2-Trichlorotriflu	Allyl chloride	trans-1,2-Dichloroe	Methyl tert butyl etl	Propionitrile	Ethyl tert butyl ethe	Vinyl acetate	Diisopropyl ether	Methacrylonitrile	Ethyl acetate	Bromochlorometha	Methyl acrylate	Isobutyl alcohol	2,2-Dichloropropan	1,1,1-Trichloroethai	1,1-Dichloropropen	Carbon tetrachloric	t-Amyl methyl ethe	1,4 Dioxane	Dibromomethane	Bromodichloromet	Methyl methacrylat	cis-1,3-Dichloropro	trans-1,3-Dichlorop	1,1,2-Trichloroethai
T-401	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-402	0.0002	0.0002	0.0001	0.0001	0.0002	0.0003	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001
T-403	0.0003	0.0002	0.0001	0.0001	0.0002	0.0003	0.0003	0.0001	0.0003	0.0002	0.0002	0.0002	0.0002	0.0004	0.0001	0.0002	0.0001	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002
T-404	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-405	0.0004	0.0003	0.0001	0.0002	0.0003	0.0005	0.0004	0.0002	0.0004	0.0002	0.0003	0.0002	0.0003	0.0005	0.0002	0.0002	0.0002	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0002	0.0002	0.0002
T-406	0.0008	0.0007	0.0003	0.0004	0.0007	0.0010	0.0008	0.0003	0.0008	0.0005	0.0007	0.0005	0.0006	0.0011	0.0004	0.0005	0.0004	0.0006	0.0008	0.0007	0.0006	0.0006	0.0007	0.0004	0.0004	0.0005
T-407	0.0003	0.0003	0.0001	0.0001	0.0003	0.0004	0.0003	0.0001	0.0003	0.0002	0.0003	0.0002	0.0003	0.0004	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0002	0.0003	0.0002	0.0002	0.0002
T-408	0.0003	0.0002	0.0001	0.0001	0.0002	0.0003	0.0003	0.0001	0.0003	0.0002	0.0002	0.0002	0.0002	0.0004	0.0001	0.0002	0.0001	0.0002	0.0003	0.0002	0.0002	0.0002	0.0003	0.0001	0.0001	0.0002
T-409	0.0006	0.0005	0.0002	0.0003	0.0005	0.0007	0.0006	0.0002	0.0006	0.0004	0.0005	0.0004	0.0005	0.0008	0.0003	0.0004	0.0003	0.0004	0.0006	0.0005	0.0005	0.0005	0.0005	0.0003	0.0003	0.0004
T-410	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001
T-411	0.0003	0.0002	0.0001	0.0001	0.0002	0.0003	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004	0.0001	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002
T-412	0.0003	0.0003	0.0001	0.0002	0.0003	0.0004	0.0003	0.0001	0.0003	0.0002	0.0003	0.0002	0.0003	0.0005	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002
T-413	0.0001	0.0001	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-414	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-415	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
T-416	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001
T-417	0.0003	0.0003	0.0001	0.0001	0.0002	0.0004	0.0003	0.0001	0.0003	0.0002	0.0002	0.0002	0.0002	0.0004	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002
T-418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-501	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-502	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001
T-503	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-504	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
T-505	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-507	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-508	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-509	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
T-510	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
T-511	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
T-512	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
T-513	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T-601	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001
T-602	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001
T-603	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-604	0.0001	0.0001	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-605	0.0001	0.0001	0.0000	0.0001	0.0001	0.0002	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-606	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001
T-607	0.0002	0.0002	0.0001	0.0001	0.0002	0.0003	0.0002	0.0001	0.0002	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001
T-608	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-609	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
T-610	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001
T-611	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
T-612	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001
T-613	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000
T-614	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 4 TO-15

Sample ID / Compound	Ethyl methacrylate	1,3-Dichloropropan	Dibromochloromet	1,2-Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloro	Bromoform	1,1,2,2-Tetrachloro	1,2,3-Trichloroprop	t-1,4-Dichloro-2-bu	n-Propylbenzene	tert-butyl benzene	i-Butylbenzene	sec-butylbenzene	1,3-Dichlorobenzer	Benzyl chloride	1,4-Dichlorobenzer	1,2-Dichlorobenzer	1,2-Dibromo-3-chlo	1,2,4-Trichlorobenz	1,2,3-Trichlorobenz	Hexachlorobutadie
CAS	97-63-2	142-28-9	124-48-1	106-93-4	108-90-7	630-20-6	75-25-2	79-34-5	96-18-4	110-57-6	103-65-1	98-06-6	538-93-2	135-98-8	541-73-1	100-44-7	106-46-7	95-50-1	96-12-8	120-82-1	87-61-6	87-68-3
MW	114.2	113	208.3	187.9	112.6	167.8	252.7	167.8	147.4	125	120.2	134.2	134.2	134.2	147	126.6	147	147	236.3	181.4	181.4	260.8
Lab Data (ppbv)																						
T-401	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-402	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-403	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-404	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-405	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-406	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-407	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-408	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-409	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-411	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-412	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-413	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-414	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-415	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-416	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-417	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-418	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-501	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-502	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-503	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-504	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-505	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-506	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-507	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-508	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-509	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-510	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-511	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-512	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-513	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-601	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-602	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-603	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-604	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-605	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-606	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-607	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-608	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-609	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-610	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-611	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-612	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-613	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-614	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)																						
T-401	0.42	0.21	0.42	0.42	0.42	0.42	0.42	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	1.25	1.25	1.25	1.04
T-402	0.42	0.21	0.42	0.42	0.42	0.42	0.42	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	1.25	1.25	1.25	1.04
T-403	0.42	0.21	0.42	0.42	0.42	0.42	0.42	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.27	1.27	1.27	1.06
T-404	0.41	0.21	0.41	0.41	0.41	0.41	0.41	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	1.24	1.24	1.24	1.03
T-405	0.43	0.21	0.43	0.43	0.43	0.43	0.43	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.28	1.28	1.28	1.07
T-406	0.42	0.21	0.42	0.42	0.42	0.42	0.42	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	1.26	1.26	1.26	1.05
T-407	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.32	1.32	1.32	1.1
T-408	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.31	1.31	1.31	1.09
T-409	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.36	1.36	1.36	1.13
T-410	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.36	1.36	1.36	1.13
T-411	0.43	0.21	0.43	0.43	0.43	0.43	0.43	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.28	1.28	1.28	1.07
T-412	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.32	1.32	1.32	1.1
T-413	0.45	0.22	0.45	0.45	0.45	0.45	0.45	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	1.34	1.34	1.34	1.12
T-414	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.32	1.32	1.32	1.1
T-415	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.31	1.31	1.31	1.09
T-416	0.47	0.24	0.47	0.47	0.47	0.47	0.47	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.42	1.42	1.42	1.18
T-417	0.43	0.22	0.43	0.43	0.43	0.43	0.43	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.3	1.3	1.3	1.08
T-418	0.42	0.21	0.42	0.42	0.42	0.42	0.42	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	1.25	1.25	1.25	1.04
T-501	0.43	0.21	0.43	0.43	0.43	0.43	0.43	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.28	1.28	1.28	1.07
T-502	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	1.33	1.33	1.33	1.11
T-503	0.43	0.21	0.43	0.43	0.43	0.43	0.43	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.28	1.28	1.28	1.07
T-504	0.43	0.21	0.43	0.43	0.43	0.43	0.43	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.28	1.28	1.28	1.07
T-505	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.35	1.35	1.35	1.13
T-506	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.36	1.36	1.36	1.13
T-507	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.38	1.38	1.38	1.15
T-508	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.38	1.38	1.38	1.15
T-509	0.47	0.23	0.47	0.47	0.47	0.47	0.47	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.4	1.4	1.4	1.17
T-510	0.47	0.24	0.47	0.47	0.47	0.47	0.47	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.42	1.42	1.42	1.18
T-511	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.37	1.37	1.37	1.14
T-512	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.36	1.36	1.36	1.13
T-513	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.36	1.36	1.36	1.13
T-514	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.38	1.38	1.38	1.15
T-601	0.43	0.22	0.43	0.43	0.43	0.43	0.43	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.3	1.3	1.3	1.08
T-602	0.43	0.21	0.43	0.43	0.43	0.43	0.43	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	1.28	1.28	1.28	1.07
T-603	0.41	0.21	0.41	0.41	0.41	0.41	0.41	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	1.24	1.24	1.24	1.03
T-604	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	1.33	1.33	1.33	1.11
T-605	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.31	1.31	1.31	1.09
T-606	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.38	1.38	1.38	1.15
T-607	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.31	1.31	1.31	1.09
T-608	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.35	1.35	1.35	1.13
T-609	0.44	0.22	0.44	0.44	0.44	0.44	0.44	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	1.31	1.31	1.31	1.09
T-610	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.37	1.37	1.37	1.14
T-611	0.45	0.23	0.45	0.45	0.45	0.45	0.45	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.35	1.35	1.35	1.13
T-612	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.39	1.39	1.39	1.16
T-613	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.39	1.39	1.39	1.16
T-614	0.46	0.23	0.46	0.46	0.46	0.46	0.46	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.38	1.38	1.38	1.15

Table 4 TO-15

Sample ID	Compound	Ethyl methacrylate	1,3-Dichloropropan	Dibromochlorometh	1,2-Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloro	Bromoform	1,1,2,2-Tetrachloro	1,2,3-Trichloroprop	t-1,4-Dichloro-2-but	n-Propylbenzene	tert-butyl benzene	i-Butylbenzene	sec-butylbenzene	1,3-Dichlorobenzer	Benzyl chloride	1,4-Dichlorobenzer	1,2-Dichlorobenzer	1,2-Dibromo-3-chlo	1,2,4-Trichlorobenz	1,2,3-Trichlorobenz	Hexachlorobutadie
	CAS	97-63-2	142-28-9	124-48-1	106-93-4	108-90-7	630-20-6	75-25-2	79-34-5	96-18-4	110-57-6	103-65-1	98-06-6	538-93-2	135-98-8	541-73-1	100-44-7	106-46-7	95-50-1	96-12-8	120-82-1	87-61-6	87-68-3
	MW	114.2	113	208.3	187.9	112.6	167.8	252.7	167.8	147.4	125	120.2	134.2	134.2	134.2	147	126.6	147	147	236.3	181.4	181.4	260.8
Data Used (ug/l)																							
T-401		1.02	0.50	1.86	1.68	1.01	1.50	2.26	2.96	2.60	2.21	2.12	2.37	2.37	2.37	2.60	2.23	2.60	2.60	6.28	4.82	4.82	5.77
T-402		1.02	0.50	1.86	1.68	1.00	1.50	2.25	2.96	2.60	2.20	2.12	2.36	2.36	2.36	2.59	2.23	2.59	2.59	6.27	4.81	4.81	5.76
T-403		1.03	0.51	1.87	1.69	1.01	1.51	2.27	3.05	2.68	2.27	2.19	2.44	2.44	2.44	2.67	2.30	2.67	2.67	6.42	4.93	4.93	5.91
T-404		1.01	0.51	1.83	1.65	0.99	1.48	2.23	2.99	2.63	2.23	2.14	2.39	2.39	2.39	2.62	2.26	2.62	2.62	6.29	4.83	4.83	5.77
T-405		1.02	0.49	1.86	1.68	1.00	1.50	2.25	2.96	2.60	2.20	2.12	2.37	2.37	2.37	2.59	2.23	2.59	2.59	6.28	4.82	4.82	5.79
T-406		1.01	0.50	1.85	1.67	1.00	1.49	2.24	2.98	2.62	2.22	2.14	2.38	2.38	2.38	2.61	2.25	2.61	2.61	6.30	4.83	4.83	5.79
T-407		1.02	0.50	1.86	1.67	1.00	1.49	2.25	2.99	2.63	2.23	2.14	2.39	2.39	2.39	2.62	2.26	2.62	2.62	6.32	4.85	4.85	5.81
T-408		1.02	0.51	1.87	1.68	1.01	1.50	2.26	2.97	2.61	2.21	2.13	2.38	2.38	2.38	2.60	2.24	2.60	2.60	6.30	4.84	4.84	5.79
T-409		1.03	0.52	1.88	1.70	1.02	1.51	2.28	3.06	2.69	2.28	2.19	2.45	2.45	2.45	2.68	2.31	2.68	2.68	6.45	4.95	4.95	5.91
T-410		1.02	0.52	1.86	1.68	1.01	1.50	2.26	3.04	2.67	2.26	2.17	2.43	2.43	2.43	2.66	2.29	2.66	2.66	6.39	4.90	4.90	5.86
T-411		0.99	0.48	1.80	1.63	0.97	1.45	2.19	2.87	2.52	2.14	2.06	2.30	2.30	2.30	2.52	2.17	2.52	2.52	6.09	4.68	4.68	5.62
T-412		1.03	0.51	1.88	1.70	1.02	1.51	2.28	3.03	2.66	2.26	2.17	2.42	2.42	2.42	2.65	2.29	2.65	2.65	6.40	4.91	4.91	5.88
T-413		1.03	0.50	1.87	1.69	1.01	1.51	2.27	2.99	2.62	2.22	2.14	2.39	2.39	2.39	2.62	2.25	2.62	2.62	6.33	4.86	4.86	5.84
T-414		1.01	0.50	1.85	1.67	1.00	1.49	2.24	2.98	2.62	2.22	2.13	2.38	2.38	2.38	2.61	2.25	2.61	2.61	6.29	4.83	4.83	5.79
T-415		1.03	0.51	1.88	1.70	1.02	1.51	2.28	2.99	2.63	2.23	2.15	2.40	2.40	2.40	2.62	2.26	2.62	2.62	6.35	4.87	4.87	5.83
T-416		1.09	0.55	1.98	1.79	1.07	1.60	2.40	3.23	2.84	2.40	2.31	2.58	2.58	2.58	2.83	2.44	2.83	2.83	6.79	5.22	5.22	6.23
T-417		0.99	0.50	1.81	1.64	0.98	1.46	2.20	2.96	2.60	2.20	2.12	2.36	2.36	2.36	2.59	2.23	2.59	2.59	6.22	4.77	4.77	5.70
T-418		0.98	0.49	1.79	1.62	0.97	1.45	2.18	2.86	2.51	2.13	2.05	2.28	2.28	2.28	2.50	2.16	2.50	2.50	6.06	4.65	4.65	5.56
T-501		1.06	0.51	1.94	1.75	1.05	1.56	2.35	3.08	2.71	2.30	2.21	2.46	2.46	2.46	2.70	2.32	2.70	2.70	6.53	5.02	5.02	6.03
T-502		1.07	0.53	1.96	1.77	1.06	1.58	2.38	3.19	2.81	2.38	2.29	2.56	2.56	2.56	2.80	2.41	2.80	2.80	6.72	5.16	5.16	6.19
T-503		1.05	0.51	1.92	1.74	1.04	1.55	2.33	3.06	2.69	2.28	2.19	2.45	2.45	2.45	2.68	2.31	2.68	2.68	6.50	4.99	4.99	5.99
T-504		1.05	0.51	1.92	1.73	1.04	1.55	2.33	3.06	2.69	2.28	2.19	2.45	2.45	2.45	2.68	2.31	2.68	2.68	6.48	4.98	4.98	5.98
T-505		1.08	0.55	1.97	1.78	1.07	1.59	2.39	3.18	2.79	2.37	2.27	2.54	2.54	2.54	2.78	2.40	2.78	2.78	6.71	5.15	5.15	6.20
T-506		1.06	0.54	1.93	1.74	1.05	1.56	2.35	3.15	2.77	2.35	2.26	2.52	2.52	2.52	2.76	2.38	2.76	2.76	6.63	5.09	5.09	6.08
T-507		1.06	0.53	1.94	1.75	1.05	1.56	2.35	3.13	2.75	2.33	2.24	2.50	2.50	2.50	2.74	2.36	2.74	2.74	6.60	5.07	5.07	6.07
T-508		1.08	0.53	1.96	1.77	1.06	1.58	2.38	3.16	2.78	2.35	2.26	2.53	2.53	2.53	2.77	2.38	2.77	2.77	6.68	5.13	5.13	6.14
T-509		1.11	0.54	2.02	1.82	1.09	1.62	2.45	3.21	2.82	2.39	2.30	2.57	2.57	2.57	2.81	2.42	2.81	2.81	6.81	5.23	5.23	6.28
T-510		1.07	0.54	1.95	1.76	1.05	1.57	2.36	3.17	2.78	2.36	2.27	2.53	2.53	2.53	2.78	2.39	2.78	2.78	6.67	5.12	5.12	6.12
T-511		1.06	0.53	1.94	1.75	1.05	1.56	2.35	3.09	2.71	2.30	2.21	2.47	2.47	2.47	2.70	2.33	2.70	2.70	6.54	5.02	5.02	6.01
T-512		1.02	0.52	1.86	1.68	1.01	1.50	2.26	3.03	2.66	2.26	2.17	2.42	2.42	2.42	2.65	2.29	2.65	2.65	6.38	4.90	4.90	5.85
T-513		1.02	0.52	1.86	1.68	1.01	1.50	2.26	3.03	2.66	2.26	2.17	2.42	2.42	2.42	2.65	2.29	2.65	2.65	6.38	4.90	4.90	5.85
T-514		1.08	0.53	1.97	1.77	1.06	1.58	2.38	3.17	2.78	2.36	2.27	2.53	2.53	2.53	2.77	2.39	2.77	2.77	6.69	5.14	5.14	6.15
T-601		1.05	0.53	1.92	1.73	1.04	1.55	2.33	3.13	2.75	2.33	2.24	2.50	2.50	2.50	2.74	2.36	2.74	2.74	6.58	5.05	5.05	6.04
T-602		1.05	0.51	1.92	1.74	1.04	1.55	2.33	3.06	2.69	2.28	2.19	2.45	2.45	2.45	2.68	2.31	2.68	2.68	6.50	4.99	4.99	5.99
T-603		1.01	0.51	1.85	1.67	1.00	1.49	2.24	3.01	2.65	2.25	2.16	2.41	2.41	2.41	2.64	2.27	2.64	2.64	6.34	4.87	4.87	5.81
T-604		1.08	0.53	1.97	1.78	1.07	1.59	2.39	3.21	2.82	2.39	2.30	2.57	2.57	2.57	2.82	2.42	2.82	2.82	6.76	5.19	5.19	6.23
T-605		1.05	0.52	1.92	1.73	1.04	1.54	2.32	3.05	2.68	2.27	2.19	2.44	2.44	2.44	2.67	2.30	2.67	2.67	6.47	4.97	4.97	5.94
T-606		1.10	0.54	2.01	1.81	1.08	1.62	2.43	3.23	2.84	2.41	2.32	2.59	2.59	2.59	2.83	2.44	2.83	2.83	6.83	5.24	5.24	6.28
T-607		1.06	0.52	1.93	1.74	1.04	1.56	2.34	3.08	2.70	2.29	2.20	2.46	2.46	2.46	2.69	2.32	2.69	2.69	6.52	5.01	5.01	5.99
T-608		1.07	0.54	1.94	1.75	1.05	1.57	2.36	3.13	2.75	2.33	2.24	2.51	2.51	2.51	2.74	2.36	2.74	2.74	6.62	5.08	5.08	6.11
T-609		1.01	0.50	1.85	1.66	1.00	1.49	2.24	2.94	2.58	2.19	2.11	2.35	2.35	2.35	2.58	2.22	2.58	2.58	6.23	4.79	4.79	5.72
T-610		1.09	0.54	2.00	1.80	1.08	1.61	2.42	3.18	2.79	2.37	2.28	2.54	2.54	2.54	2.79	2.40	2.79	2.79	6.74	5.18	5.18	6.19
T-611		1.05	0.53	1.91	1.72	1.03	1.54	2.32	3.08	2.71	2.29	2.21	2.46	2.46	2.46	2.70	2.32	2.70	2.70	6.51	5.00	5.00	6.01
T-612		1.07	0.53	1.95	1.76	1.05	1.57	2.36	3.17	2.79	2.36	2.27	2.54	2.54	2.54	2.78	2.39	2.78	2.78	6.68	5.12	5.12	6.15
T-613		1.07	0.53	1.95	1.76	1.05	1.57	2.36	3.17	2.79	2.36	2.27	2.54	2.54	2.54	2.78	2.39	2.78	2.78	6.68	5.12	5.12	6.15
T-614		1.08	0.53	1.97	1.77	1.06	1.58	2.38	3.17	2.78	2.36	2.27	2.53	2.53	2.53	2.77	2.39	2.77	2.77	6.69	5.14	5.14	6.15
Flux (mg/m2-min)																							
T-401		0.0002	0.0001	0.0003	0.0003	0.0002	0.0002	0.0003	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0004	0.0010	0.0007	0.0007	0.0009
T-402		0.0002	0.0001	0.0004	0.0004	0.0002	0.0004	0.0005	0.0007	0.0006	0.0005	0.0005	0.0006	0.0006	0.0006	0.0006	0.0005	0.0006	0.0006	0.0015	0.0011	0.0011	0.0014
T-403		0.0003	0.0001	0.0005	0.0005	0.0003	0.0004	0.0006	0.0008	0.0007	0.0006	0.0006	0.0007	0.0007	0.0007	0.0007	0.0006	0.0007	0.0007	0.0018	0.0014	0.0014	0.0016
T-404		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002	0.0003	0.0003	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0007	0.0005	0.0005	0.0006
T-405		0.0004	0.0002	0.0007	0.0007	0.0004	0.0006	0.0009	0.0012	0.0010	0.0009	0.0009	0.0010	0.0010	0.0010	0.0010	0.0009	0.0010	0.0010	0.0025	0.0019	0.0019	0.0023
T-406		0.0008	0.0004	0.0015	0.0014	0.0008	0.0012	0.0019	0.0025	0.0022	0.0018	0.0018	0.0020	0.0020	0.0020	0.0022	0.0019	0.0022	0.0022	0.0052	0.0040	0.0040	0.0048
T-407		0.0003	0.0002	0.0006	0.0005	0.0003	0.0005	0.0007	0.0010	0.0009	0.0007	0.0007	0.0008	0.0008	0.0008	0.0009	0.0007	0.0009	0.0009	0.0021	0.0016	0.0016	0.0019
T-408		0.0003	0.0001	0.0005	0.0005	0.0003	0.0004	0.0006	0.0008	0.0007	0.0006	0.0006	0.0007	0.0007	0.0007	0.0007	0.0006	0.0007	0.0007	0.0018	0.0014	0.0014	0.0016
T-409		0.0006	0.0003	0.0011	0.0010	0.0006	0.0009	0.0014	0.0018	0.0016	0.0014	0.0013	0.0015	0.0015	0.0015	0.0016	0.0014	0.0016	0.0016	0.0039	0.0030	0.0030	0.0035
T-410		0.0002	0.0001	0.0004	0.0003	0.0002	0.0003	0.0004	0.0006	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005	0.0013	0.0010	0.0010	0.0012
T-411		0.0003	0.0001	0.0005	0.0005	0.0003	0.0004	0.0006	0.0008	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0007	0.0006	0.0007	0.0007	0.0017	0.0013	0.0013	0.0016
T-412		0.0004	0.0002	0.0007	0.0006	0.0004	0.0005	0.0008	0.0011	0.0009	0.0008	0.0008	0.0009	0.0009	0.0009	0.0009	0.0008	0.0009	0.0009	0.0023	0.0017	0.0017	0.0021
T-413		0.0002	0.0001	0.0003	0.0002	0.0001	0.0002	0.0003	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0004	0.0003	0.0004	0.0004	0.0009	0.0007	0.0007	0.0009
T-414		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0003	0.0003	0.0003
T-415		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0004	0.0004	0.0005
T-416		0.0002	0.0001	0.0003	0.0003	0.0002	0.0003	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0011	0.0009	0.0009	0.0010
T-417		0.0003	0.0002	0.0006	0.0005	0.0003	0.0005	0.0007	0.0009	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0008	0.0007	0.0008	0.0008	0.0019	0.0015	0.0015	0.0018
T-418		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002
T-501		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0007	0.0005	0.0005	0.0006
T-502		0.0001	0.0000	0.0002	0.0001	0.0001	0.0001	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0006	0.0004	0.0004	0.0005
T-503		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002	0.0003	0.0003	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0007	0.0005	0.0005	0.0006
T-504		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0004	0.0004	0.0004
T-505		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0007	0.0005	0.0005	0.0007
T-506		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0002	0.0002	0.0003
T-507		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0002	0.0002	0.0003
T-508		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0002	0.0002	0.0003
T-509		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0004	0.0003	0.0003	0.0004
T-510		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0004	0.0004	0.0004
T-511		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0004	0.0003	0.0003	0.0004
T-512		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0004	0.0004	0.0004
T-513		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0002	0.0002	0.0003
T-514		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0003	0.0002	0.0002	0.0002
T-601		0.0002	0.0001	0.0003	0.0003	0.0002	0.0003	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0011	0.0008	0.0008	0.0010
T-602		0.0001	0.0000	0.0002	0.0002	0.0001	0.0001	0.0002	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0003	0.0003	0.0006	0.0005	0.0005	0.0006
T-603		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0006	0.0005	0.0005	0.0006
T-604		0.0001	0.0001	0.0003	0.0002	0.0001	0.0002	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0003	0.0004	0.0004	0.0009	0.0007	0.0007	0.0008
T-605		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0008	0.0006	0.0006	0.0007
T-606		0.0002	0.0001	0.0004	0.0003	0.0002	0.0003	0.0005	0.0006	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0013	0.0010	0.0010	0.0012
T-607		0.0002	0.0001	0.0004	0.0004	0.0002	0.0003	0.0005	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0006	0.0005	0.0006	0.0006	0.0013	0.0010	0.0010	0.0012
T-608		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0008	0.0006	0.0006	0.0007
T-609		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004	0.0003	0.0003	0.0003
T-610		0.0002	0.0001	0.0003	0.0003	0.0002	0.0003	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005	0.0005	0.0011	0.0009	0.0009	0.0010
T-611		0.0001	0.0001	0.0002	0.0002	0.0001	0.0002	0.0002	0.0003	0.0003	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003	0.0007	0.0005	0.0005	0.0006
T-612		0.0001	0.0000	0.0002	0.0002	0.0001	0.0001	0.0002	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0003	0.0003	0.0006	0.0005	0.0005	0.0006
T-613		0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004	0.0003	0.0003	0.0004
T-614		0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002

Table 5 TO-14

Sample ID	Compound	Total Non-Methane Hydrocarbons	Total Non-Methane Hydrocarbons	Toluene	Propene	m,p-xylene	i-Pentane	n-Butane	Ethylbenzene	o-xylene	2-Ethyltoluene	Ethane	t-2-Pentene	n-Heptane	Ethene	Methylcyclohexane	2,2,4-Trimethylpentane	n-Nonane	Propane	n-Pentane	Benzene	3-Methylhexane	Cyclohexane	2,3-Dimethylpentane	1-Pentene
	CAS	TNMHC - C1	TNMHC - C6	108-88-3	115-07-1	108-38-3	78-78-4	106-97-8	100-41-4	95-47-6	611-14-3	74-84-0	646-04-8	142-82-5	74-85-1	108-87-2	540-84-1	111-84-2	74-98-6	109-66-0	71-43-2	589-34-4	110-82-7	565-59-3	109-67-1
	MW	16	80	92.1	42.1	106.2	72.2	58.1	106.2	106.2	120.2	30.1	70.1	100.2	28.1	98.2	114.2	128.3	44.1	72.1	78.1	100.2	84.2	100.2	70.1
Lab Data (ppbv)																									
T-401		26641	4440.2	323.72	75.65	129.88	63.78	89.97	63.03	53.37	8.43	42.66	33.59	65.32	42.51	20.76	11.91	21.89	33.49	13.75	6.93	25.79	11.18	19.72	12.96
T-402		6717.2	1119.5	1.96	ND	ND	7.67	1.92	ND	ND	7.46	3.17	ND	ND	ND	7.35	ND	ND	ND	3.62	ND	2.27	4.24	ND	1.3
T-403		98.6	16.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND
T-404		77.45	12.91	ND	ND	ND	ND	ND	1.23	ND	ND	ND	ND	1.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.69
T-405		87.79	14.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.63	ND	ND	ND	ND	ND	ND
T-406		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-407		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-408		84.89	14.15	ND	1.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-409		82.68	13.78	ND	12.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-410		67413	11236	23.78	189.4	183.13	49.16	ND	70.92	43.65	160.76	ND	16.79	17.82	ND	63.76	99.24	ND	ND	33.86	11.45	27.9	40.44	8.5	25.63
T-411		503.61	83.93	ND	ND	ND	4.17	4.46	ND	ND	0.71	3.46	ND	ND	ND	ND	ND	ND	1.53	ND	ND	ND	ND	ND	ND
T-412		358.72	59.79	ND	1.41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND
T-413		57.12	9.52	ND	ND	ND	ND	ND	ND	ND	ND	2.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-414		46.09	7.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7
T-415		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.31
T-416		82.13	13.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.24	ND	ND	ND	ND	ND
T-417		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-418		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-501		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-502		706.65	117.77	7.38	ND	5.78	ND	ND	4.23	1.39	ND	2.37	ND	0.85	ND	ND	ND	1.4	ND	ND	21.97	ND	ND	ND	ND
T-503		50.92	8.49	ND	ND	ND	ND	ND	ND	ND	ND	2.26	ND	ND	ND	ND	ND	ND	ND	ND	1.97	ND	ND	ND	1.13
T-504		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.53	ND	ND	ND	ND
T-505		65.56	10.93	ND	ND	ND	ND	ND	ND	ND	ND	3.28	ND	ND	ND	ND	ND	ND	1.35	ND	ND	ND	ND	ND	ND
T-506		274.68	45.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-507		57.44	9.57	ND	ND	ND	ND	ND	ND	ND	ND	3.87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-508		58.34	9.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	1.2
T-509		66.44	11.07	0.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.07	ND	ND	ND	ND
T-510		84.59	14.1	ND	ND	3.04	ND	ND	0.52	1.13	ND	ND	ND	ND	ND	ND	ND	0.78	ND	ND	ND	ND	ND	ND	ND
T-511		129.64	21.61	ND	ND	ND	1.43	ND	0.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.94	ND	ND	ND	ND
T-512		569.87	94.98	1.3	ND	2.35	ND	ND	0.94	1.07	0.77	ND	ND	0.6	ND	ND	ND	0.58	ND	ND	ND	ND	ND	ND	1.09
T-513		359.16	59.86	1	ND	1.42	ND	ND	0.81	0.55	0.51	ND	ND	0.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-514		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-601		1716.5	286.08	1.43	12.51	ND	10.43	17.05	2.15	0.55	0.61	16.61	ND	ND	18.24	ND	ND	0.71	17.69	2.82	ND	ND	ND	ND	ND
T-602		3163.4	527.23	2.43	81.83	3.08	6.52	ND	1.03	2.88	0.88	14.01	0.81	ND	40.56	3.76	ND	0.49	ND	4.9	2.18	0.9	3.54	0.63	3.59
T-603		386.55	64.42	ND	42.06	ND	3.13	14.19	ND	ND	ND	8.66	ND	ND	11.46	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND
T-604		169.36	28.23	ND	ND	ND	0.81	ND	ND	ND	ND	8.69	ND	ND	ND	ND	ND	ND	4.3	ND	ND	ND	ND	ND	ND
T-605		58141	9690.2	479.54	379.46	311.84	118.82	135.8	115.97	111.97	30.91	63.66	132.5	90.35	42.53	39.53	14.53	84.56	ND	33.07	28.83	34.97	25.26	54.84	24.33
T-606		663.09	110.52	1.71	ND	2.51	6.49	3.76	1.21	ND	ND	3.34	ND	ND	3.72	ND	ND	0.75	15.45	ND	ND	ND	ND	ND	ND
T-607		570.07	95.01	0.67	ND	0.73	3.03	ND	ND	ND	ND	5.83	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND
T-608		178.65	29.77	ND	ND	ND	ND	ND	ND	ND	ND	2.05	ND	ND	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	ND
T-609		109.83	18.31	ND	ND	ND	ND	ND	ND	ND	ND	2.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-610		522.67	87.11	1.42	2.45	2.17	1.47	3.52	0.89	ND	ND	ND	ND	ND	ND	ND	ND	0.87	5.46	0.92	0.8	ND	ND	ND	ND
T-611		154.15	25.69	ND	ND	0.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-612		65.67	10.95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-613		93.05	15.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND
T-614		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)																									
T-401		56.25	9.375	0.7143	1.6667	0.625	1	1.25	0.625	0.625	0.5556	2.5	1	0.7143	2.5	0.7143	0.625	0.5556	1.6667	1	0.8333	0.7143	0.8333	0.7143	1
T-402		56.25	9.375	0.7143	1.6667	0.625	1	1.25	0.625	0.625	0.5556	2.5	1	0.7143	2.5	0.7143	0.625	0.5556	1.6667	1	0.8333	0.7143	0.8333	0.7143	1
T-403		57.15	9.525	0.7257	1.6933	0.635	1.016	1.27	0.635	0.635	0.5644	2.54	1.016	0.7257	2.54	0.7257	0.635	0.5644	1.6933	1.016	0.8467	0.7257	0.8467	0.7257	1.016
T-404		55.8	9.3	0.7086	1.6533	0.62	0.992	1.24	0.62	0.62	0.5511	2.48	0.992	0.7086	2.48	0.7086	0.62	0.5511	1.6533	0.992	0.8267	0.7086	0.8267	0.7086	0.992
T-405		57.6	9.6	0.7314	1.7067	0.64	1.024	1.28	0.64	0.64	0.5689	2.56	1.024	0.7314	2.56	0.7314	0.64	0.5689	1.7067	1.024	0.8533	0.7314	0.8533	0.7314	1.024
T-406		56.7	9.45	0.72	1.68	0.63	1.008	1.26	0.63	0.63	0.56	2.52	1.008	0.72	2.52	0.72	0.63	0.56	1.68	1.008	0.84	0.72	0.84	0.72	1.008
T-407		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-408		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-409		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-410		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-411		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-412		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-413		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-414		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-415		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-416		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-417		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-418		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-501		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-502		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-503		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-504		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-505		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-506		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-507		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-508		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-509		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-510		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-511		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-512		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-513		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-514		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-601		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-602		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-603		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-604		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-605		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-606		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-607		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-608		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-609		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-610		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-611		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-612		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-613		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8
T-614		45	7.5	0.5714	1.3333	0.5	0.8	1	0.5	0.5	0.4444	2	0.8	0.5714	2	0.5714	0.5	0.4444	1.3333	0.8	0.6667	0.5714	0.6667	0.5714	0.8

Table 5 TO-14

Sample ID / Compound	Total Non-Methane Hydrocarbons	Total Non-Methane Hydrocarbons	Toluene	Propene	m,p-xylene	i-Pentane	n-Butane	Ethylbenzene	o-xylene	2-Ethyltoluene	Ethane	t-2-Pentene	n-Heptane	Ethene	Methylcyclohexane	2,2,4-Trimethylpentane	n-Nonane	Propane	n-Pentane	Benzene	3-Methylhexane	Cyclohexane	2,3-Dimethylpentane	1-Pentene
CAS	TNMHC - C1	TNMHC - C6	108-88-3	115-07-1	108-38-3	78-78-4	106-97-8	100-41-4	95-47-6	611-14-3	74-84-0	646-04-8	142-82-5	74-85-1	108-87-2	540-84-1	111-84-2	74-98-6	109-66-0	71-43-2	589-34-4	110-82-7	565-59-3	109-67-1
MW	**16**	**80**	**92.1**	**42.1**	**106.2**	**72.2**	**58.1**	**106.2**	**106.2**	**120.2**	**30.1**	**70.1**	**100.2**	**28.1**	**98.2**	**114.2**	**128.3**	**44.1**	**72.1**	**78.1**	**100.2**	**84.2**	**100.2**	**70.1**
Data Used (ug/l)																								
T-401	18132	15110	1268.3	135.48	586.75	195.89	222.36	284.74	241.1	43.104	54.622	100.16	278.42	50.814	86.721	57.858	119.47	62.826	42.172	23.023	109.93	40.044	84.054	38.646
T-402	4563	3802.5	7.664	1.4895	1.409	23.511	4.7361	1.409	1.409	38.07	4.051	1.4881	1.5193	1.4913	30.644	1.5152	1.5131	1.5603	11.081	1.3816	9.6568	15.157	1.5193	3.869
T-403	67.502	56.24	1.4299	1.5251	1.4427	1.5693	1.5786	1.4427	1.4427	1.4515	1.6356	1.5237	1.5557	1.527	1.5246	1.5514	1.5493	7.359	1.5672	1.4147	1.5557	1.5251	1.5557	1.5237
T-404	53.23	44.364	1.4016	1.495	1.4142	1.5383	1.5473	5.6111	1.4142	1.4227	1.6033	1.4935	8.2208	1.4967	1.4944	1.5207	1.5186	1.566	1.5361	1.3866	1.5249	1.495	1.5249	11.111
T-405	58.282	48.563	1.3976	1.4906	1.4101	1.5338	1.5429	1.4101	1.4101	1.4186	1.5986	1.4892	1.5205	1.4924	1.4901	1.5163	1.5142	23.111	1.5317	1.3826	1.5205	1.4906	1.5205	1.4892
T-406	19.184	15.987	1.4023	1.4956	1.4148	1.539	1.548	1.4148	1.4148	1.4234	1.604	1.4942	1.5256	1.4974	1.4951	1.5214	1.5193	1.5667	1.5368	1.3873	1.5256	1.4956	1.5256	1.4942
T-407	14.579	12.149	1.0656	1.1366	1.0752	1.1695	1.1764	1.0752	1.0752	1.0817	1.219	1.1355	1.1594	1.138	1.1362	1.1562	1.1546	1.1906	1.1679	1.0543	1.1594	1.1366	1.1594	1.1355
T-408	55.311	46.098	1.0716	2.503	1.0812	1.1761	1.183	1.0812	1.0812	1.0877	1.2257	1.1419	1.1658	1.1443	1.1426	1.1626	1.161	1.1972	1.1744	1.0601	1.1658	1.1429	1.1658	1.1419
T-409	53.082	44.235	1.0559	21.387	1.0654	1.1588	1.1657	1.0654	1.0654	1.0718	1.2078	1.1251	1.1488	1.1276	1.1258	1.1456	1.144	1.1797	1.1572	1.0446	1.1488	1.1262	1.1488	1.1251
T-410	42889	35740	87.086	317.06	773.32	141.13	1.1551	299.48	184.33	768.35	1.1969	46.8	70.999	1.1173	248.96	450.64	1.1337	1.169	97.073	35.558	111.16	135.39	33.866	71.44
T-411	324.52	270.41	1.0598	1.1303	1.0693	12.125	10.436	1.0693	1.0693	3.437	4.1943	1.1293	1.153	1.1317	1.13	1.1498	1.1482	2.7174	1.1615	1.0485	1.153	1.1303	1.153	1.1293
T-412	235.47	196.24	1.0796	2.4354	1.0893	1.1849	1.1918	1.0893	1.0893	1.0959	1.2349	1.1504	1.1745	1.1529	1.1511	4.6853	1.1697	1.2062	1.1832	1.0681	1.1745	1.1515	1.1745	1.1504
T-413	36.539	30.449	1.052	1.1221	1.0615	1.1546	1.1614	1.0615	1.0615	1.0679	3.3455	1.121	1.1446	1.1234	1.1217	1.1414	1.1399	1.1754	1.153	1.0408	1.1446	1.1221	1.1446	1.121
T-414	29.754	24.79	1.0617	1.1324	1.0712	1.1652	1.1721	1.0712	1.0712	1.0777	1.2145	1.1314	1.1551	1.1338	1.132	1.1519	1.1504	1.1862	1.1636	1.0504	1.1551	1.1324	1.1551	4.8082
T-415	14.77	12.308	1.0796	1.1515	1.0893	1.1849	1.1918	1.0893	1.0893	1.0959	1.2349	1.1504	1.1745	1.1529	1.1511	1.1713	1.1697	1.2062	1.1832	1.0681	1.1745	1.1515	1.1745	3.7675
T-416	53.216	44.352	1.0656	1.1366	1.0752	1.1695	1.1764	1.0752	1.0752	1.0817	1.219	1.1355	1.1594	1.138	1.1362	1.1562	1.1546	3.2146	3.6206	1.0543	1.1594	1.1366	1.1594	1.1355
T-417	14.579	12.149	1.0656	1.1366	1.0752	1.1695	1.1764	1.0752	1.0752	1.0817	1.219	1.1355	1.1594	1.138	1.1362	1.1562	1.1546	1.1906	1.1679	1.0543	1.1594	1.1366	1.1594	1.1355
T-418	14.77	12.308	1.0796	1.1515	1.0893	1.1849	1.1918	1.0893	1.0893	1.0959	1.2349	1.1504	1.1745	1.1529	1.1511	1.1713	1.1697	1.2062	1.1832	1.0681	1.1745	1.1515	1.1745	1.1504
T-501	15.555	12.963	1.137	1.2127	1.1472	1.2479	1.2552	1.1472	1.1472	1.1542	1.3006	1.2116	1.237	1.2142	1.2123	1.2336	1.2319	1.2703	1.2461	1.1249	1.237	1.2127	1.237	1.2116
T-502	483.77	403.13	29.083	1.2009	26.265	1.2357	1.243	19.221	6.3162	1.1429	3.0523	1.1998	3.6442	1.2023	1.2005	1.2216	7.6855	1.258	1.234	73.417	1.2249	1.2009	1.2249	1.1998
T-503	34.996	29.175	1.1303	1.2056	1.1405	1.2405	1.2478	1.1405	1.1405	1.1474	2.9221	1.2045	1.2297	1.207	1.2052	1.2264	1.2247	1.2629	1.2388	6.6089	1.2297	1.2056	1.2297	3.4026
T-504	15.434	12.861	1.1281	1.2032	1.1382	1.2381	1.2454	1.1382	1.1382	1.1451	1.2904	1.2021	1.2273	1.2047	1.2028	1.224	1.2223	1.2604	1.2364	5.1228	1.2273	1.2032	1.2273	1.2021
T-505	44.108	36.768	1.1065	1.1802	1.1164	1.2144	1.2215	1.1164	1.1164	1.1232	4.1514	1.1791	1.2038	1.1816	1.1798	1.2005	1.1989	2.5034	1.2127	1.0947	1.2038	1.1802	1.2038	1.1791
T-506	181.33	151.1	1.0857	1.158	1.0954	1.1915	1.1986	1.0954	1.0954	1.1021	1.2419	1.1569	1.1812	1.1594	1.1576	1.1779	1.1763	1.213	1.1899	1.0741	1.1812	1.158	1.1812	1.1569
T-507	37.218	31.004	1.0656	1.1366	1.0752	1.1695	1.1764	1.0752	1.0752	1.0817	4.7173	1.1355	1.1594	1.138	1.1362	1.1562	1.1546	1.1906	1.1679	1.0543	1.1594	1.1366	1.1594	1.1355
T-508	38.225	31.843	1.0776	1.1493	1.0872	1.1826	1.1896	1.0872	1.0872	1.0938	1.2326	3.3299	1.1723	1.1507	1.1489	1.1691	1.1675	1.2039	1.181	8.3154	1.1723	1.1493	1.1723	3.4447
T-509	43.777	36.47	2.3894	1.1558	1.0934	1.1893	1.1963	1.0934	1.0934	1.1	1.2395	1.1547	1.179	1.1572	1.1554	1.1757	1.1741	1.2107	1.1877	19.523	1.179	1.1558	1.179	1.1547
T-510	53.816	44.852	1.0463	1.116	12.837	1.1483	1.1551	2.1959	4.7718	1.0621	1.1969	1.1149	1.1383	1.1173	1.1156	1.1352	3.9792	1.169	1.1468	1.0352	1.1383	1.116	1.1383	1.1149
T-511	83.845	69.882	1.0637	1.1345	1.0732	4.1734	1.1743	3.1767	1.0732	1.0797	1.2167	1.1334	1.1572	1.1359	1.1341	1.1541	1.1525	1.1884	1.1658	21.909	1.1572	1.1345	1.1572	1.1334
T-512	361.9	301.59	4.7522	1.114	9.9056	1.1463	1.153	3.9622	4.5102	3.6735	1.1947	1.1129	2.3862	1.1153	1.1136	1.1332	2.9535	1.1669	1.1447	1.0333	1.1363	1.114	1.1363	3.0327
T-513	228.09	190.07	3.6555	1.114	5.9855	1.1463	1.153	3.4143	2.3183	2.4331	1.1947	1.1129	2.3067	1.1153	1.1136	1.1332	1.1316	1.1669	1.1447	1.0333	1.1363	1.114	1.1363	1.1129
T-514	14.77	12.308	1.0796	1.1515	1.0893	1.1849	1.1918	1.0893	1.0893	1.0959	1.2349	1.1504	1.1745	1.1529	1.1511	1.1713	1.1697	1.2062	1.1832	1.0681	1.1745	1.1515	1.1745	1.1504
T-601	1177.4	981.17	5.6463	22.579	1.1382	32.284	42.468	9.7888	2.5041	3.1434	21.434	1.2021	1.2273	21.973	1.2028	1.224	3.9053	33.445	8.7166	1.1161	1.2273	1.2032	1.2273	1.2021
T-602	2174.1	1811.8	9.6135	147.98	14.05	20.221	1.2478	4.6987	13.138	4.5436	18.114	2.439	1.2297	48.957	15.86	1.2264	2.7005	1.2629	15.176	7.3134	3.8737	12.804	2.7116	10.81
T-603	267.77	223.12	1.1393	76.662	1.1495	9.7839	35.693	1.1495	1.1495	1.1564	11.285	1.214	1.2395	13.942	1.2147	1.236	1.2344	1.2728	3.621	1.1271	1.2395	1.2151	1.2395	1.214
T-604	116.63	97.2	1.1326	1.208	1.1427	2.517	1.2503	1.1427	1.1427	1.1496	11.258	1.2068	1.2322	1.2094	1.2076	1.2288	1.2271	8.1616	1.2413	1.1205	1.2322	1.208	1.2322	1.2068
T-605	38893	32411	1846.5	667.91	1384.6	358.67	329.87	514.92	497.16	155.34	80.113	388.33	378.5	49.966	162.3	69.375	453.59	1.2292	99.687	94.138	146.5	88.923	229.74	71.306
T-606	444.42	370.36	6.5971	1.1757	11.166	19.628	9.1508	5.3828	1.1121	1.1189	4.2112	1.1746	1.1992	4.3787	1.1753	1.1959	4.0307	28.541	1.2081	1.0905	1.1992	1.1757	1.1992	1.1746
T-607	384.27	320.22	2.5997	1.1825	3.2662	9.2166	1.2239	1.1186	1.1186	1.1253	7.3931	1.1813	1.2061	1.1839	1.182	1.2028	1.2012	3.7159	1.215	1.0968	1.2061	1.1825	1.2061	1.1813
T-608	118.6	98.819	1.0918	1.1646	1.1016	1.1983	1.2054	1.1016	1.1016	1.1083	2.5603	1.1635	1.1879	1.1659	1.1642	1.1846	1.183	3.5499	1.1966	1.0802	1.1879	1.1646	1.1879	1.1635
T-609	70.772	58.993	1.0598	1.1303	1.0693	1.1631	1.17	1.0693	1.0693	1.0758	2.4608	1.1293	1.153	1.1317	1.13	1.1498	1.1482	1.184	1.1615	1.0485	1.153	1.1303	1.153	1.1293
T-610	348.31	290.25	5.4471	4.296	9.5984	4.4205	8.518	3.9367	1.1058	1.1125	1.2537	1.1679	1.1924	1.1704	1.1686	1.1891	4.649	10.029	2.7627	2.6023	1.1924	1.169	1.1924	1.1679
T-611	100.62	83.848	1.0736	1.1451	2.643	1.1782	1.1852	1.0832	1.0832	1.0898	1.228	1.144	1.168	1.1464	1.1447	1.1648	1.1632	1.1995	1.1766	1.0621	1.168	1.1451	1.168	1.144
T-612	42.708	35.607	1.0696	1.1408	1.0792	1.1739	1.1808	1.0792	1.0792	1.0857	1.2235	1.1397	1.1637	1.1422	1.1404	1.1605	1.1589	1.195	1.1723	1.0582	1.1637	1.1408	1.1637	1.1397
T-613	60.515	50.435	1.0696	1.1408	1.0792	1.1739	1.1808	1.0792	1.0792	1.0857	1.2235	1.1397	1.1637	1.1422	1.1404	1.1605	1.1589	1.195	1.1723	2.2222	1.1637	1.1408	1.1637	1.1397
T-614	14.77	12.308	1.0796	1.1515	1.0893	1.1849	1.1918	1.0893	1.0893	1.0959	1.2349	1.1504	1.1745	1.1529	1.1511	1.1713	1.1697	1.2062	1.1832	1.0681	1.1745	1.1515	1.1745	1.1504
	0.13																							
Flux (mg/m2-min)																								
T-401	2.7533	2.2944	0.19258	0.02057	0.08909	0.02974	0.03376	0.04324	0.03661	0.00654	0.00829	0.01521	0.04228	0.00772	0.01317	0.00879	0.01814	0.00954	0.00640	0.00350	0.01669	0.00608	0.01276	0.00587
T-402	1.076	0.8967	0.00181	0.00035	0.00033	0.00554	0.00112	0.00033	0.00033	0.00898	0.00096	0.00035	0.00036	0.00035	0.00723	0.00036	0.00036	0.00037	0.00261	0.00033	0.00228	0.00357	0.00036	0.00091
T-403	0.0187	0.0156	0.00040	0.00042	0.00040	0.00043	0.00044	0.00040	0.00040	0.00040	0.00045	0.00042	0.00043	0.00042	0.00042	0.00043	0.00043	0.00204	0.00043	0.00039	0.00043	0.00042	0.00043	0.00042
T-404	0.0057	0.0047	0.00015	0.00016	0.00015	0.00016	0.00017	0.00060	0.00015	0.00015	0.00017	0.00016	0.00088	0.00016	0.00016	0.00016	0.00016	0.00017	0.00016	0.00015	0.00016	0.00016	0.00016	0.00119
T-405	0.0235	0.0196	0.00056	0.00060	0.00057	0.00062	0.00062	0.00057	0.00057	0.00057	0.00064	0.00060	0.00061	0.00060	0.00060	0.00061	0.00061	0.00931	0.00062	0.00056	0.00061	0.00060	0.00061	0.00060
T-406	0.016	0.0133	0.00117	0.00125	0.00118	0.00128	0.00129	0.00118	0.00118	0.00118	0.00134	0.00124	0.00127	0.00125	0.00124	0.00127	0.00126	0.00130	0.00128	0.00115	0.00127	0.00125	0.00127	0.00124
T-407	0.0048	0.004	0.00035	0.00037	0.00035	0.00038	0.00039	0.00035	0.00035	0.00035	0.00040	0.00037	0.00038	0.00037	0.00037	0.00038	0.00038	0.00039	0.00038	0.00035	0.00038	0.00037	0.00038	0.00037
T-408	0.0157	0.0131	0.00030	0.00071	0.00031	0.00033	0.00034	0.00031	0.00031	0.00031	0.00035	0.00032	0.00033	0.00033	0.00032	0.00033	0.00033	0.00034	0.00033	0.00030	0.00033	0.00032	0.00033	0.00032
T-409	0.0318	0.0265	0.00063	0.01281	0.00064	0.00069	0.00070	0.00064	0.00064	0.00064	0.00072	0.00067	0.00069	0.00068	0.00067	0.00069	0.00069	0.00071	0.00069	0.00063	0.00069	0.00067	0.00069	0.00067
T-410	8.4204	7.017	0.01710	0.06225	0.15183	0.02771	0.00023	0.05880	0.03619	0.15085	0.00023	0.00919	0.01394	0.00022	0.04888	0.08848	0.00022	0.00023	0.01906	0.00698	0.02182	0.02658	0.00665	0.01403
T-411	0.0905	0.0754	0.00030	0.00032	0.00030	0.00338	0.00291	0.00030	0.00030	0.00096	0.00117	0.00031	0.00032	0.00032	0.00032	0.00032	0.00032	0.00076	0.00032	0.00029	0.00032	0.00032	0.00032	0.00031
T-412	0.0837	0.0698	0.00038	0.00087	0.00039	0.00042	0.00042	0.00039	0.00039	0.00039	0.00044	0.00041	0.00042	0.00041	0.00041	0.00167	0.00042	0.00043	0.00042	0.00038	0.00042	0.00041	0.00042	0.00041
T-413	0.0054	0.0045	0.00015	0.00016	0.00016	0.00017	0.00017	0.00016	0.00016	0.00016	0.00049	0.00016	0.00017	0.00016	0.00016	0.00017	0.00017	0.00017	0.00017	0.00015	0.00017	0.00016	0.00017	0.00016
T-414	0.0016	0.0013	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00005	0.00006	0.00006	0.00006	0.00025
T-415	0.0012	0.001	0.00008	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00010	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00009	0.00030
T-416	0.0087	0.0073	0.00017	0.00019	0.00018	0.00019	0.00019	0.00018	0.00018	0.00018	0.00020	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00053	0.00059	0.00017	0.00019	0.00019	0.00019	0.00019
T-417	0.0045	0.0037	0.00033	0.00035	0.00033	0.00036	0.00036	0.00033	0.00033	0.00033	0.00038	0.00035	0.00036	0.00035	0.00035	0.00036	0.00036	0.00037	0.00036	0.00032	0.00036	0.00035	0.00036	0.00035
T-418	0.0006	0.0005	0.00004	0.00005	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005
T-501	0.0017	0.0014	0.00012	0.00013	0.00012	0.00013	0.00014	0.00012	0.00012	0.00012	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00014	0.00013	0.00012	0.00013	0.00013	0.00013	0.00013
T-502	0.041	0.0342	0.00246	0.00010	0.00223	0.00010	0.00011	0.00163	0.00054	0.00010	0.00026	0.00010	0.00031	0.00010	0.00010	0.00010	0.00065	0.00011	0.00010	0.00622	0.00010	0.00010	0.00010	0.00010
T-503	0.0037	0.0031	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00012	0.00031	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00070	0.00013	0.00013	0.00013	0.00036
T-504	0.0011	0.0009	0.00008	0.00009	0.00008	0.00009	0.00009	0.00008	0.00008	0.00008	0.00010	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00038	0.00009	0.00009	0.00009	0.00009
T-505	0.0047	0.0039	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00012	0.00044	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00027	0.00013	0.00012	0.00013	0.00013	0.00013	0.00013
T-506	0.0076	0.0063	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005
T-507	0.0017	0.0014	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00021	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-508	0.0018	0.0015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00006	0.00015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00006	0.00005	0.00038	0.00005	0.00005	0.00005	0.00016
T-509	0.0025	0.0021	0.00013	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00110	0.00007	0.00007	0.00007	0.00007
T-510	0.0038	0.0032	0.00007	0.00008	0.00090	0.00008	0.00008	0.00015	0.00034	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00028	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00008
T-511	0.0049	0.0041	0.00006	0.00007	0.00006	0.00024	0.00007	0.00019	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00128	0.00007	0.00007	0.00007	0.00007
T-512	0.0261	0.0218	0.00034	0.00008	0.00071	0.00008	0.00008	0.00029	0.00033	0.00026	0.00009	0.00008	0.00017	0.00008	0.00008	0.00008	0.00021	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00022
T-513	0.011	0.0092	0.00018	0.00005	0.00029	0.00006	0.00006	0.00016	0.00011	0.00012	0.00006	0.00005	0.00011	0.00005	0.00005	0.00005	0.00005	0.00006	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005
T-514	0.0006	0.0005	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00004	0.00005	0.00004	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00005	0.00004	0.00005	0.00004
T-601	0.1948	0.1623	0.00093	0.00374	0.00019	0.00534	0.00703	0.00162	0.00041	0.00052	0.00355	0.00020	0.00020	0.00363	0.00020	0.00020	0.00065	0.00553	0.00144	0.00018	0.00020	0.00020	0.00020	0.00020
T-602	0.204	0.17	0.00090	0.01389	0.00132	0.00190	0.00012	0.00044	0.00123	0.00043	0.00170	0.00023	0.00012	0.00459	0.00149	0.00012	0.00025	0.00012	0.00142	0.00069	0.00036	0.00120	0.00025	0.00101
T-603	0.0274	0.0229	0.00012	0.00785	0.00012	0.00100	0.00366	0.00012	0.00012	0.00012	0.00116	0.00012	0.00013	0.00143	0.00012	0.00013	0.00013	0.00013	0.00037	0.00012	0.00013	0.00012	0.00013	0.00012
T-604	0.0157	0.0131	0.00015	0.00016	0.00015	0.00034	0.00017	0.00015	0.00015	0.00015	0.00151	0.00016	0.00017	0.00016	0.00016	0.00017	0.00016	0.00110	0.00017	0.00015	0.00017	0.00016	0.00017	0.00016
T-605	4.8192	4.016	0.22880	0.08276	0.17157	0.04444	0.04087	0.06380	0.06160	0.01925	0.00993	0.04812	0.04690	0.00619	0.02011	0.00860	0.05620	0.00015	0.01235	0.01166	0.01815	0.01102	0.02847	0.00884
T-606	0.0824	0.0686	0.00122	0.00022	0.00207	0.00364	0.00170	0.00100	0.00021	0.00021	0.00078	0.00022	0.00022	0.00081	0.00022	0.00022	0.00075	0.00529	0.00022	0.00020	0.00022	0.00022	0.00022	0.00022
T-607	0.0787	0.0655	0.00053	0.00024	0.00067	0.00189	0.00025	0.00023	0.00023	0.00023	0.00151	0.00024	0.00025	0.00024	0.00024	0.00025	0.00025	0.00076	0.00025	0.00022	0.00025	0.00024	0.00025	0.00024
T-608	0.0137	0.0114	0.00013	0.00013	0.00013	0.00014	0.00014	0.00013	0.00013	0.00013	0.00029	0.00013	0.00014	0.00013	0.00013	0.00014	0.00014	0.00041	0.00014	0.00012	0.00014	0.00013	0.00014	0.00013
T-609	0.0041	0.0034	0.00006	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00006	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00007
T-610	0.0588	0.049	0.00092	0.00073	0.00162	0.00075	0.00144	0.00066	0.00019	0.00019	0.00021	0.00020	0.00020	0.00020	0.00020	0.00020	0.00079	0.00169	0.00047	0.00044	0.00020	0.00020	0.00020	0.00020
T-611	0.0104	0.0087	0.00011	0.00012	0.00027	0.00012	0.00012	0.00011	0.00011	0.00011	0.00013	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00011	0.00012	0.00012	0.00012	0.00012
T-612	0.0039	0.0033	0.00010	0.00010	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00011	0.00010	0.00011	0.00010	0.00010	0.00011	0.00011	0.00011	0.00011	0.00010	0.00011	0.00010	0.00011	0.00010
T-613	0.0038	0.0032	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00008	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00008	0.00007	0.00014	0.00007	0.00007	0.00007	0.00007
T-614	0.0005	0.0004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004

Table 5 TO-14

Sample ID	Compound	n-Octane	2-Methylpentane	2-Methylhexane	2,3,4-Trimethylpentane	1,3,5-Trimethylbenzene	Styrene	3-Ethyltoluene	n-Decane	2,4-Dimethylpentane	n-Hexane	3-Methylheptane	4-Ethyltoluene	Cyclopentane	3-Methylpentane	2,2-Dimethylbutane	1,4-Diethylbenzene	2,3-Dimethylbutane	2-Methylheptane	1,2,4-Trimethylbenzene	1,3-Diethylbenzene	c-2-Pentene	Methylcyclopentane	t-2-Butene	1-Butene
	CAS	111-65-9	107-83-5	591-76-4	565-75-3	108-67-8	100-42-5	620-14-4	124-18-5	108-08-7	110-54-3	589-81-1	622-96-8	287-92-3	96-14-0	75-83-2	105-05-5	79-29-8	592-27-8	95-63-6	141-93-5	627-20-3	96-37-7	624-64-6	106-98-9
	MW	114.2	86.2	100.2	114.2	120.2	104.2	120.2	142.3	100.2	86.2	114.2	120.2	70.1	86.2	86.2	134.2	86.2	114.2	120.2	134.2	70.1	84.2	56.1	56.1
Lab Data (ppbv)																									
T-401		19.95	2.03	14.03	14.98	6.77	1.5	4.73	4.38	11.49	13.35	10.07	5.6	ND	ND	0.92	1.61	ND	14.54	3.65	ND	3.65	ND	ND	ND
T-402		ND	4.18	19.37	0.89	ND	1.23	ND	ND	2.1	ND	ND	4.56	1.23	11.51	1.13	2.62	ND	ND	ND	ND	ND	ND	ND	ND
T-403		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	ND	ND	ND	ND	ND	1.35	ND	ND	ND	ND
T-404		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-405		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-406		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-407		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-408		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-409		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-410		ND	35.32	12.13	17.8	41.58	ND	48.29	2.59	7.05	20.4	11.08	11.23	24.8	13.54	9.42	14.82	28.85	1.98	10.3	14.75	5.15	5.64	ND	ND
T-411		ND	ND	ND	ND	0.77	ND	ND	ND	ND	ND	ND	0.63	1.16	ND	ND	1.05	ND	ND	ND	ND	ND	5.33	ND	ND
T-412		ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND	ND	1.42	ND	ND	0.66	ND	ND	ND	ND	ND	2.54	1.61	ND
T-413		ND	ND	ND	ND	ND	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-414		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.59	2.44
T-415		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44	ND	ND	1.74	1.41
T-416		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.81	ND	ND	1.23	1.42
T-417		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-418		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-501		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-502		1.84	ND	ND	0.68	1.22	ND	ND	2.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.45	2.65	ND	ND	ND	ND
T-503		0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-504		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-505		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.48	ND
T-506		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-507		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-508		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-509		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-510		0.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.37	ND
T-511		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-512		0.83	ND	ND	ND	ND	ND	ND	0.8	ND	ND	ND	ND	0.94	ND	ND	ND	ND	ND	ND	ND	ND	0.85	ND	ND
T-513		0.69	ND	ND	ND	ND	ND	ND	0.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	ND	ND	ND	ND
T-514		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-601		ND	1.35	ND	ND	ND	1.07	0.54	ND	1.14	1.27	ND	ND	0.9	1.51	0.83	ND	ND	1.6	ND	0.59	ND	ND	1.48	ND
T-602		ND	2.2	0.26	0.6	0.29	0.57	ND	0.47	2.26	1.02	ND	1.08	0.73	1.91	1.46	ND	ND	ND	ND	ND	ND	ND	1.51	1.06
T-603		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.36
T-604		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.59	ND	ND	ND	ND	ND
T-605		45.47	9.69	14.64	20.32	4.14	50.24	ND	34.97	22.89	ND	15.07	11.4	2.91	ND	18.36	8.16	ND	10.7	8.39	ND	11.94	2.3	1.9	ND
T-606		ND	ND	ND	ND	0.5	ND	ND	0.46	ND	ND	ND	ND	0.89	ND	ND	ND	ND	ND	ND	ND	ND	2.2	2.23	ND
T-607		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.72	ND	ND	ND	ND	ND	ND	ND	1.84	1.87	1.58
T-608		ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2
T-609		ND	7.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4	ND	ND	ND	ND	
T-610		ND	ND	0.92	ND	ND	ND	ND	ND	ND	ND	ND	1.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
T-611		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.82	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND
T-612		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-613		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-614		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)																									
T-401		0.625	0.8333	0.7143	0.625	0.5556	0.625	0.5556	0.5	0.7143	0.8333	0.625	0.5556	1	0.8333	0.8333	0.5	0.8333	0.625	0.5556	0.5	1	0.8333	1.25	1.25
T-402		0.625	0.8333	0.7143	0.625	0.5556	0.625	0.5556	0.5	0.7143	0.8333	0.625	0.5556	1	0.8333	0.8333	0.5	0.8333	0.625	0.5556	0.5	1	0.8333	1.25	1.25
T-403		0.635	0.8467	0.7257	0.635	0.5644	0.635	0.5644	0.508	0.7257	0.8467	0.635	0.5644	1.016	0.8467	0.8467	0.508	0.8467	0.635	0.5644	0.508	1.016	0.8467	1.27	1.27
T-404		0.62	0.8267	0.7086	0.62	0.5511	0.62	0.5511	0.496	0.7086	0.8267	0.62	0.5511	0.992	0.8267	0.8267	0.496	0.8267	0.62	0.5511	0.496	0.992	0.8267	1.24	1.24
T-405		0.64	0.8533	0.7314	0.64	0.5689	0.64	0.5689	0.512	0.7314	0.8533	0.64	0.5689	1.024	0.8533	0.8533	0.512	0.8533	0.64	0.5689	0.512	1.024	0.8533	1.28	1.28
T-406		0.63	0.84	0.72	0.63	0.56	0.63	0.56	0.504	0.72	0.84	0.63	0.56	1.008	0.84	0.84	0.504	0.84	0.63	0.56	0.504	1.008	0.84	1.26	1.26
T-407		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-408		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-409		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-410		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-411		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-412		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-413		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-414		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-415		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-416		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-417		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-418		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-501		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-502		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-503		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-504		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-505		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-506		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-507		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-508		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-509		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-510		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-511		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-512		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-513		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-514		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-601		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-602		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-603		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-604		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-605		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-606		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-607		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-608		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-609		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-610		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-611		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-612		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-613		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1
T-614		0.5	0.6667	0.5714	0.5	0.4444	0.5	0.4444	0.4	0.5714	0.6667	0.5	0.4444	0.8	0.6667	0.6667	0.4	0.6667	0.5	0.4444	0.4	0.8	0.6667	1	1

Table 5 TO-14

Sample ID / Compound	n-Octane	2-Methylpentane	2-Methylhexane	2,3,4-Trimethylpentane	1,3,5-Trimethylbenzene	Styrene	3-Ethyltoluene	n-Decane	2,4-Dimethylpentane	n-Hexane	3-Methylheptane	4-Ethyltoluene	Cyclopentane	3-Methylpentane	2,2-Dimethylbutane	1,4-Diethylbenzene	2,3-Dimethylbutane	2-Methylheptane	1,2,4-Trimethylbenzene	1,3-Diethylbenzene	c-2-Pentene	Methylcyclopentane	t-2-Butene	1-Butene
CAS	111-65-9	107-83-5	591-76-4	565-75-3	108-67-8	100-42-5	620-14-4	124-18-5	108-08-7	110-54-3	589-81-1	622-96-8	287-92-3	96-14-0	75-83-2	105-05-5	79-29-8	592-27-8	95-63-6	141-93-5	627-20-3	96-37-7	624-64-6	106-98-9
MW	114.2	86.2	100.2	114.2	120.2	104.2	120.2	142.3	100.2	86.2	114.2	120.2	70.1	86.2	86.2	134.2	86.2	114.2	120.2	134.2	70.1	84.2	56.1	56.1
Data Used (ug/l)																								
T-401	96.915	7.4437	59.801	72.771	34.616	6.6488	24.185	26.513	48.975	48.952	48.919	28.634	1.491	1.5278	3.3735	9.191	1.5278	70.634	18.663	1.4272	10.884	1.4924	1.4915	1.4915
T-402	1.5152	15.298	82.402	4.3152	1.4176	5.4414	1.4176	1.5104	8.9336	1.5249	1.5152	23.271	3.6607	42.123	4.1355	14.928	1.5249	1.5152	1.4176	1.4244	1.4881	1.4895	1.4886	1.4886
T-403	1.5514	1.5614	1.5557	1.5514	1.4515	1.4156	1.4515	1.5465	1.5557	1.5614	1.5514	1.4515	1.5237	3.8727	1.5614	1.4585	1.5614	1.5514	1.4515	7.7518	1.5237	1.5251	1.5242	1.5242
T-404	1.5207	1.5305	1.5249	1.5207	1.4227	1.3875	1.4227	1.5159	1.5249	1.5305	1.5207	1.4227	1.4935	1.5305	1.5305	1.4296	1.5305	1.5207	1.4227	1.4296	1.4935	1.495	1.4941	1.4941
T-405	1.5163	1.526	1.5205	1.5163	1.4186	1.3835	1.4186	1.5115	1.5205	1.526	1.5163	1.4186	1.4892	1.526	1.526	1.4255	1.526	1.5163	1.4186	1.4255	1.4892	1.4906	1.4897	1.4897
T-406	1.5214	1.5312	1.5256	1.5214	1.4234	1.3882	1.4234	1.5166	1.5256	1.5312	1.5214	1.4234	1.4942	1.5312	1.5312	1.4303	1.5312	1.5214	1.4234	1.4303	1.4942	1.4956	1.4947	1.4947
T-407	1.1562	1.1636	1.1594	1.1562	1.0817	1.0549	1.0817	1.1525	1.1594	1.1636	1.1562	1.0817	1.1355	1.1636	1.1636	1.0869	1.1636	1.1562	1.0817	1.0869	1.1355	1.1366	1.1359	1.1359
T-408	1.1626	1.1701	1.1658	1.1626	1.0877	1.0608	1.0877	1.159	1.1658	1.1701	1.1626	1.0877	1.1419	1.1701	1.1701	1.093	1.1701	1.1626	1.0877	1.093	1.1419	1.1429	1.1423	1.1423
T-409	1.1456	1.153	1.1488	1.1456	1.0718	1.0453	1.0718	1.142	1.1488	1.153	1.1456	1.0718	1.1251	1.153	1.153	1.077	1.153	1.1456	1.0718	1.077	1.1251	1.1262	1.1255	1.1255
T-410	1.1352	121.06	48.329	80.828	198.73	1.0358	230.8	14.655	28.089	69.922	50.313	53.673	69.127	46.409	32.287	79.082	98.885	8.991	49.229	78.708	14.355	18.883	1.1153	1.1153
T-411	1.1498	1.1572	1.153	1.1498	3.7275	1.0491	1.0758	1.1462	1.153	1.1572	1.1498	3.0498	3.2749	1.1572	1.1572	5.675	1.1572	1.1498	1.0758	1.0809	1.1293	18.074	1.1297	1.1297
T-412	1.1713	1.1788	1.1745	1.1713	1.0959	1.0688	1.0959	6.2468	1.1745	1.1788	1.1713	1.0959	4.0839	1.1788	1.1788	3.6338	1.1788	1.1713	1.0959	1.1012	1.1504	8.7743	3.7056	1.1508
T-413	1.1414	1.1488	1.1446	1.1414	1.0679	1.0415	1.0679	1.1378	1.1446	3.9632	1.1414	1.0679	1.121	1.1488	1.1488	1.0731	1.1488	1.1414	1.0679	1.0731	1.121	1.1221	1.1214	1.1214
T-414	1.1519	1.1593	1.1551	1.1519	1.0777	1.0511	1.0777	1.1483	1.1551	1.1593	1.1519	1.0777	1.1314	1.1593	1.1593	1.0829	1.1593	1.1519	1.0777	1.0829	1.1314	1.1324	3.599	5.523
T-415	1.1713	1.1788	1.1745	1.1713	1.0959	1.0688	1.0959	1.1676	1.1745	1.1788	1.1713	1.0959	1.1504	1.1788	1.1788	1.1012	1.1788	1.1713	1.0959	2.4226	1.1504	1.1515	4.0048	3.2453
T-416	1.1562	1.1636	1.1594	1.1562	1.0817	1.0549	1.0817	1.1525	1.1594	1.1636	1.1562	1.0817	1.1355	1.1636	1.1636	1.0869	1.1636	1.1562	1.0817	4.4021	1.1355	1.1366	2.7944	3.2261
T-417	1.1562	1.1636	1.1594	1.1562	1.0817	1.0549	1.0817	1.1525	1.1594	1.1636	1.1562	1.0817	1.1355	1.1636	1.1636	1.0869	1.1636	1.1562	1.0817	1.0869	1.1355	1.1366	1.1359	1.1359
T-418	1.1713	1.1788	1.1745	1.1713	1.0959	1.0688	1.0959	1.1676	1.1745	1.1788	1.1713	1.0959	1.1504	1.1788	1.1788	1.1012	1.1788	1.1713	1.0959	1.1012	1.1504	1.1515	1.1508	1.1508
T-501	1.2336	1.2415	1.237	1.2336	1.1542	1.1256	1.1542	1.2297	1.237	1.2415	1.2336	1.1542	1.2116	1.2415	1.2415	1.1597	1.2415	1.2336	1.1542	1.1597	1.2116	1.2127	1.212	1.212
T-502	8.9909	1.2294	1.2249	3.3227	6.2745	1.1146	1.1429	12.847	1.2249	1.2294	1.2216	1.1429	1.1998	1.2294	1.2294	1.1484	1.2294	1.2216	7.4574	15.217	1.1998	1.2009	1.2002	1.2002
T-503	2.5508	1.2342	1.2297	1.2264	1.1474	1.119	1.1474	1.2225	1.2297	1.2342	1.2264	1.1474	1.2045	1.2342	1.2342	1.1529	1.2342	1.2264	1.1474	1.1529	1.2045	1.2056	1.2049	1.2049
T-504	1.224	1.2318	1.2273	1.224	1.1451	1.1168	1.1451	1.2201	1.2273	1.2318	1.224	1.1451	1.2021	1.2318	1.2318	1.1507	1.2318	1.224	1.1451	1.1507	1.2021	1.2032	1.2025	1.2025
T-505	1.2005	1.2082	1.2038	1.2005	1.1232	1.0954	1.1232	1.1967	1.2038	1.2082	1.2005	1.1232	1.1791	1.2082	1.2082	1.1286	1.2082	1.2005	1.1232	1.1286	1.1791	1.1802	3.4913	1.1795
T-506	1.1779	1.1855	1.1812	1.1779	1.1021	1.0748	1.1021	1.1742	1.1812	1.1855	1.1779	1.1021	1.1569	1.1855	1.1855	1.1074	1.1855	1.1779	1.1021	1.1074	1.1569	1.158	1.1573	1.1573
T-507	1.1562	1.1636	1.1594	1.1562	1.0817	1.0549	1.0817	1.1525	1.1594	1.1636	1.1562	1.0817	1.1355	1.1636	1.1636	1.0869	1.1636	1.1562	1.0817	1.0869	1.1355	1.1366	1.1359	1.1359
T-508	1.1691	1.1766	1.1723	1.1691	1.0938	1.0668	1.0938	1.1654	1.1723	1.1766	1.1691	1.0938	1.1482	1.1766	1.1766	1.0991	1.1766	1.1691	1.0938	1.0991	1.1482	1.1493	1.1487	1.1487
T-509	1.1757	1.1833	1.179	1.1757	1.1	1.0728	1.1	1.172	1.179	1.1833	1.1757	1.1	1.1547	1.1833	1.1833	1.1053	1.1833	1.1757	1.1	1.1053	1.1547	1.1558	1.1551	1.1551
T-510	3.0424	1.1425	1.1383	1.1352	1.0621	1.0358	1.0621	1.1316	1.1383	1.1425	1.1352	1.0621	1.1149	1.1425	1.1425	1.0672	1.1425	1.1352	1.0621	1.0672	1.1149	1.116	3.056	1.1153
T-511	1.1541	1.1615	1.1572	1.1541	1.0797	1.053	1.0797	1.1504	1.1572	1.1615	1.1541	1.0797	1.1334	1.1615	1.1615	1.0849	1.1615	1.1541	1.0797	1.0849	1.1334	1.1345	1.1338	1.1338
T-512	3.7621	1.1404	1.1363	1.1332	1.0602	1.0339	1.0602	4.5184	1.1363	1.1404	1.1332	1.0602	2.6154	1.1404	1.1404	1.0653	1.1404	1.1332	1.0602	1.0653	1.1129	2.8407	1.1133	1.1133
T-513	3.1275	1.1404	1.1363	1.1332	1.0602	1.0339	1.0602	2.3722	1.1363	1.1404	1.1332	1.0602	1.1129	1.1404	1.1404	1.0653	1.1404	1.1332	1.0602	5.8059	1.1129	1.114	1.1133	1.1133
T-514	1.1713	1.1788	1.1745	1.1713	1.0959	1.0688	1.0959	1.1676	1.1745	1.1788	1.1713	1.0959	1.1504	1.1788	1.1788	1.1012	1.1788	1.1713	1.0959	1.1012	1.1504	1.1515	1.1508	1.1508
T-601	1.224	4.9889	1.2273	1.224	1.1451	4.7799	2.7827	1.2201	4.8971	4.6933	1.224	1.1451	2.7047	5.5802	3.0673	1.1507	1.2318	7.8334	1.1451	3.3945	1.2021	1.2032	3.5595	1.2025
T-602	1.2264	8.146	1.1191	2.9433	1.4973	2.5513	1.1474	2.8729	9.7273	3.7768	1.2264	5.5763	2.1981	7.0722	5.406	1.1529	1.2342	1.2264	1.1474	1.1529	1.2045	1.2056	3.6388	2.5544
T-603	1.236	1.244	1.2395	1.236	1.1564	1.1278	1.1564	1.2322	1.2395	1.244	1.236	1.1564	1.214	1.244	1.244	1.162	1.244	1.236	1.1564	1.162	1.214	1.2151	1.2144	3.3032
T-604	1.2288	1.2367	1.2322	1.2288	1.1496	1.1212	1.1496	1.2249	1.2322	1.2367	1.2288	1.1496	1.2068	1.2367	1.2367	1.1552	1.2367	1.2288	13.399	1.1552	1.2068	1.208	1.2073	1.2073
T-605	217.1	34.922	61.331	97.019	20.805	218.87	1.1168	208.05	95.892	1.2013	71.953	57.29	8.5286	1.2013	66.168	45.784	1.2013	51.088	42.163	1.1222	34.994	8.0967	4.4564	1.1727
T-606	1.1959	1.2036	1.1992	1.1959	2.5175	1.0912	1.1189	2.742	1.1992	1.2036	1.1959	1.1189	2.6134	1.2036	1.2036	1.1243	1.2036	1.1959	1.1189	1.1243	1.1746	7.7595	5.2404	1.175
T-607	1.2028	1.2105	1.2061	1.2028	1.1253	1.0975	1.1253	1.199	1.2061	1.2105	1.2028	1.1253	1.1813	9.878	1.2105	1.1308	1.2105	1.2028	1.1253	1.1308	1.1813	6.5271	4.4197	3.7343
T-608	1.1846	1.1922	1.1879	1.1846	1.1083	1.0809	1.1083	15.942	1.1879	1.1922	1.1846	1.1083	1.1635	1.1922	1.1922	1.1137	1.1922	1.1846	1.1083	1.1137	1.1635	1.1646	1.1639	2.7933
T-609	1.1498	26.245	1.153	1.1498	1.0758	1.0491	1.0758	1.1462	1.153	1.1572	1.1498	1.0758	1.1293	1.1572	1.1572	1.0809	1.1572	1.1498	1.0758	2.1619	1.1293	1.1303	1.1297	1.1297
T-610	1.1891	1.1967	3.8395	1.1891	1.1125	1.085	1.1125	1.1854	1.1924	1.1967	1.1891	6.7586	1.1679	1.1967	1.1967	1.1179	1.1967	1.1891	1.1125	1.1179	1.1679	1.169	1.1683	1.1683
T-611	1.1648	1.1723	1.168	1.1648	1.0898	1.0628	1.0898	1.1611	1.168	1.1723	1.1648	1.0898	1.144	6.4006	1.1723	1.095	1.1723	1.1648	1.0898	1.095	1.144	1.1451	4.8064	1.1444
T-612	1.1605	1.1679	1.1637	1.1605	1.0857	1.0588	1.0857	1.1568	1.1637	1.1679	1.1605	1.0857	1.1397	1.1679	1.1679	1.091	1.1679	1.1605	1.0857	1.091	1.1397	1.1408	1.1401	1.1401
T-613	1.1605	1.1679	1.1637	1.1605	1.0857	1.0588	1.0857	1.1568	1.1637	1.1679	1.1605	1.0857	1.1397	1.1679	1.1679	1.091	1.1679	1.1605	1.0857	1.091	1.1397	1.1408	1.1401	1.1401
T-614	1.1713	1.1788	1.1745	1.1713	1.0959	1.0688	1.0959	1.1676	1.1745	1.1788	1.1713	1.0959	1.1504	1.1788	1.1788	1.1012	1.1788	1.1713	1.0959	1.1012	1.1504	1.1515	1.1508	1.1508
Flux (mg/m2-min)																								
T-401	0.01472	0.00113	0.00908	0.01105	0.00526	0.00101	0.00367	0.00403	0.00744	0.00743	0.00743	0.00435	0.00023	0.00023	0.00051	0.00140	0.00023	0.01073	0.00283	0.00022	0.00165	0.00023	0.00023	0.00023
T-402	0.00036	0.00361	0.01943	0.00102	0.00033	0.00128	0.00033	0.00036	0.00211	0.00036	0.00036	0.00549	0.00086	0.00993	0.00098	0.00352	0.00036	0.00036	0.00033	0.00034	0.00035	0.00035	0.00035	0.00035
T-403	0.00043	0.00043	0.00043	0.00043	0.00040	0.00039	0.00040	0.00043	0.00043	0.00043	0.00043	0.00040	0.00042	0.00107	0.00043	0.00040	0.00043	0.00043	0.00040	0.00215	0.00042	0.00042	0.00042	0.00042
T-404	0.00016	0.00016	0.00016	0.00016	0.00015	0.00015	0.00015	0.00016	0.00016	0.00016	0.00016	0.00015	0.00016	0.00016	0.00016	0.00015	0.00016	0.00016	0.00015	0.00015	0.00016	0.00016	0.00016	0.00016
T-405	0.00061	0.00061	0.00061	0.00061	0.00057	0.00056	0.00057	0.00061	0.00061	0.00061	0.00061	0.00057	0.00060	0.00061	0.00061	0.00057	0.00061	0.00061	0.00057	0.00057	0.00060	0.00060	0.00060	0.00060
T-406	0.00127	0.00127	0.00127	0.00127	0.00118	0.00116	0.00118	0.00126	0.00127	0.00127	0.00127	0.00118	0.00124	0.00127	0.00127	0.00119	0.00127	0.00127	0.00118	0.00119	0.00124	0.00125	0.00124	0.00124
T-407	0.00038	0.00038	0.00038	0.00038	0.00035	0.00035	0.00035	0.00038	0.00038	0.00038	0.00038	0.00035	0.00037	0.00038	0.00038	0.00036	0.00038	0.00038	0.00035	0.00036	0.00037	0.00037	0.00037	0.00037
T-408	0.00033	0.00033	0.00033	0.00033	0.00031	0.00030	0.00031	0.00033	0.00033	0.00033	0.00033	0.00031	0.00032	0.00033	0.00033	0.00031	0.00033	0.00033	0.00031	0.00031	0.00032	0.00032	0.00032	0.00032
T-409	0.00069	0.00069	0.00069	0.00069	0.00064	0.00063	0.00064	0.00068	0.00069	0.00069	0.00069	0.00064	0.00067	0.00069	0.00069	0.00065	0.00069	0.00069	0.00064	0.00065	0.00067	0.00067	0.00067	0.00067
T-410	0.00022	0.02377	0.00949	0.01587	0.03902	0.00020	0.04531	0.00288	0.00551	0.01373	0.00988	0.01054	0.01357	0.00911	0.00634	0.01553	0.01941	0.00177	0.00967	0.01545	0.00282	0.00371	0.00022	0.00022
T-411	0.00032	0.00032	0.00032	0.00032	0.00104	0.00029	0.00030	0.00032	0.00032	0.00032	0.00032	0.00085	0.00091	0.00032	0.00032	0.00158	0.00032	0.00032	0.00030	0.00030	0.00031	0.00504	0.00032	0.00032
T-412	0.00042	0.00042	0.00042	0.00042	0.00039	0.00038	0.00039	0.00222	0.00042	0.00042	0.00042	0.00039	0.00145	0.00042	0.00042	0.00129	0.00042	0.00042	0.00039	0.00039	0.00041	0.00312	0.00132	0.00041
T-413	0.00017	0.00017	0.00017	0.00017	0.00016	0.00015	0.00016	0.00017	0.00017	0.00058	0.00017	0.00016	0.00016	0.00017	0.00017	0.00016	0.00017	0.00017	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
T-414	0.00006	0.00006	0.00006	0.00006	0.00006	0.00005	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00019	0.00029
T-415	0.00009	0.00009	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00019	0.00009	0.00009	0.00031	0.00025
T-416	0.00019	0.00019	0.00019	0.00019	0.00018	0.00017	0.00018	0.00019	0.00019	0.00019	0.00019	0.00018	0.00019	0.00019	0.00019	0.00018	0.00019	0.00019	0.00018	0.00072	0.00019	0.00019	0.00046	0.00053
T-417	0.00036	0.00036	0.00036	0.00036	0.00033	0.00033	0.00033	0.00036	0.00036	0.00036	0.00036	0.00033	0.00035	0.00036	0.00036	0.00033	0.00036	0.00036	0.00033	0.00033	0.00035	0.00035	0.00035	0.00035
T-418	0.00005	0.00005	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00004	0.00004	0.00005	0.00005	0.00005	0.00005
T-501	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013
T-502	0.00076	0.00010	0.00010	0.00028	0.00053	0.00009	0.00010	0.00109	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00063	0.00129	0.00010	0.00010	0.00010	0.00010
T-503	0.00027	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013
T-504	0.00009	0.00009	0.00009	0.00009	0.00008	0.00008	0.00008	0.00009	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00009	0.00008	0.00009	0.00009	0.00008	0.00008	0.00009	0.00009	0.00009	0.00009
T-505	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00037	0.00013
T-506	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-507	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-508	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-509	0.00007	0.00007	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007
T-510	0.00021	0.00008	0.00008	0.00008	0.00007	0.00007	0.00007	0.00008	0.00008	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00007	0.00008	0.00008	0.00008	0.00022	0.00008
T-511	0.00007	0.00007	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007
T-512	0.00027	0.00008	0.00008	0.00008	0.00008	0.00007	0.00008	0.00033	0.00008	0.00008	0.00008	0.00008	0.00019	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00020	0.00008	0.00008
T-513	0.00015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00011	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00028	0.00005	0.00005	0.00005	0.00005
T-514	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00004	0.00004	0.00005	0.00005	0.00004	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
T-601	0.00020	0.00083	0.00020	0.00020	0.00019	0.00079	0.00046	0.00020	0.00081	0.00078	0.00020	0.00019	0.00045	0.00092	0.00051	0.00019	0.00020	0.00130	0.00019	0.00056	0.00020	0.00020	0.00059	0.00020
T-602	0.00012	0.00076	0.00011	0.00028	0.00014	0.00024	0.00011	0.00027	0.00091	0.00035	0.00012	0.00052	0.00021	0.00066	0.00051	0.00011	0.00012	0.00012	0.00011	0.00011	0.00011	0.00011	0.00034	0.00024
T-603	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.00013	0.00013	0.00012	0.00013	0.00013	0.00012	0.00012	0.00012	0.00012	0.00012	0.00034
T-604	0.00017	0.00017	0.00017	0.00017	0.00015	0.00015	0.00015	0.00016	0.00017	0.00017	0.00017	0.00015	0.00016	0.00017	0.00017	0.00016	0.00017	0.00017	0.00180	0.00016	0.00016	0.00016	0.00016	0.00016
T-605	0.02690	0.00433	0.00760	0.01202	0.00258	0.02712	0.00014	0.02578	0.01188	0.00015	0.00892	0.00710	0.00106	0.00015	0.00820	0.00567	0.00015	0.00633	0.00522	0.00014	0.00434	0.00100	0.00055	0.00015
T-606	0.00022	0.00022	0.00022	0.00022	0.00047	0.00020	0.00021	0.00051	0.00022	0.00022	0.00022	0.00021	0.00048	0.00022	0.00022	0.00021	0.00022	0.00022	0.00021	0.00021	0.00022	0.00144	0.00097	0.00022
T-607	0.00025	0.00025	0.00025	0.00025	0.00023	0.00022	0.00023	0.00025	0.00025	0.00025	0.00025	0.00023	0.00024	0.00202	0.00025	0.00023	0.00025	0.00025	0.00023	0.00023	0.00024	0.00134	0.00090	0.00076
T-608	0.00014	0.00014	0.00014	0.00014	0.00013	0.00012	0.00013	0.00184	0.00014	0.00014	0.00014	0.00013	0.00013	0.00014	0.00014	0.00013	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00032
T-609	0.00007	0.00152	0.00007	0.00007	0.00006	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00007	0.00006	0.00007	0.00007	0.00006	0.00013	0.00007	0.00007	0.00007	0.00007
T-610	0.00020	0.00020	0.00065	0.00020	0.00019	0.00018	0.00019	0.00020	0.00020	0.00020	0.00020	0.00114	0.00020	0.00020	0.00020	0.00019	0.00020	0.00020	0.00019	0.00019	0.00020	0.00020	0.00020	0.00020
T-611	0.00012	0.00012	0.00012	0.00012	0.00011	0.00011	0.00011	0.00012	0.00012	0.00012	0.00012	0.00011	0.00012	0.00066	0.00012	0.00011	0.00012	0.00012	0.00011	0.00011	0.00012	0.00012	0.00050	0.00012
T-612	0.00011	0.00011	0.00011	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011	0.00011	0.00011	0.00010	0.00010	0.00011	0.00011	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
T-613	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
T-614	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004

Table 5 TO-14

Sample ID	Compound	i-Propylbenzene	Undecane	1,2,3-Trimethylbenzene	c-2-Butene	n-propylbenzene	i-Butane	Dodecane	Acetylene
	CAS	98-82-8	1120-21-4	526-73-8	590-18-1	103-65-1	75-28-5	112-40-3	74-86-2
	MW	120.2	156.3	120.2	56.1	120.2	58.1	170.3	26
Lab Data (ppbv)									
T-401		6.37	ND	ND	ND	ND	ND	ND	ND
T-402		2.19	ND	ND	ND	ND	ND	ND	ND
T-403		ND	ND	ND	ND	ND	ND	ND	ND
T-404		ND	ND	ND	ND	ND	ND	ND	ND
T-405		ND	ND	ND	ND	ND	ND	ND	ND
T-406		ND	ND	ND	ND	ND	ND	ND	ND
T-407		ND	ND	ND	ND	ND	ND	ND	ND
T-408		ND	ND	ND	ND	ND	1.17	1.07	ND
T-409		ND	ND	ND	ND	ND	ND	ND	ND
T-410		ND	7.34	ND	2.53	ND	ND	ND	ND
T-411		ND	ND	0.73	ND	0.97	ND	ND	ND
T-412		ND	ND	4.52	1.47	ND	ND	ND	ND
T-413		ND	ND	ND	ND	ND	ND	ND	ND
T-414		ND	ND	ND	ND	ND	ND	ND	ND
T-415		ND	ND	ND	ND	ND	ND	ND	ND
T-416		ND	ND	ND	ND	ND	ND	ND	ND
T-417		ND	ND	ND	ND	ND	ND	ND	ND
T-418		ND	ND	ND	ND	ND	ND	ND	ND
T-501		ND	ND	ND	ND	ND	ND	ND	ND
T-502		ND	ND	ND	ND	0.46	ND	ND	ND
T-503		ND	ND	ND	ND	ND	ND	ND	ND
T-504		ND	ND	ND	ND	ND	ND	ND	ND
T-505		ND	ND	ND	ND	ND	ND	ND	ND
T-506		ND	ND	ND	ND	ND	ND	ND	ND
T-507		ND	ND	ND	ND	ND	ND	ND	ND
T-508		ND	ND	ND	ND	ND	ND	ND	ND
T-509		ND	ND	ND	ND	ND	ND	ND	ND
T-510		ND	ND	ND	ND	ND	ND	ND	ND
T-511		ND	ND	ND	ND	ND	ND	ND	ND
T-512		ND	ND	1.28	ND	ND	ND	ND	ND
T-513		ND	ND	ND	ND	0.47	ND	ND	ND
T-514		ND	ND	ND	ND	ND	ND	ND	ND
T-601		0.55	ND	ND	ND	ND	ND	ND	ND
T-602		ND	ND	ND	ND	0.78	ND	ND	ND
T-603		ND	ND	ND	ND	ND	ND	ND	ND
T-604		ND	ND	ND	ND	ND	ND	ND	ND
T-605		ND	ND	ND	ND	ND	ND	ND	ND
T-606		ND	ND	ND	ND	ND	ND	ND	ND
T-607		ND	ND	ND	1.68	1.18	ND	ND	ND
T-608		ND	ND	ND	ND	0.45	ND	ND	ND
T-609		ND	ND	ND	ND	ND	ND	ND	ND
T-610		ND	ND	0.65	ND	ND	ND	ND	ND
T-611		ND	ND	ND	ND	ND	ND	ND	ND
T-612		ND	ND	ND	ND	ND	ND	ND	ND
T-613		ND	ND	ND	ND	ND	ND	ND	ND
T-614		ND	ND	ND	ND	ND	ND	ND	ND
MDL (ppbv)									
T-401		0.5556	0.4545	0.5556	1.25	0.5556	1.25	0.4167	2.5
T-402		0.5556	0.4545	0.5556	1.25	0.5556	1.25	0.4167	2.5
T-403		0.5644	0.4618	0.5644	1.27	0.5644	1.27	0.4233	2.54
T-404		0.5511	0.4509	0.5511	1.24	0.5511	1.24	0.4133	2.48
T-405		0.5689	0.4655	0.5689	1.28	0.5689	1.28	0.4267	2.56
T-406		0.56	0.4582	0.56	1.26	0.56	1.26	0.42	2.52
T-407		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-408		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-409		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-410		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-411		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-412		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-413		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-414		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-415		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-416		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-417		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-418		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-501		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-502		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-503		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-504		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-505		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-506		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-507		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-508		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-509		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-510		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-511		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-512		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-513		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-514		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-601		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-602		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-603		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-604		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-605		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-606		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-607		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-608		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-609		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-610		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-611		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-612		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-613		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2
T-614		0.4444	0.3636	0.4444	1	0.4444	1	0.3333	2

Table 5 TO-14

Sample ID	Compound	i-Propylbenzene	Undecane	1,2,3-Trimethylbenzene	c-2-Butene	n-propylbenzene	i-Butane	Dodecane	Acetylene
	CAS	98-82-8	1120-21-4	526-73-8	590-18-1	103-65-1	75-28-5	112-40-3	74-86-2
	MW	120.2	156.3	120.2	56.1	120.2	58.1	170.3	26
Data Used (ug/l)									
T-401		32.571	1.5111	1.4203	1.4915	1.4203	1.5447	1.5092	1.3825
T-402		11.176	1.5082	1.4176	1.4886	1.4176	1.5417	1.5063	1.37983
T-403		1.4515	1.5442	1.4515	1.5242	1.4515	1.5786	1.5424	1.41284
T-404		1.4227	1.5137	1.4227	1.4941	1.4227	1.5473	1.5118	1.38487
T-405		1.4186	1.5093	1.4186	1.4897	1.4186	1.5429	1.5075	1.38087
T-406		1.4234	1.5144	1.4234	1.4947	1.4234	1.548	1.5125	1.3855
T-407		1.0817	1.1508	1.0817	1.1359	1.0817	1.1764	1.1494	1.05292
T-408		1.0877	1.1573	1.0877	1.1423	1.0877	2.7682	7.4205	1.05878
T-409		1.0718	1.1403	1.0718	1.1255	1.0718	1.1657	1.1389	1.04329
T-410		1.0621	45.617	1.0621	5.6436	1.0621	1.1551	1.1286	1.03383
T-411		1.0758	1.1445	3.5339	1.1297	4.6957	1.17	1.1431	1.04712
T-412		1.0959	1.1659	22.29	3.3834	1.0959	1.1918	1.1645	1.0667
T-413		1.0679	1.1362	1.0679	1.1214	1.0679	1.1614	1.1348	1.03948
T-414		1.0777	1.1466	1.0777	1.1318	1.0777	1.1721	1.1452	1.04904
T-415		1.0959	1.1659	1.0959	1.1508	1.0959	1.1918	1.1645	1.0667
T-416		1.0817	1.1508	1.0817	1.1359	1.0817	1.1764	1.1494	1.05292
T-417		1.0817	1.1508	1.0817	1.1359	1.0817	1.1764	1.1494	1.05292
T-418		1.0959	1.1659	1.0959	1.1508	1.0959	1.1918	1.1645	1.0667
T-501		1.1542	1.2279	1.1542	1.212	1.1542	1.2552	1.2264	1.12343
T-502		1.1429	1.2159	1.1429	1.2002	2.3658	1.243	1.2145	1.11248
T-503		1.1474	1.2207	1.1474	1.2049	1.1474	1.2478	1.2192	1.11683
T-504		1.1451	1.2183	1.1451	1.2025	1.1451	1.2454	1.2168	1.11465
T-505		1.1232	1.195	1.1232	1.1795	1.1232	1.2215	1.1935	1.09328
T-506		1.1021	1.1725	1.1021	1.1573	1.1021	1.1986	1.1711	1.07272
T-507		1.0817	1.1508	1.0817	1.1359	1.0817	1.1764	1.1494	1.05292
T-508		1.0938	1.1637	1.0938	1.1487	1.0938	1.1896	1.1623	1.06471
T-509		1.1	1.1703	1.1	1.1551	1.1	1.1963	1.1689	1.07071
T-510		1.0621	1.13	1.0621	1.1153	1.0621	1.1551	1.1286	1.03383
T-511		1.0797	1.1487	1.0797	1.1338	1.0797	1.1743	1.1473	1.05098
T-512		1.0602	1.1279	6.1067	1.1133	1.0602	1.153	1.1266	1.03196
T-513		1.0602	1.1279	1.0602	1.1133	2.2423	1.153	1.1266	1.03196
T-514		1.0959	1.1659	1.0959	1.1508	1.0959	1.1918	1.1645	1.0667
T-601		2.8342	1.2183	1.1451	1.2025	1.1451	1.2454	1.2168	1.11465
T-602		1.1474	1.2207	1.1474	1.2049	4.0273	1.2478	1.2192	1.11683
T-603		1.1564	1.2303	1.1564	1.2144	1.1564	1.2577	1.2288	1.12565
T-604		1.1496	1.2231	1.1496	1.2073	1.1496	1.2503	1.2216	1.11902
T-605		1.1168	1.1881	1.1168	1.1727	1.1168	1.2145	1.1867	1.08703
T-606		1.1189	1.1904	1.1189	1.175	1.1189	1.2169	1.1889	1.08911
T-607		1.1253	1.1973	1.1253	3.9707	5.9756	1.2239	1.1958	1.09538
T-608		1.1083	1.1791	1.1083	1.1639	2.2443	1.2054	1.1777	1.07881
T-609		1.0758	1.1445	1.0758	1.1297	1.0758	1.17	1.1431	1.04712
T-610		1.1125	1.1836	3.2541	1.1683	1.1125	1.2099	1.1822	1.0829
T-611		1.0898	1.1594	1.0898	1.1444	1.0898	1.1852	1.158	1.06075
T-612		1.0857	1.1551	1.0857	1.1401	1.0857	1.1808	1.1537	1.05682
T-613		1.0857	1.1551	1.0857	1.1401	1.0857	1.1808	1.1537	1.05682
T-614		1.0959	1.1659	1.0959	1.1508	1.0959	1.1918	1.1645	1.0667

Flux (mg/m2-min)

T-401	0.00495	0.00023	0.00022	0.00023	0.00022	0.00023	0.00023	0.00021
T-402	0.00264	0.00036	0.00033	0.00035	0.00033	0.00036	0.00036	0.00033
T-403	0.00040	0.00043	0.00040	0.00042	0.00040	0.00044	0.00043	0.00039
T-404	0.00015	0.00016	0.00015	0.00016	0.00015	0.00017	0.00016	0.00015
T-405	0.00057	0.00061	0.00057	0.00060	0.00057	0.00062	0.00061	0.00056
T-406	0.00118	0.00126	0.00118	0.00124	0.00118	0.00129	0.00126	0.00115
T-407	0.00035	0.00038	0.00035	0.00037	0.00035	0.00039	0.00038	0.00034
T-408	0.00031	0.00033	0.00031	0.00032	0.00031	0.00079	0.00211	0.00030
T-409	0.00064	0.00068	0.00064	0.00067	0.00064	0.00070	0.00068	0.00063
T-410	0.00021	0.00896	0.00021	0.00111	0.00021	0.00023	0.00022	0.00020
T-411	0.00030	0.00032	0.00099	0.00032	0.00131	0.00033	0.00032	0.00029
T-412	0.00039	0.00041	0.00792	0.00120	0.00039	0.00042	0.00041	0.00038
T-413	0.00016	0.00017	0.00016	0.00016	0.00016	0.00017	0.00017	0.00015
T-414	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00005
T-415	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00008
T-416	0.00018	0.00019	0.00018	0.00019	0.00018	0.00019	0.00019	0.00017
T-417	0.00033	0.00035	0.00033	0.00035	0.00033	0.00036	0.00035	0.00032
T-418	0.00004	0.00005	0.00004	0.00005	0.00004	0.00005	0.00005	0.00004
T-501	0.00012	0.00013	0.00012	0.00013	0.00012	0.00014	0.00013	0.00012
T-502	0.00010	0.00010	0.00010	0.00010	0.00020	0.00011	0.00010	0.00009
T-503	0.00012	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012
T-504	0.00008	0.00009	0.00008	0.00009	0.00008	0.00009	0.00009	0.00008
T-505	0.00012	0.00013	0.00012	0.00013	0.00012	0.00013	0.00013	0.00012
T-506	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00004
T-507	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-508	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
T-509	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00007	0.00006
T-510	0.00007	0.00008	0.00007	0.00008	0.00007	0.00008	0.00008	0.00007
T-511	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00007	0.00006
T-512	0.00008	0.00008	0.00044	0.00008	0.00008	0.00008	0.00008	0.00007
T-513	0.00005	0.00005	0.00005	0.00005	0.00011	0.00006	0.00005	0.00005
T-514	0.00004	0.00004	0.00004	0.00004	0.00004	0.00005	0.00004	0.00004
T-601	0.00047	0.00020	0.00019	0.00020	0.00019	0.00021	0.00020	0.00018
T-602	0.00011	0.00011	0.00011	0.00011	0.00038	0.00012	0.00011	0.00010
T-603	0.00012	0.00013	0.00012	0.00012	0.00012	0.00013	0.00013	0.00012
T-604	0.00015	0.00016	0.00015	0.00016	0.00015	0.00017	0.00016	0.00015
T-605	0.00014	0.00015	0.00014	0.00015	0.00014	0.00015	0.00015	0.00013
T-606	0.00021	0.00022	0.00021	0.00022	0.00021	0.00023	0.00022	0.00020
T-607	0.00023	0.00025	0.00023	0.00081	0.00122	0.00025	0.00024	0.00022
T-608	0.00013	0.00014	0.00013	0.00013	0.00026	0.00014	0.00014	0.00012
T-609	0.00006	0.00007	0.00006	0.00007	0.00006	0.00007	0.00007	0.00006
T-610	0.00019	0.00020	0.00055	0.00020	0.00019	0.00020	0.00020	0.00018
T-611	0.00011	0.00012	0.00011	0.00012	0.00011	0.00012	0.00012	0.00011
T-612	0.00010	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011	0.00010
T-613	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
T-614	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004

Table 6 ORS

Sample ID	Synonym	Total Reduced Sulfurs	Carbonyl sulfide (COS)	Methanethiol (MeSH)	Carbon disulfide (CS2)	Hydrogen sulfide (H2S)	Dimethylsulfide (DMS)	Dimethyldisulfide (DMDS)	Total Unidentified Sulfur	2-Propanethiol (iPrSH)	i-Butanethiol (i-BuSH)	s-Butanethiol (s-BuSH)	Ethanethiol (EtSH)	3-Methylthiophene	Methylthiol	t-Butanethiol (tBSH)	1-Propanethiol (nPrSH)	Methylethylsulfide (MES)	Diethylsulfide (DES)	n-Butanethiol (n-BuSH)	Tetramethylene sulfide	2-Bromothiophene	Phenyl mercaptan	Diethyldisulfide (DEDS)
	CAS		463-58-1	74-93-1	75-15-0	7783-06-4	75-18-3	624-92-0		75-33-2	513-44-0	513-53-1	75-08-1	616-44-4	554-14-3	75-66-1	107-03-9	624-89-5	352-93-2	109-79-5	110-01-0	1003-09-4	108-98-5	110-81-6
	MW	34.08	60.08	48.11	76.14	34.08	62.134	94.19	34.08	76.16	90.186	90.186	62.134	98.17	98.16	90.186	76.16	76.16	90.19	90.186	88.17	163.04	110.18	122.252
Laboratory Results (ppmv)																								
S- 401 a		0.77	< 0.005	0.116	0.275	0.04	0.092	0.1	0.073	0.019	0.018	0.012	0.01	0.009	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 402 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 403 a		0.013	< 0.005	< 0.005	< 0.005	0.013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 404 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 405 a		0.03	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 406 a		0.016	< 0.005	< 0.005	< 0.005	0.016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 407 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 408 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 409 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 410 a		0.006	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 411 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 412 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 413 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 414 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 415 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 416 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 417 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 418 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 501 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 502 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 503 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 504 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 505 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 506 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 507 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 508 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 509 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 510 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 511 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 512 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 513 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 514 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 601 a		0.043	0.017	< 0.005	0.009	0.034	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 602 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 603 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 604 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 605 a		1.66	0.421	0.469	0.277	0.373	0.158	0.12	0.118	0.077	0.029	0.024	0.019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 606 a		0.016	< 0.005	< 0.005	< 0.005	0.016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 607 a		0.066	0.16	0.005	< 0.005	0.015	0.023	0.016	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 608 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 609 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 610 a		0.022	0.091	< 0.005	< 0.005	0.017	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 611 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 612 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 613 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
S- 614 a		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MDL (ppmv)																								
S- 401 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 402 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 403 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 404 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 405 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 406 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 407 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 408 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 409 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 410 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 411 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 412 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 413 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 414 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 415 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 416 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 417 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 418 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 501 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 502 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 503 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 504 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 505 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 506 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 507 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 508 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 509 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 510 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 511 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 512 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 513 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 514 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 601 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 602 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 603 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 604 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 605 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 606 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 607 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 608 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 609 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 610 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 611 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 612 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 613 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
S- 614 a		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005

Table 6 ORS

Sample ID	Synonym	Total Reduced Sulfurs	Carbonyl sulfide (COS)	Methanethiol (MeSH)	Carbon disulfide (CS2)	Hydrogen sulfide (H2S)	Dimethylsulfide (DMS)	Dimethyldisulfide (DMDS)	Total Unidentified Sulfur	2-Propanethiol (iPrSH)	i-Butanethiol (i-BuSH)	s-Butanethiol (s-BuSH)	Ethanethiol (EtSH)	3-Methylthiophene	Methylthiol	t-Butanethiol (tBSH)	1-Propanethiol (nPrSH)	Methylethylsulfide (MES)	Diethylsulfide (DES)	n-Butanethiol (n-BuSH)	Tetramethylene sulfide	2-Bromothiophene	Phenyl mercaptan	Diethyldisulfide (DEDS)
	CAS		463-58-1	74-93-1	75-15-0	7783-06-4	75-18-3	624-92-0		75-33-2	513-44-0	513-53-1	75-08-1	616-44-4	554-14-3	75-66-1	107-03-9	624-89-5	352-93-2	109-79-5	110-01-0	1003-09-4	108-98-5	110-81-6
	MW	**34.08**	**60.08**	**48.11**	**76.14**	**34.08**	**62.134**	**94.19**	**34.08**	**76.16**	**90.186**	**90.186**	**62.134**	**98.17**	**98.16**	**90.186**	**76.16**	**76.16**	**90.19**	**90.186**	**88.17**	**163.04**	**110.18**	**122.252**
Data Used (mg/m3)																								
S- 401 a		1.1163	0.0064	0.2374	0.8907	0.0580	0.2432	0.4007	0.1058	0.0616	0.0691	0.0460	0.0264	0.0376	0.0251	0.0096	0.0081	0.0081	0.0096	0.0096	0.0094	0.0173	0.0117	0.0130
S- 402 a		0.0036	0.0064	0.0051	0.0081	0.0036	0.0066	0.0100	0.0036	0.0081	0.0096	0.0096	0.0066	0.0104	0.0104	0.0096	0.0081	0.0081	0.0096	0.0096	0.0094	0.0173	0.0117	0.0130
S- 403 a		0.0190	0.0064	0.0051	0.0081	0.0190	0.0066	0.0101	0.0036	0.0081	0.0096	0.0096	0.0066	0.0105	0.0105	0.0096	0.0081	0.0081	0.0096	0.0096	0.0094	0.0174	0.0118	0.0131
S- 404 a		0.0037	0.0065	0.0052	0.0082	0.0037	0.0067	0.0101	0.0037	0.0082	0.0097	0.0097	0.0067	0.0105	0.0105	0.0097	0.0082	0.0082	0.0097	0.0097	0.0095	0.0175	0.0118	0.0131
S- 405 a		0.0424	0.0062	0.0050	0.0079	0.0424	0.0064	0.0098	0.0035	0.0079	0.0094	0.0094	0.0064	0.0102	0.0102	0.0094	0.0079	0.0079	0.0094	0.0094	0.0091	0.0169	0.0114	0.0127
S- 406 a		0.0231	0.0064	0.0051	0.0081	0.0231	0.0066	0.0100	0.0036	0.0081	0.0095	0.0095	0.0066	0.0104	0.0104	0.0095	0.0081	0.0081	0.0095	0.0095	0.0093	0.0172	0.0116	0.0129
S- 407 a		0.0035	0.0061	0.0049	0.0077	0.0035	0.0063	0.0095	0.0035	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0165	0.0112	0.0124
S- 408 a		0.0035	0.0061	0.0049	0.0078	0.0035	0.0063	0.0096	0.0035	0.0078	0.0092	0.0092	0.0063	0.0100	0.0100	0.0092	0.0078	0.0078	0.0092	0.0092	0.0090	0.0166	0.0112	0.0124
S- 409 a		0.0034	0.0060	0.0048	0.0076	0.0034	0.0062	0.0094	0.0034	0.0076	0.0090	0.0090	0.0062	0.0098	0.0098	0.0090	0.0076	0.0076	0.0090	0.0090	0.0088	0.0164	0.0111	0.0123
S- 410 a		0.0081	0.0060	0.0048	0.0182	0.0034	0.0062	0.0094	0.0034	0.0076	0.0090	0.0090	0.0062	0.0098	0.0098	0.0090	0.0076	0.0076	0.0090	0.0090	0.0088	0.0162	0.0110	0.0122
S- 411 a		0.0034	0.0060	0.0048	0.0077	0.0034	0.0063	0.0095	0.0034	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0164	0.0111	0.0123
S- 412 a		0.0035	0.0062	0.0049	0.0078	0.0035	0.0064	0.0097	0.0035	0.0078	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0078	0.0078	0.0093	0.0093	0.0090	0.0167	0.0113	0.0125
S- 413 a		0.0034	0.0060	0.0048	0.0076	0.0034	0.0062	0.0094	0.0034	0.0076	0.0090	0.0090	0.0062	0.0098	0.0098	0.0090	0.0076	0.0076	0.0090	0.0090	0.0088	0.0163	0.0110	0.0122
S- 414 a		0.0034	0.0061	0.0049	0.0077	0.0034	0.0063	0.0095	0.0034	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0164	0.0111	0.0123
S- 415 a		0.0035	0.0062	0.0049	0.0078	0.0035	0.0064	0.0097	0.0035	0.0078	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0078	0.0078	0.0093	0.0093	0.0090	0.0167	0.0113	0.0125
S- 416 a		0.0035	0.0061	0.0049	0.0077	0.0035	0.0063	0.0095	0.0035	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0165	0.0112	0.0124
S- 417 a		0.0035	0.0061	0.0049	0.0077	0.0035	0.0063	0.0095	0.0035	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0165	0.0112	0.0124
S- 418 a		0.0035	0.0062	0.0049	0.0078	0.0035	0.0064	0.0097	0.0035	0.0078	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0078	0.0078	0.0093	0.0093	0.0090	0.0167	0.0113	0.0125
S- 501 a		0.0037	0.0065	0.0052	0.0082	0.0037	0.0067	0.0102	0.0037	0.0082	0.0097	0.0097	0.0067	0.0106	0.0106	0.0097	0.0082	0.0082	0.0097	0.0097	0.0095	0.0176	0.0119	0.0132
S- 502 a		0.0036	0.0064	0.0051	0.0081	0.0036	0.0066	0.0101	0.0036	0.0081	0.0096	0.0096	0.0066	0.0105	0.0105	0.0096	0.0081	0.0081	0.0096	0.0096	0.0094	0.0174	0.0118	0.0131
S- 503 a		0.0037	0.0065	0.0052	0.0082	0.0037	0.0067	0.0101	0.0037	0.0082	0.0097	0.0097	0.0067	0.0105	0.0105	0.0097	0.0082	0.0082	0.0097	0.0097	0.0095	0.0175	0.0118	0.0131
S- 504 a		0.0037	0.0064	0.0052	0.0082	0.0037	0.0067	0.0101	0.0037	0.0082	0.0097	0.0097	0.0067	0.0105	0.0105	0.0097	0.0082	0.0082	0.0097	0.0097	0.0094	0.0175	0.0118	0.0131
S- 505 a		0.0036	0.0063	0.0051	0.0080	0.0036	0.0065	0.0099	0.0036	0.0080	0.0095	0.0095	0.0065	0.0103	0.0103	0.0095	0.0080	0.0080	0.0095	0.0095	0.0093	0.0171	0.0116	0.0129
S- 506 a		0.0035	0.0062	0.0050	0.0079	0.0035	0.0064	0.0097	0.0035	0.0079	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0079	0.0079	0.0093	0.0093	0.0091	0.0168	0.0114	0.0126
S- 507 a		0.0035	0.0061	0.0049	0.0077	0.0035	0.0063	0.0095	0.0035	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0165	0.0112	0.0124
S- 508 a		0.0035	0.0062	0.0049	0.0078	0.0035	0.0064	0.0096	0.0035	0.0078	0.0092	0.0092	0.0064	0.0101	0.0100	0.0092	0.0078	0.0078	0.0092	0.0092	0.0090	0.0167	0.0113	0.0125
S- 509 a		0.0035	0.0062	0.0050	0.0078	0.0035	0.0064	0.0097	0.0035	0.0078	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0078	0.0078	0.0093	0.0093	0.0091	0.0168	0.0113	0.0126
S- 510 a		0.0034	0.0060	0.0048	0.0076	0.0034	0.0062	0.0094	0.0034	0.0076	0.0090	0.0090	0.0062	0.0098	0.0098	0.0090	0.0076	0.0076	0.0090	0.0090	0.0088	0.0162	0.0110	0.0122
S- 511 a		0.0034	0.0061	0.0049	0.0077	0.0034	0.0063	0.0095	0.0034	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0165	0.0111	0.0124
S- 512 a		0.0034	0.0060	0.0048	0.0076	0.0034	0.0062	0.0093	0.0034	0.0076	0.0089	0.0089	0.0062	0.0097	0.0097	0.0089	0.0076	0.0076	0.0089	0.0089	0.0087	0.0162	0.0109	0.0121
S- 513 a		0.0034	0.0060	0.0048	0.0076	0.0034	0.0062	0.0093	0.0034	0.0076	0.0089	0.0089	0.0062	0.0097	0.0097	0.0089	0.0076	0.0076	0.0089	0.0089	0.0087	0.0162	0.0109	0.0121
S- 514 a		0.0035	0.0062	0.0049	0.0078	0.0035	0.0064	0.0097	0.0035	0.0078	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0078	0.0078	0.0093	0.0093	0.0090	0.0167	0.0113	0.0125
S- 601 a		0.0628	0.0438	0.0052	0.0294	0.0497	0.0067	0.0101	0.0037	0.0082	0.0097	0.0097	0.0067	0.0105	0.0105	0.0097	0.0082	0.0082	0.0097	0.0097	0.0094	0.0175	0.0118	0.0131
S- 602 a		0.0037	0.0065	0.0052	0.0082	0.0037	0.0067	0.0101	0.0037	0.0082	0.0097	0.0097	0.0067	0.0105	0.0105	0.0097	0.0082	0.0082	0.0097	0.0097	0.0095	0.0175	0.0118	0.0131
S- 603 a		0.0037	0.0065	0.0052	0.0082	0.0037	0.0067	0.0102	0.0037	0.0082	0.0098	0.0098	0.0067	0.0106	0.0106	0.0098	0.0082	0.0082	0.0098	0.0098	0.0095	0.0176	0.0119	0.0132
S- 604 a		0.0037	0.0065	0.0052	0.0082	0.0037	0.0067	0.0101	0.0037	0.0082	0.0097	0.0097	0.0067	0.0106	0.0106	0.0097	0.0082	0.0082	0.0097	0.0097	0.0095	0.0175	0.0119	0.0132
S- 605 a		2.3652	1.0575	0.9434	0.8818	0.5315	0.4104	0.4726	0.1681	0.2452	0.1093	0.0905	0.0494	0.0103	0.0103	0.0094	0.0080	0.0080	0.0094	0.0094	0.0092	0.0170	0.0115	0.0128
S- 606 a		0.0228	0.0063	0.0050	0.0080	0.0228	0.0065	0.0099	0.0036	0.0080	0.0094	0.0094	0.0065	0.0103	0.0103	0.0094	0.0080	0.0080	0.0094	0.0094	0.0092	0.0171	0.0115	0.0128
S- 607 a		0.0948	0.4050	0.0101	0.0080	0.0215	0.0602	0.0635	0.0101	0.0080	0.0095	0.0095	0.0065	0.0103	0.0103	0.0095	0.0080	0.0080	0.0095	0.0095	0.0093	0.0172	0.0116	0.0129
S- 608 a		0.0035	0.0062	0.0050	0.0079	0.0035	0.0064	0.0098	0.0035	0.0079	0.0094	0.0094	0.0064	0.0102	0.0102	0.0094	0.0079	0.0079	0.0094	0.0094	0.0091	0.0169	0.0114	0.0127
S- 609 a		0.0034	0.0060	0.0048	0.0077	0.0034	0.0063	0.0095	0.0034	0.0077	0.0091	0.0091	0.0063	0.0099	0.0099	0.0091	0.0077	0.0077	0.0091	0.0091	0.0089	0.0164	0.0111	0.0123
S- 610 a		0.0312	0.2277	0.0050	0.0079	0.0241	0.0065	0.0196	0.0035	0.0079	0.0094	0.0094	0.0065	0.0102	0.0102	0.0094	0.0079	0.0079	0.0094	0.0094	0.0092	0.0170	0.0115	0.0127
S- 611 a		0.0035	0.0061	0.0049	0.0078	0.0035	0.0063	0.0096	0.0035	0.0078	0.0092	0.0092	0.0063	0.0100	0.0100	0.0092	0.0078	0.0078	0.0092	0.0092	0.0090	0.0166	0.0112	0.0125
S- 612 a		0.0035	0.0061	0.0049	0.0077	0.0035	0.0063	0.0096	0.0035	0.0077	0.0092	0.0092	0.0063	0.0100	0.0100	0.0092	0.0077	0.0077	0.0092	0.0092	0.0090	0.0166	0.0112	0.0124
S- 613 a		0.0035	0.0061	0.0049	0.0077	0.0035	0.0063	0.0096	0.0035	0.0077	0.0092	0.0092	0.0063	0.0100	0.0100	0.0092	0.0077	0.0077	0.0092	0.0092	0.0090	0.0166	0.0112	0.0124
S- 614 a		0.0035	0.0062	0.0049	0.0078	0.0035	0.0064	0.0097	0.0035	0.0078	0.0093	0.0093	0.0064	0.0101	0.0101	0.0093	0.0078	0.0078	0.0093	0.0093	0.0090	0.0167	0.0113	0.0125
		0.1300																						
Flux (mg/m2-min)																								
S- 401 a		0.1695	0.0010	0.0360	0.1352	0.0088	0.0369	0.0608	0.0161	0.0093	0.0105	0.0070	0.0040	0.0057	0.0038	0.0015	0.0012	0.0012	0.0015	0.0015	0.0014	0.0026	0.0018	0.0020
S- 402 a		0.0009	0.0015	0.0012	0.0019	0.0009	0.0016	0.0024	0.0009	0.0019	0.0023	0.0023	0.0016	0.0025	0.0025	0.0023	0.0019	0.0019	0.0023	0.0023	0.0022	0.0041	0.0028	0.0031
S- 403 a		0.0052	0.0018	0.0014	0.0023	0.0052	0.0018	0.0028	0.0010	0.0023	0.0027	0.0027	0.0018	0.0029	0.0029	0.0027	0.0023	0.0023	0.0027	0.0027	0.0026	0.0048	0.0033	0.0036
S- 404 a		0.0004	0.0007	0.0006	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007	0.0011	0.0011	0.0010	0.0009	0.0009	0.0010	0.0010	0.0010	0.0019	0.0013	0.0014
S- 405 a		0.0171	0.0025	0.0020	0.0032	0.0171	0.0026	0.0039	0.0014	0.0032	0.0038	0.0038	0.0026	0.0041	0.0041	0.0038	0.0032	0.0032	0.0038	0.0038	0.0037	0.0068	0.0046	0.0051
S- 406 a		0.0192	0.0053	0.0042	0.0067	0.0192	0.0055	0.0083	0.0030	0.0067	0.0079	0.0079	0.0055	0.0086	0.0086	0.0079	0.0067	0.0067	0.0079	0.0079	0.0078	0.0144	0.0097	0.0108
S- 407 a		0.0011	0.0020	0.0016	0.0025	0.0011	0.0021	0.0031	0.0011	0.0025	0.0030	0.0030	0.0021	0.0033	0.0033	0.0030	0.0025	0.0025	0.0030	0.0030	0.0029	0.0054	0.0037	0.0041
S- 408 a		0.0010	0.0017	0.0014	0.0022	0.0010	0.0018	0.0027	0.0010	0.0022	0.0026	0.0026	0.0018	0.0028	0.0028	0.0026	0.0022	0.0022	0.0026	0.0026	0.0026	0.0047	0.0032	0.0035
S- 409 a		0.0020	0.0036	0.0029	0.0046	0.0020	0.0037	0.0057	0.0020	0.0046	0.0054	0.0054	0.0037	0.0059	0.0059	0.0054	0.0046	0.0046	0.0054	0.0054	0.0053	0.0098	0.0066	0.0073
S- 410 a		0.0016	0.0012	0.0009	0.0036	0.0007	0.0012	0.0018	0.0007	0.0015	0.0018	0.0018	0.0012	0.0019	0.0019	0.0018	0.0015	0.0015	0.0018	0.0018	0.0017	0.0032	0.0022	0.0024
S- 411 a		0.0010	0.0017	0.0014	0.0021	0.0010	0.0017	0.0026	0.0010	0.0021	0.0025	0.0025	0.0017	0.0028	0.0028	0.0025	0.0021	0.0021	0.0025	0.0025	0.0025	0.0046	0.0031	0.0034
S- 412 a		0.0012	0.0022	0.0018	0.0028	0.0012	0.0023	0.0034	0.0012	0.0028	0.0033	0.0033	0.0023	0.0036	0.0036	0.0033	0.0028	0.0028	0.0033	0.0033	0.0032	0.0059	0.0040	0.0045
S- 413 a		0.0005	0.0009	0.0007	0.0011	0.0005	0.0009	0.0014	0.0005	0.0011	0.0013	0.0013	0.0009	0.0014	0.0014	0.0013	0.0011	0.0011	0.0013	0.0013	0.0013	0.0024	0.0016	0.0018
S- 414 a		0.0002	0.0003	0.0003	0.0004	0.0002	0.0003	0.0005	0.0002	0.0004	0.0005	0.0005	0.0003	0.0005	0.0005	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0009	0.0006	0.0006
S- 415 a		0.0003	0.0005	0.0004	0.0006	0.0003	0.0005	0.0008	0.0003	0.0006	0.0007	0.0007	0.0005	0.0008	0.0008	0.0007	0.0006	0.0006	0.0007	0.0007	0.0007	0.0013	0.0009	0.0010
S- 416 a		0.0006	0.0010	0.0008	0.0013	0.0006	0.0010	0.0016	0.0006	0.0013	0.0015	0.0015	0.0010	0.0016	0.0016	0.0015	0.0013	0.0013	0.0015	0.0015	0.0015	0.0027	0.0018	0.0020
S- 417 a		0.0011	0.0019	0.0015	0.0024	0.0011	0.0019	0.0029	0.0011	0.0024	0.0028	0.0028	0.0019	0.0031	0.0031	0.0028	0.0024	0.0024	0.0028	0.0028	0.0028	0.0051	0.0034	0.0038
S- 418 a		0.0001	0.0002	0.0002	0.0003	0.0001	0.0003	0.0004	0.0001	0.0003	0.0004	0.0004	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0007	0.0005	0.0005
S- 501 a		0.0004	0.0007	0.0006	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007	0.0011	0.0011	0.0010	0.0009	0.0009	0.0010	0.0010	0.0010	0.0019	0.0013	0.0014
S- 502 a		0.0003	0.0005	0.0004	0.0007	0.0003	0.0006	0.0009	0.0003	0.0007	0.0008	0.0008	0.0006	0.0009	0.0009	0.0008	0.0007	0.0007	0.0008	0.0008	0.0008	0.0015	0.0010	0.0011
S- 503 a		0.0004	0.0007	0.0005	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007	0.0011	0.0011	0.0010	0.0009	0.0009	0.0010	0.0010	0.0010	0.0018	0.0012	0.0014
S- 504 a		0.0003	0.0005	0.0004	0.0006	0.0003	0.0005	0.0007	0.0003	0.0006	0.0007	0.0007	0.0005	0.0008	0.0008	0.0007	0.0006	0.0006	0.0007	0.0007	0.0007	0.0013	0.0009	0.0010
S- 505 a		0.0004	0.0007	0.0005	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0010	0.0010	0.0007	0.0011	0.0011	0.0010	0.0009	0.0009	0.0010	0.0010	0.0010	0.0018	0.0012	0.0014
S- 506 a		0.0001	0.0003	0.0002	0.0003	0.0001	0.0003	0.0004	0.0001	0.0003	0.0004	0.0004	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0007	0.0005	0.0005
S- 507 a		0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0004	0.0002	0.0003	0.0004	0.0004	0.0003	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0004	0.0007	0.0005	0.0006
S- 508 a		0.0002	0.0003	0.0002	0.0004	0.0002	0.0003	0.0004	0.0002	0.0004	0.0004	0.0004	0.0003	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0008	0.0005	0.0006
S- 509 a		0.0002	0.0003	0.0003	0.0004	0.0002	0.0004	0.0005	0.0002	0.0004	0.0005	0.0005	0.0004	0.0006	0.0006	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0009	0.0006	0.0007
S- 510 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0007	0.0002	0.0005	0.0006	0.0006	0.0004	0.0007	0.0007	0.0006	0.0005	0.0005	0.0006	0.0006	0.0006	0.0011	0.0008	0.0009
S- 511 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0006	0.0002	0.0005	0.0005	0.0005	0.0004	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0010	0.0007	0.0007
S- 512 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0007	0.0002	0.0005	0.0006	0.0006	0.0004	0.0007	0.0007	0.0006	0.0005	0.0005	0.0006	0.0006	0.0006	0.0012	0.0008	0.0009
S- 513 a		0.0002	0.0003	0.0002	0.0004	0.0002	0.0003	0.0005	0.0002	0.0004	0.0004	0.0004	0.0003	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0008	0.0005	0.0006
S- 514 a		0.0001	0.0002	0.0002	0.0003	0.0001	0.0002	0.0004	0.0001	0.0003	0.0004	0.0004	0.0002	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	0.0004	0.0003	0.0006	0.0004	0.0005
S- 601 a		0.0104	0.0072	0.0009	0.0049	0.0082	0.0011	0.0017	0.0006	0.0014	0.0016	0.0016	0.0011	0.0017	0.0017	0.0016	0.0014	0.0014	0.0016	0.0016	0.0016	0.0029	0.0020	0.0022
S- 602 a		0.0003	0.0006	0.0005	0.0008	0.0003	0.0006	0.0009	0.0003	0.0008	0.0009	0.0009	0.0006	0.0010	0.0010	0.0009	0.0008	0.0008	0.0009	0.0009	0.0009	0.0016	0.0011	0.0012
S- 603 a		0.0004	0.0007	0.0005	0.0008	0.0004	0.0007	0.0010	0.0004	0.0008	0.0010	0.0010	0.0007	0.0011	0.0011	0.0010	0.0008	0.0008	0.0010	0.0010	0.0010	0.0018	0.0012	0.0014
S- 604 a		0.0005	0.0009	0.0007	0.0011	0.0005	0.0009	0.0014	0.0005	0.0011	0.0013	0.0013	0.0009	0.0014	0.0014	0.0013	0.0011	0.0011	0.0013	0.0013	0.0013	0.0024	0.0016	0.0018
S- 605 a		0.2931	0.1310	0.1169	0.1093	0.0659	0.0509	0.0586	0.0208	0.0304	0.0135	0.0112	0.0061	0.0013	0.0013	0.0012	0.0010	0.0010	0.0012	0.0012	0.0011	0.0021	0.0014	0.0016
S- 606 a		0.0042	0.0012	0.0009	0.0015	0.0042	0.0012	0.0018	0.0007	0.0015	0.0018	0.0018	0.0012	0.0019	0.0019	0.0018	0.0015	0.0015	0.0018	0.0018	0.0017	0.0032	0.0021	0.0024
S- 607 a		0.0194	0.0829	0.0021	0.0016	0.0044	0.0123	0.0130	0.0021	0.0016	0.0019	0.0019	0.0013	0.0021	0.0021	0.0019	0.0016	0.0016	0.0019	0.0019	0.0019	0.0035	0.0024	0.0026
S- 608 a		0.0004	0.0007	0.0006	0.0009	0.0004	0.0007	0.0011	0.0004	0.0009	0.0011	0.0011	0.0007	0.0012	0.0012	0.0011	0.0009	0.0009	0.0011	0.0011	0.0011	0.0019	0.0013	0.0015
S- 609 a		0.0002	0.0004	0.0003	0.0004	0.0002	0.0004	0.0006	0.0002	0.0004	0.0005	0.0005	0.0004	0.0006	0.0006	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0010	0.0006	0.0007
S- 610 a		0.0053	0.0385	0.0008	0.0013	0.0041	0.0011	0.0033	0.0006	0.0013	0.0016	0.0016	0.0011	0.0017	0.0017	0.0016	0.0013	0.0013	0.0016	0.0016	0.0016	0.0029	0.0019	0.0022
S- 611 a		0.0004	0.0006	0.0005	0.0008	0.0004	0.0007	0.0010	0.0004	0.0008	0.0010	0.0010	0.0007	0.0010	0.0010	0.0010	0.0008	0.0008	0.0010	0.0010	0.0009	0.0017	0.0012	0.0013
S- 612 a		0.0003	0.0006	0.0004	0.0007	0.0003	0.0006	0.0009	0.0003	0.0007	0.0008	0.0008	0.0006	0.0009	0.0009	0.0008	0.0007	0.0007	0.0008	0.0008	0.0008	0.0015	0.0010	0.0011
S- 613 a		0.0002	0.0004	0.0003	0.0005	0.0002	0.0004	0.0006	0.0002	0.0005	0.0006	0.0006	0.0004	0.0006	0.0006	0.0006	0.0005	0.0005	0.0006	0.0006	0.0006	0.0010	0.0007	0.0008
S- 614 a		0.0001	0.0002	0.0002	0.0003	0.0001	0.0002	0.0003	0.0001	0.0003	0.0003	0.0003	0.0002	0.0004	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0006	0.0004	0.0005

CE Schmidt, Ph.D.
Environmental Consultant

ATTACHMENT A

EMISSION MEASUREMENT DATA SHEETS

19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878

160

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TCL JDA RCW

LOCATION Chiquita Canyon Landfill CELL #160 L#1

SURFACE DESCRIPTION EXEEDENCE CELL

CURRENT ACTIVITY

INSTRUMENT TYPE TO631X I.D. NO. H2S TYPE TVA1000 THC ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP ____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB0160945 SUPPLIER LIN PSIG START 2000 PSIG STOP

Time	Sweep Air (L/min) 10.07% He	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter %	H2S	He %	Sample Number	Comments
0746	5	0			55	55	2.5%/2.1%		5.0		
|	5	1					2.5/2.1	0.000			
↓	5	2									
0804	5	3	59	56	55	55			510	T401	# 636
↓	5	4								0401	
0816	5	5								S401A	
										S401B	

COMMENTS:

FID Outside: 1300/1200 ppmv
H_2S Outside: 0.000

Coordinates
11 S 348,006
3,811,444

SITE DIAGRAM

160

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS LES TRE JON TRW

LOCATION Chiquita Canyon Landfill CELL# 160 L#2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP He CC EV D160945 SUPPLIER LIN PSIG START 2000 PSIG STOP

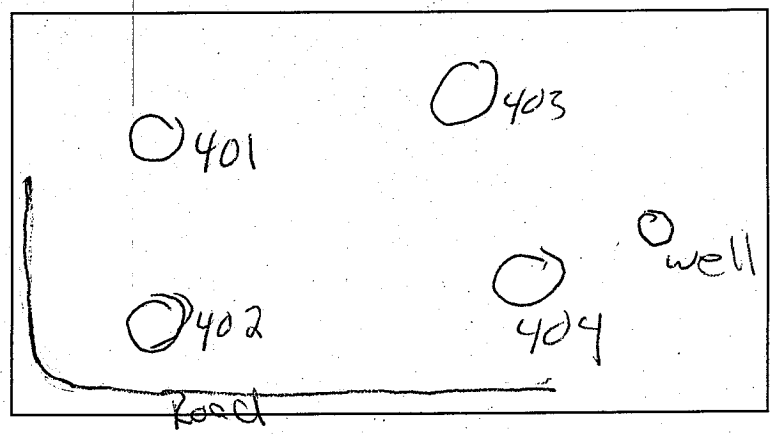
Time	10.07% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
0746	5	0					0/0				
↓	5	1									
↓	5	2								T402 #703	
0804	5	3	60	57	54	54	0.8/2.3	0.000	1.9	S402	
	5	4								S402A	
0816	5	5								S402B	

COMMENTS:

FID Outside: 27/21
H_2S Outside: 0.000

Coordinates
11 S 340,614
3,811,445

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

160

DATE 11/19/24 SAMPLERS CES TCC JDA RCW

LOCATION Chiquita Canyon Landfill CELL #160 L#3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC G3 8160963 SUPPLIER LIN PSIG START 2000 PSIG STOP

Time	10.14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
0742	5	0						HB	He		
	5	1							%		
↓	5	2					160/114			T403	#547
0800	5	3	52	53	52	54		0,000 ~~0,000~~ 0,000	24	0403	
	5	4								S403A	
0812	5	5								S403B	

COMMENTS:

FID Outside: 200/180
H_2S Outside: 0,000

Coordinates
11 S 348,601
3,811,459

SITE DIAGRAM

160

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JOA RCW

LOCATION Chiquita Canyon Landfill CELL # 160 IL # 4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP He cc EB 0160B3 SUPPLIER LIN PSIG START 2000 PSIG STOP

Time	10.14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He 0%		
			Surf	Air	Surf	Air					
0742	5	0						INV 0.000			
↓	5	1									
↓	5	2								T1404	# 7491
0800	5	3	51	51	52	51	<0/24	OUT	6.5	0404	
	5	4								S404A	
0802	5	5								S404B	

COMMENTS:

FID Outside: 30/25

H_2S Outside: 0.000

Coordinates

11 S 34 8, 6 14

3,81 1, 4 6 0

SITE DIAGRAM

34

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS ~~KE~~ CES TRL JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 34 L#1

SURFACE DESCRIPTION Normal Mid-level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 0160963 SUPPLIER ZIN PSIG START 1600 PSIG STOP _____

Time	10.14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
0916	5	0									
0922	5	1									
0928	5	2								T405	#837
0934	5	3	74	69	70	62	211 / 27	0.000	0.8	0405	
0940	5	4								S405A	
0946	5	5								S405B	

COMMENTS:

FID Outside: 78 / 100
H_2S Outside: 0.000

Coordinates
11 S 34 8,836
3,81 1,473

SITE DIAGRAM

34

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRL JMA RCW

LOCATION Chiquita Canyon Landfill CELL #34 L#2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC EG 0160963 SUPPLIER LN PSIG START 1600 PSIG STOP

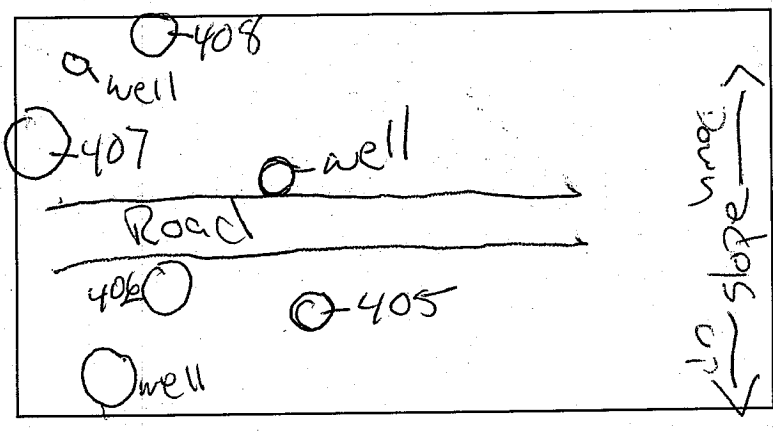
Time	10.14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0916	5	0									
0922	5	1									
0928	5	2								T406	# 626
0934	5	3	59	59	59	61	31 / 37	0.000	0.0	0406	
0940	5	4								S406A	
0946	5	5								S406B	

COMMENTS:

FID Outside: 26 / 32
H_2S Outside: 0.000

Coordinates
11 S 348,843
3,811,474

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL #34 L#3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 0160945 SUPPLIER LIN PSIG START 1600 PSIG STOP

Time	10.07% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
0918	5	0									
↓	5	1									
↓	5	2								T407	# 740
0936	5	3	89	82	73	62	33/29	0.000	1.3	0407	
	5	4								S407A	
0948	5	5								S407B	

COMMENTS:

FID Outside: 35/24
H_2S Outside: 0.000

Coordinates
11 S 34 8,873
3,81 1,478

SITE DIAGRAM

34

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL #3 4 L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP RAIN: Yes ☐ No ☒ Comment ~15-20 mph

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 0160945 SUPPLIER LIN PSIG START 1600 PSIG STOP

Time	10.07% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0918	5	0									
↓	5	1									
↓	5	2								T408	# 805
0936	5	3	79	79	79	63	-0.3/1.2	0.000	1.5	0408	
	5	4								S408A	
0948	5	5								S408B	

COMMENTS:

FID Outside: 9.4 / 8.3

H_2S Outside: 0.000

Coordinates

11 S 340,884

3,811,463

SITE DIAGRAM

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/9/24 SAMPLERS LES TDC JDA RCW

LOCATION Chiquita Canyon Landfill CELL #39 L#1

SURFACE DESCRIPTION Normal Mid-level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 2160963 SUPPLIER LIN PSIG START 1300 PSIG STOP _____

Time	10.14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
1100	5	0						1462			
↓	5	1						0,000	3.2		
↓	5	2								T409	# 631
1118	5	3	96	~~87~~ 90	73		35/27		~~0.2~~ 2	0409	
	5	4						1631		S409A	
1130	5	5						0,014		S409B	

COMMENTS:

FID Outside: 40 / 40

H_2S Outside: 1462 - 0,000 / 1631 - 0,073

Coordinates

11 S 349,021

3,811,398

SITE DIAGRAM

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRL JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 39 L#2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment 15-20 mph

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 01600963 SUPPLIER LIN PSIG START 1300 PSIG STOP

Time	10.14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
1100	5	0									
↓	5	1									
↓	5	2						1462		T416	#714
1118	5	3	108	92	79	73	5509/5100	0.000	1.6	0410	
	5	4						1631 0.000		S410A	
1130	5	5								S410B	

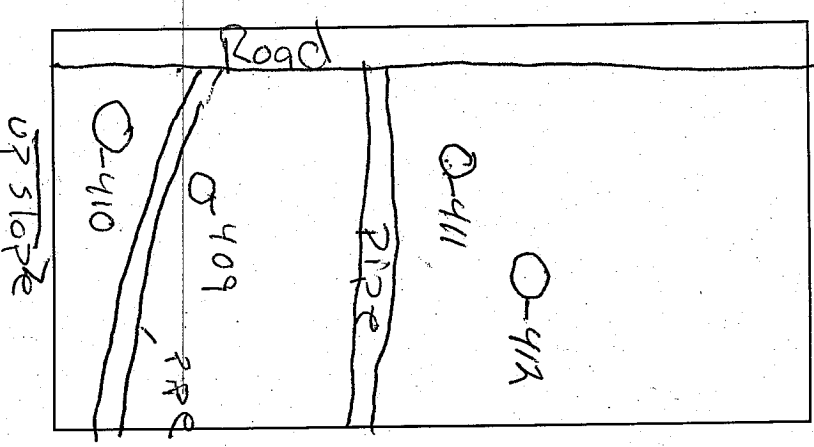
COMMENTS:

FID Outside: 71.1400

H_2S Outside: 0.000 1631-0.021
1462

Coordinates
11 S 349,006
3,811,400

SITE DIAGRAM



39

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL #39 L#3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', 3-7 mph Wind at Seal, mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP CC 160945 SUPPLIER LINDE PSIG START 1300 PSIG STOP

10.07 % He

Time	Sweep Air (L/min)	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He%	Sample Number	Comments
1053	5	0						1631			
1104	5	1						0.000			
1110	5	2								T411	#551
1116	5	3	100	85	77	68	22/24		0.9	0411	
1122	5	4						1462		S411A	
1129	5	5						0.000		S411B	

COMMENTS:

FID Outside: 45 / 37

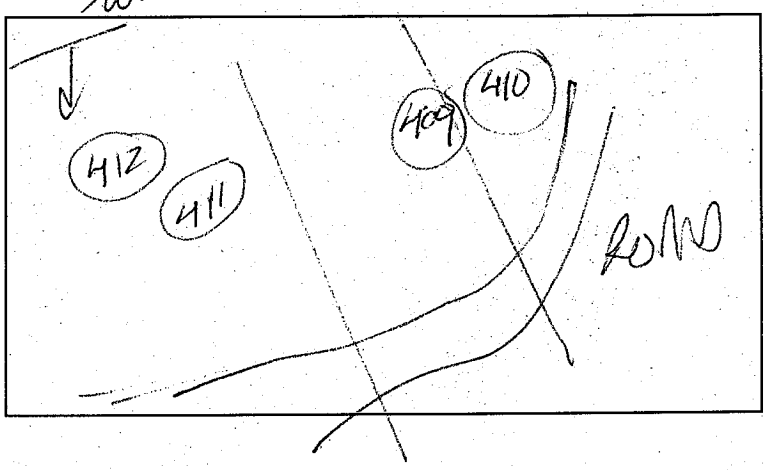
H_2S Outside: 1631 - 0.000 1462 - 0.000

Coordinates

11 S 34 8,975

3,81 1,350

SITE DIAGRAM



39

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill

SURFACE DESCRIPTION COVER

CURRENT ACTIVITY NF

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐
AMBIENT CONCENTRATIONS _____

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL Y CONDENSATION: Yes ☒ No ☐ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', 3-7 mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP/He CC 160941 SUPPLIER AWE PSIG START 1300 PSIG STOP _____

Time	Sweep Air (L/min) 10.07% He	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He %	Sample Number	Comments
1059	5	0						#1631			
1106	5	1						0.000			
1110	5	2								T412	#881
1116	5	3	93	75	82	62	42/36		0.6	0412	
1122	5	4						#1462		S412A	
1128	5	5						0.000		S412B	

COMMENTS:

FID Outside: 112 / 58

H_2S Outside: 1631 - 0.017 1462 - 0.000

Coordinates

11 S 348,969

3,811,378

SITE DIAGRAM

118

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 118 L# 1

SURFACE DESCRIPTION Normal Low-level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP-He CC EB 01 60945 SUPPLIER LIN PSIG START 900 PSIG STOP _____

Time	Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1232	5	0					5 / 4.3	1631			
↓	5	1						0.015			
↓	5	2								T413	# 766
1250	5	3	109	89	79	77			3.9	0413	
	5	4						1462		S413A	
1302	5	5						0.000		S413B	

COMMENTS:

FID Outside: 32 / 22

H_2S Outside: 1631 - 0.027 | 1462 0.000

Coordinates

11 S 348,848

3,810,908

SITE DIAGRAM

118

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/29/24 SAMPLERS CES TRC JDA RCN

LOCATION Chiquita Canyon Landfill Cell #118 L#2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC ES 0160945 SUPPLIER LNDE PSIG START 900 PSIG STOP

Time	Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
1232	5	0						1631			
↓	5	1						0.012			
↓	5	2								T414	# 725
1250	5	3	88	84	80	71	-3/-3		8.0	0414	
	5	4						1462		S414A	
1302	5	5						0.000		S414B	

COMMENTS:

FID Outside: 17/34

H_2S Outside: 1631-0.025 / 1462-0.000

Coordinates

11 S 348,860

3,810,915

SITE DIAGRAM

118

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL#118

SURFACE DESCRIPTION CL

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☒ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 016098 SUPPLIER LINDE PSIG START 1100 PSIG STOP _____

Time	10, 14% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	H_2%		
			Surf	Air	Surf	Air					
1235	5	0						1631			
↓	5	1						0.007			
↓	5	2								T415	#896
1353	5	3	91	75	70	67	15/-3			0415	
	5	4						1462	8.2	S415A	
1305	5	5						0.000		S415B	

COMMENTS:

FID Outside: 150/81

H_2S Outside: 1631-0.021 1462-0.000

Coordinates

11 S 34 8,878

3,81 0,918

SITE DIAGRAM

118

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/19/24 SAMPLERS CZS TRC JDA RCW

LOCATION *Chiquita Canyon Landfill* CELL # L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☒ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB0160963 SUPPLIER LIN PSIG START 1100 PSIG STOP

Time	Sweep Air (L/min) 10.14% He	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He %	Sample Number	Comments
1235	5	0				71		1631		T416	#659
1241	5	1						0.000		O416	
1247	5	2								S416A	
1253	5	3	95	82	74	71	24/22		3.5	S416B	
1259	5	4						1462		T417	#899
1305	5	5						0.000		O417	
										S417A	
										S417B	

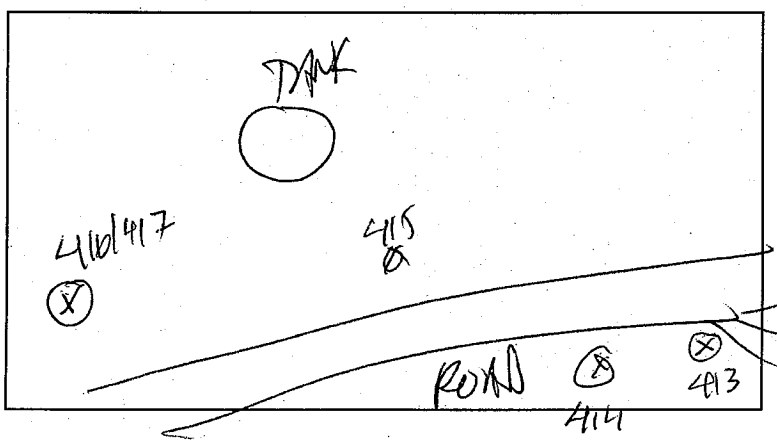
COMMENTS:

FID Outside: 58 / 54
H_2S Outside: 1631 - 0.020 1462 - 0.000

MEDIA BLK
T-418 #552
O418-1358
EB160945 SA-418 & 1402
SB-418

Coordinates
11 S 34 8,885
3,81 0,927

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

174

DATE 11/20/24 SAMPLERS CE TCC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 1 72 L#1

SURFACE DESCRIPTION Reaction Area - Mid-level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP He CC 60945 SUPPLIER LIN PSIG START 5.30 PSIG STOP _____

Time	10.17% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
0747	5	0					/	1631			
	5	1						0.010			
↓	5	2								T-501	#664
0805	5	3	48	48	48	48	-10/-5		6.0	0501	
	5	4						1462		5501A	
0817	5	5								5501B	

COMMENTS:

FID Outside: 2 / -1

H_2S Outside: 1631 → 0.022 1462

Coordinates

11 S 343,352

3,811,517

SITE DIAGRAM

174

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/20/24 SAMPLERS CES TRC JDH RCW

LOCATION Chiquita Canyon Landfill CELL # 174 Lt 2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP He CC EB 0160963 SUPPLIER LIN PSIG START 600 PSIG STOP

Time	Sweep Air (L/min) 10.14% He	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He%	Sample Number	Comments
0750	5	0						1631			
↓	5	1						~~0.022~~			
↓	5	2								T502	# ~~157~~ 716
0808	5	3	54	53	54	50	-14/-11		8.8	0502	
	5	4						1462		S502A	
0820	5	5								S502B	

COMMENTS:

FID Outside: -0.1 / -3

H_2S Outside: 1631 -0.025 ~~1462~~

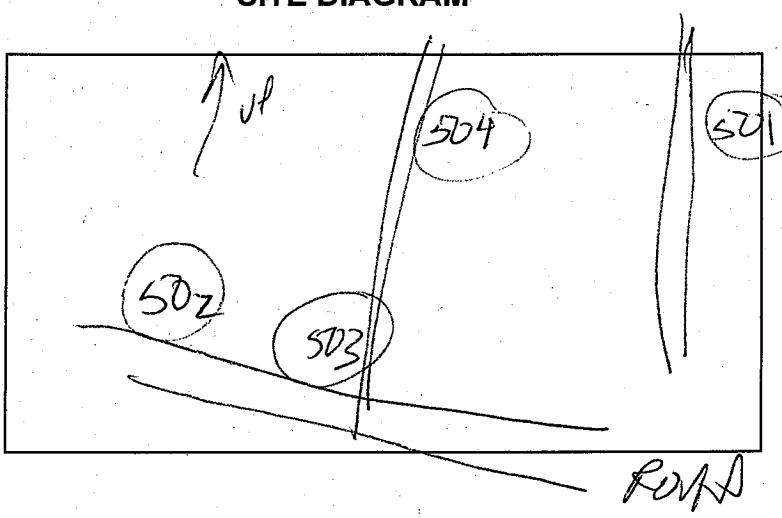
Coordinates

11 S 34 ~~4,328~~ 8330

3,81 ~~1,546~~ 1547

Ambient 4/7ppm

SITE DIAGRAM



174

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/26/24 SAMPLERS CES TRC JDA RCW

LOCATION *Chiquita Canyon Landfill* CELL #174 L#3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. ~~B~~ B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EB 01609~~45~~ 63 SUPPLIER LIN PSIG START 600 PSIG STOP

Time	10.07% He Sweep Air (L/min)	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He%	Sample Number	Comments
0747	5	0						1631			
↓	5	1						0.022			
↓	5	2								T503	# ~~[illegible]~~ 751
0805	5	3	51	51	51	51	-15/-10		8.9	0503	
	5	4						1462		S503A	
0817	5	5								S503B	

COMMENTS:

FID Outside: 15/7
H_2S Outside: 1631 - 0.010 ~~1462~~

Coordinates
11 S 34 ~~8336~~ 8330
3,81 ~~1539~~ 1540

8ppm

SITE DIAGRAM

174

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/20/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 174 L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. ~~B~~ B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He cc EB 0160923 45 SUPPLIER LIN PSIG START 600 500 PSIG STOP

Time (0747)	Sweep Air (L/min) 10.02	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He %	Sample Number	Comments
~~0747~~	5	0						1631			
↓	5	1						0.014			644
↓	5	2								T504	# ~~[illegible]~~
0808	5	3	52	52	52	54	+16/-11		9.1	0504	
	5	4						1462		S504A	
~~0817~~	5	5								S504B	
0817											

COMMENTS:

FID Outside: ~~-3~~ 1-3

H_2S Outside: 1631 → 0.020 ~~1462~~

Coordinates

11 S 34 S, 357

3,81 1,540

Screen level 57 ppm

SITE DIAGRAM

152

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/20/24 SAMPLERS CES TRL JDA RCW

LOCATION Chiquita Canyon Landfill CELL# 152 L# 1

SURFACE DESCRIPTION Reaction Area - Mid-level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC# 0051785 SUPPLIER LIN PSIG START 2000 PSIG STOP _____

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0955	5	0						1631			
↓	5	1									
↓	5	2								T505	#888
1013	5	3	60	62	60	64	0.9 / 1.6	0.004	5.8	0505	
	5	4								S505A	
1025	5	5								S505B	

COMMENTS:

FID Outside: 12/11
H_2S Outside: 1631 - 0.027

Coordinates
11 S 348,579
3,811,653

SITE DIAGRAM

SURFACE FLUX MEASUREMENT DATA FORM

152

DATE 11/20/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 152 L#2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC DT 00612869 SUPPLIER LIN PSIG START 2000 PSIG STOP _____

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0955	5	0						~~1631~~			
↓	5	1						1462			
↓	5	2								T506	# 784
1013	5	3	76	72	67	67	0.5/-1.5	0.000	8.8	0506	
	5	4								S506A	
1025	5	5								S506B	

COMMENTS:

FID Outside: 11 / 9.6

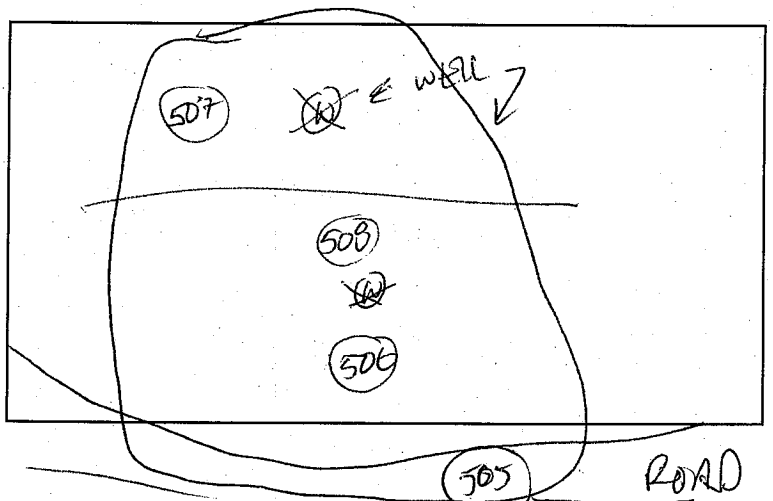
H_2S Outside: ~~1631~~ 1462 - 0.000

Coordinates

11 S 348,596

3,811,660

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

152

DATE 11/20/24 SAMPLERS CES TRL JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 152 L#3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT 0051896 SUPPLIER LN PSIG START 2000 PSIG STOP

Time	10.0 l/m He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1000	5	0						~~1631~~			
1006	5	1						1462			
1012	5	2								T507	~~A~~ 712
1018	5	3	84	82	73	65	-1.5/-1.1	0.000	8.9	0507	
	5	4								S507A	
1030	5	5								S507B	

COMMENTS:

FID Outside: 9.4 / 8.4

H_2S Outside: ~~1631~~ - 0.000
1462

Coordinates
11 S 348,622
3,811,665

SITE DIAGRAM

152

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/20/24 SAMPLERS CES TDC JDA RCW

LOCATION Chiquita Canyon Landfill CELL #152 L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC 8051896 SUPPLIER LN PSIG START 2000 PSIG STOP _____

Time	10.01% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1000	5	0						~~653~~			
↓	5	1						1462			
↓	5	2								T508	# 549
1018	5	3	79	76	71	67	-1 / -1	0.000	8.9	0508	
	5	4								S508A	
1030	5	5								S508B	

COMMENTS:

FID Outside: 10 / -9.5

H_2S Outside: ~~653~~ - 1462 - 0.000

Coordinates

11 S 348,603

3,811,657

SITE DIAGRAM

SURFACE FLUX MEASUREMENT DATA FORM

184

DATE 11/20/24 SAMPLERS LES TRL JDA RCW

LOCATION Chiquita Canyon Landfill CELL # ~~182~~ L#1

SURFACE DESCRIPTION 184 Reaction Area - High

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC EBDT0051735 SUPPLIER LN PSIG START 1800 PSIG STOP _____

Time	Sweep Air (L/min) 9.99% He	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He %	Sample Number	Comments
1130	5	0						1462:			
1142	5	1									
1148	5	2								T509	# 882
1154	5	3	78	73	78	71	11/5.2	0,000	8.2	0509	
1200	5	4								S509A	
1206	5	5								S509B	

COMMENTS:

FID Outside: 65/43

H_2S Outside:

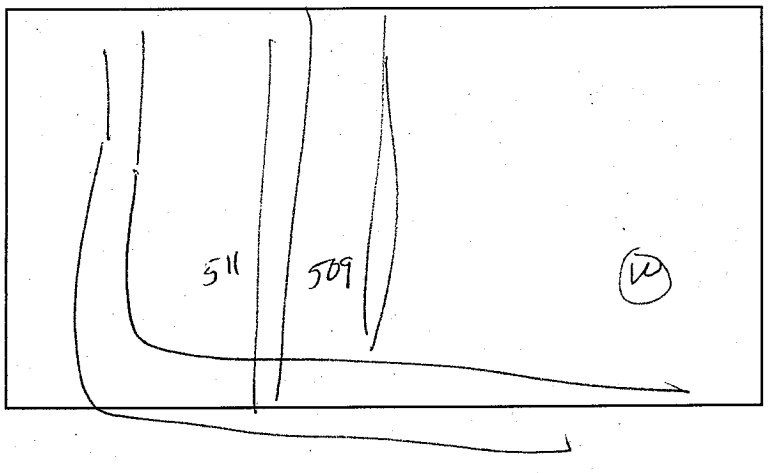
320 FID SCREEN 11/18

Coordinates

11 S 34 9,414

3,81 1,745

SITE DIAGRAM



184

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/20/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL# 184 L#2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. 0 PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC 06051896 SUPPLIER LIN PSIG START 1800 PSIG STOP _____

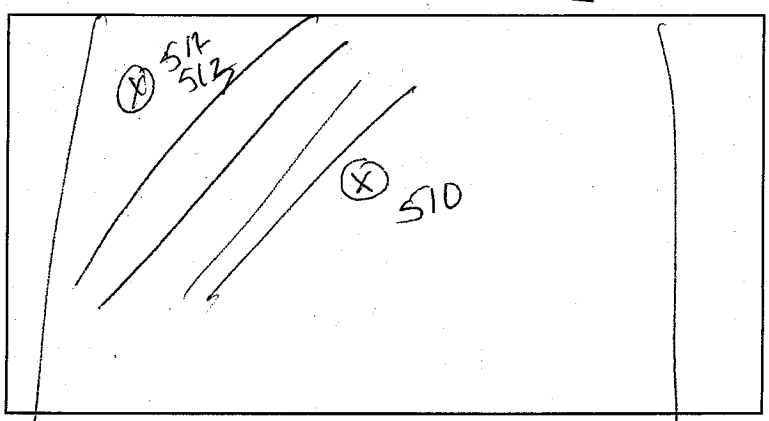
Time	10.01% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
1134	5	0						1462:			
	5	1									
	5	2								T510	~~A~~860
1152	5	3	91	92	85	75	4.1/2.1	0.000	9.1	0510	
	5	4								S510A	
1204	5	5								S510B	

COMMENTS:

FID Outside: 45 / 33
H_2S Outside: 1462: 0.000

Coordinates
11 S 348,427
3,811,763

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

184

DATE 11/20/24 SAMPLERS CES TDC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # ~~187~~ 184 LA3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. 67 PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC DT0051785 SUPPLIER LN PSIG START 1800 PSIG STOP _____

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
1136	5	0						1462	~~He~~		
↓	5	1									
V	5	2								T511	#627
1154	5	3	80	83	80	75	5.3/4.2	0.000	8.1	0511	
	5	4								S511A	
1206	5	5								S511B	

COMMENTS:

FID Outside: 71 / 36
H_2S Outside: 0.000 (1462)
MEDIA BLANK
T514 1245
0514 - 1241 } 9.99% He DT0051785
S514A 1243
S514B 1243
Coordinates
11 S 34 90,409
3,81 1,752

SITE DIAGRAM

SURFACE FLUX MEASUREMENT DATA FORM

184

DATE 11/20/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL# 184 L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT0051096 SUPPLIER LN PSIG START 1800 PSIG STOP

Time	10.01% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He %		
			Surf	Air	Surf	Air					
1134	5	0						1462:		T512	#417
	5	1								0512	
	5	2								S512A	
1152	5	3	90	93	83	76	2.4/1.1	0.000	8.7	S512B	
	5	4								T513	# 781
1204	5	5								0513	
										S513A	
										S513B	

COMMENTS:

FID Outside: 26/23
H_2S Outside: 1462: 0.000

20 FID SCREENS 11/18

Coordinates
11 S 348,427
3,811,711

SITE DIAGRAM

SURFACE FLUX MEASUREMENT DATA FORM

62

DATE 11/21/24 SAMPLERS CES TDC JOA RCW

LOCATION Chiquita Canyon Landfill Cell #62 L#1

SURFACE DESCRIPTION Normal - High Level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP He CC DT 3053785 SUPPLIER LIN PSIG START 1500 PSIG STOP _____

Time	Sweep Air (L/min) 9.99% He	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0731	5	0						1462			
↓	5	1									
↓	5	2								T601	#700
0749	5	3	54	52	54	52	8700/8060	0.000	4.1	0601	
	5	4								S601A	
0801	5	5								S601B	

COMMENTS:

FID Outside: 4000 / 3000
H_2S Outside: 1462 : 0.000

Coordinates
11 S 349,035
3,811,675

SITE DIAGRAM

62

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TRC JDA RCW

LOCATION *Chiquita Canyon Landfill* CELL # 62 L#2

SURFACE DESCRIPTION Normal High Level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT 0051896 SUPPLIER LIN PSIG START 1500 PSIG STOP

Time	10.01% He Sweep Air (L/min)	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He %	Sample Number	Comments
0740	5	0									
↓	5	1								T602	# 673
↓	5	2								O602	
0758	5	3	51	51	51	52	4300/~~884~~	0.000	7.9	S602A	
	5	4					4200			S602B	
0810	5	5									

COMMENTS:

FID Outside: 82/100
H_2S Outside: ~~0.000~~ 0.000

Coordinates
11 S 349,057
3,811,695

SITE DIAGRAM

62

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS LES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 62 L#3

SURFACE DESCRIPTION Normal - High Level

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC DT00078676 SUPPLIER LN PSIG START 1500 PSIG STOP _____

Time	Sweep Air (L/min) 10.01% He	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0740	5	0									
0746	5	1						MG2			
0752	5	2								T603	# 550
0758	5	3	48	47	50	46	2000/2000	0.000	8.2	0603	
~~0804~~	5	4								S603A	
0810	5	5								S603B	

COMMENTS:

FID Outside: 50/50
H_2S Outside: 0.000

Coordinates
11 S 349,055
3,811,725

SITE DIAGRAM

Rock Crusher

Q603 Q602 0 0

Road

S 62 - 2

62

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS GES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL# 62 L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC PJ 0.61785 SUPPLIER ZIN PSIG START 1500 PSIG STOP

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0731	5	0						1462:			
1	5	1									
V	5	2								T604	#738
0749	5	3					12 / 14	0.000	5.1	0604	
	5	4								S604A	
0801	5	5								S604B	

COMMENTS:

FID Outside: 17 / 13

H_2S Outside: 1462: 0.000

Coordinates

11 S 349,036

3,811,682

SITE DIAGRAM

160 HIGHEST LOCATION FOR TEST PROGRAM

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TRC JDA RCW

LOCATION *Chiquita Canyon Landfill* CELL # 160 L#1

SURFACE DESCRIPTION EXCEEDENCE RETEST

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT 0051896 SUPPLIER LIN PSIG START 1000 PSIG STOP

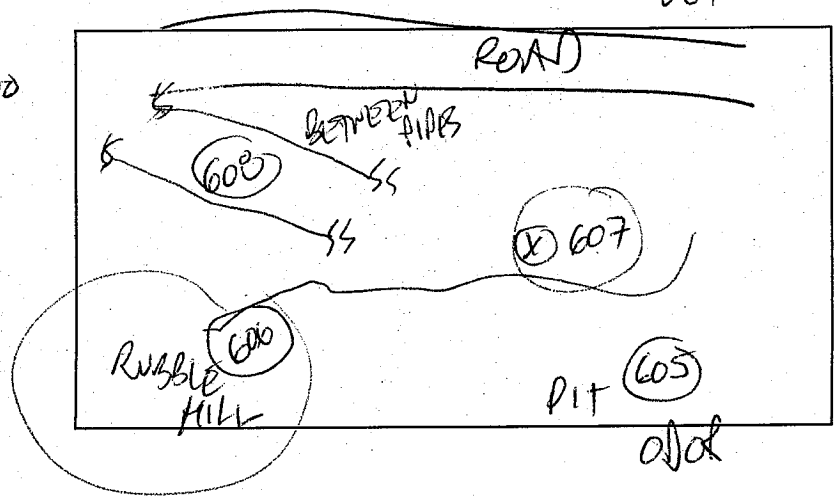
Time	10.01% He Sweep Air (L/min)	Res. Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) FID No Filter/ Filter	H_2S	He%	Sample Number	Comments
0858	5	0						1631:			
↓	5	1					☆	1.6			
↓	5	2								T605	# 892
0916	5	3	71	65	73	61	5.8% / 5.4%		6.5	0605	
	5	4						1462:		S605A	
0928	5	5						0.000		S605B	

COMMENTS:

FID Outside: 2000 / 1000
H_2S Outside: 1631-0.13 1462-0.000

Coordinates
11 S 348,607
3,811,444

SITE DIAGRAM



160

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 160 L#2

SURFACE DESCRIPTION EXCEEDANCE RETEST

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT 0051795 SUPPLIER LN PSIG START 1300 PSIG STOP _____

Time	Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0901	5	0						163:			
↓	5	1						0.019			
↓	5	2								T606	#608
0919	5	3	68	64	70	58	270/220		3.4	0606	
	5	4						162:		S606A	
0931	5	5						0.000		S606B	

COMMENTS:

FID Outside: 100 / 120

H_2S Outside: 163 = 0.073 162 = 0.000

↑

Coordinates

11 S 348,603

3,811,458

SITE DIAGRAM

160

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TRC JDA PCW

LOCATION Chiquita Canyon Landfill CELL# 160 L#3

SURFACE DESCRIPTION Exceedant cell — Retest

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP+He CC 0051896 SUPPLIER LIN PSIG START 1000 PSIG STOP _____

Time	10.01% Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0858	5	0						~~1646~~ 1462			
	5	1						<0.000			
↓	5	2					~~7.2/7.5~~			T607	# 771
0916	5	3	64	61	74	58	7.2/7.5		3.5	0607	
	5	4						1631		S607A	
0928	5	5						0.000		S607B	

COMMENTS:

FID Outside: 13 /13

H_2S Outside: 0.000 1631-0.22

~~1646~~

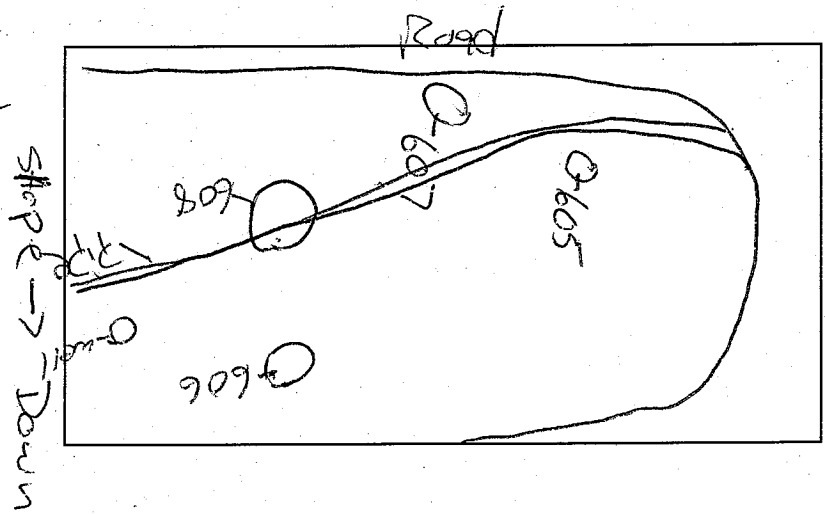
1462

Coordinates

11 S 340,615

3,811,446

SITE DIAGRAM



160

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS LZS TRL JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 160 L#4

SURFACE DESCRIPTION EXCEEDENCE RETEST

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT0051785 SUPPLIER LIN PSIG START 1300 PSIG STOP _____

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
0901	5	0						1631:			
↓	5	1						0.006			
↓	5	2								T608	#531
0919	5	3	70	69	60	60	3.4/6.1		7.6	0608	
	5	4						1462:		S608A	
0931	5	5						0.000		S608B	

COMMENTS:

FID Outside: 14 / 15

H_2S Outside: 1631: 0.037 1462: 0.000

Coordinates

11 S 348,614

3,811,460

SITE DIAGRAM

209

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 209 L# 1

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. G PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP He CC DT 0051785 SUPPLIER LN PSIG START 1000 PSIG STOP _____

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1025	5	0						1631:			
↓	5	1						0.018			
↓	5	2								T609	# 668
1043	5	3	90	85	94	73	-1.3/-1.3			0609	
	5	4						1462:		S609A	
1055	5	5						0.000		S609B	

COMMENTS:

FID Outside: 13 / 12.6

H_2S Outside: 1631: 0.018 1462: 0.000

Coordinates

11 S 348,465

3,811,354

SITE DIAGRAM

209

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TDL JDA RCW

LOCATION Chiquita Canyon Landfill CELL# 209 LF 2

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. B PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT0051896 SUPPLIER LIN PSIG START 1000 PSIG STOP

Time	10.01% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1024	5	0						1631:			
	5	1						0.016			
	5	2								T610	#730
1042	5	3	65	67	65	67	5.2/4.7		2.4	0610	
	5	4						1462:		S610A	
1054	5	5						0.000		S610B	

COMMENTS:

FID Outside: 7.2 / 29

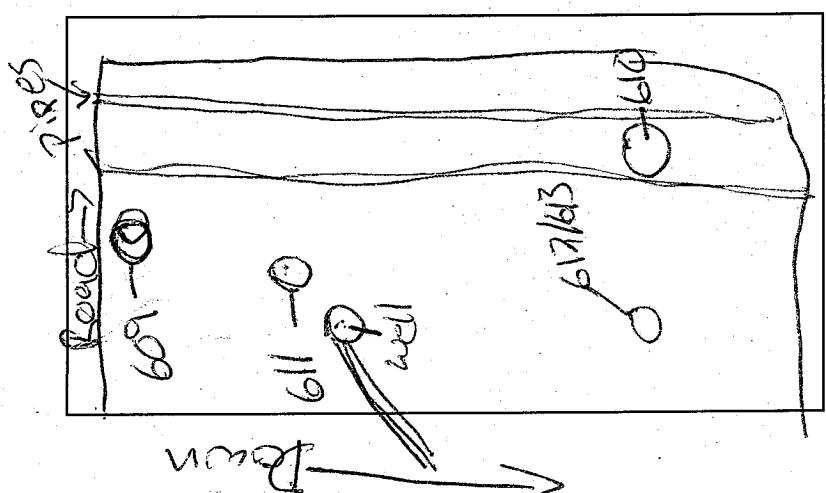
H_2S Outside: 1631: 0.030 / 1462: 0.000

Coordinates

11 S 348,448

3,811,324

SITE DIAGRAM



209

SURFACE FLUX MEASUREMENT DATA FORM

DATE 11/21/24 SAMPLERS CES TDE JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 209 L#3

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. F PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP+He CC DT0051785 SUPPLIER LIN PSIG START 1000 PSIG STOP

Time	9.99% He Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1025	5	0						1631:			
↓	5	1						0.031			
↓	5	2								T611	# 701
1043	5	3	106	78	90	73	-1.5/-1.2		8.4	0611	
	5	4						1462:		S611A	
1055	5	5						0.000		S611B	

COMMENTS:

FID Outside: 7.6 / 7.6

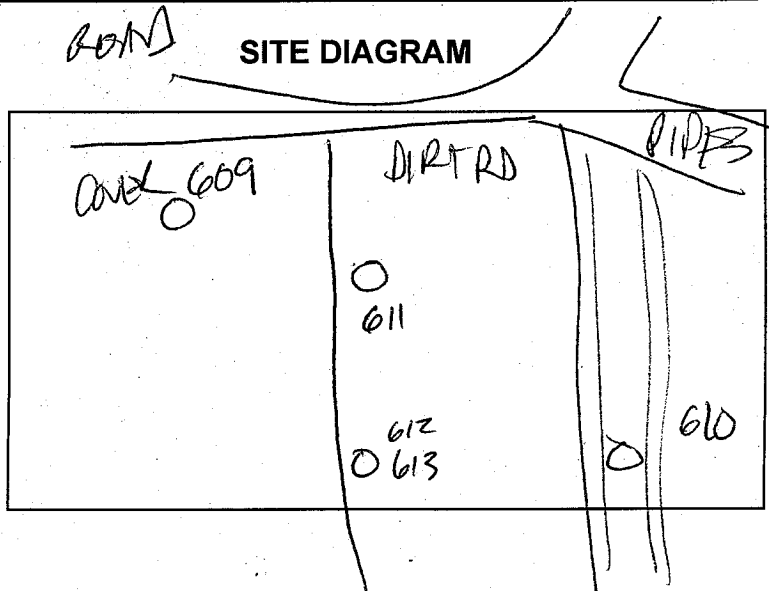
H_2S Outside: 1631: 0.031 1462: 0.000

Coordinates

11 S 348,457

3,811,339

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

209

DATE 11/21/24 SAMPLERS CBS TRC JDA RCW

LOCATION Chiquita Canyon Landfill CELL # 209 L#4

SURFACE DESCRIPTION

CURRENT ACTIVITY

INSTRUMENT TYPE I.D. NO. TYPE ID NO.

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒
AMBIENT CONCENTRATIONS

CHAMBER I.D. D PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UAP/He CC DT 0051896 SUPPLIER LIN PSIG START 1000 PSIG STOP

Time	Sweep Air (L/min)	Res. Number	Temperature (°F)				Real-Time (ppmv)			Sample Number	Comments
			Chamber		Ambient		FID No Filter/ Filter	H_2S	He%		
			Surf	Air	Surf	Air					
1024	5	0						1631:		T612	# 514
↓	5	1						~~0.030~~		0612	
	5	2						0.010		S612A	
1042	5	3	81	80	84	74	-1/-0.4		8.3	S612B	
	5	4						1462		T613	# 694
1054	5	5						0.000		0613	
										S613A	
										S613B	

COMMENTS:

FID Outside: 7.1 / 8.4

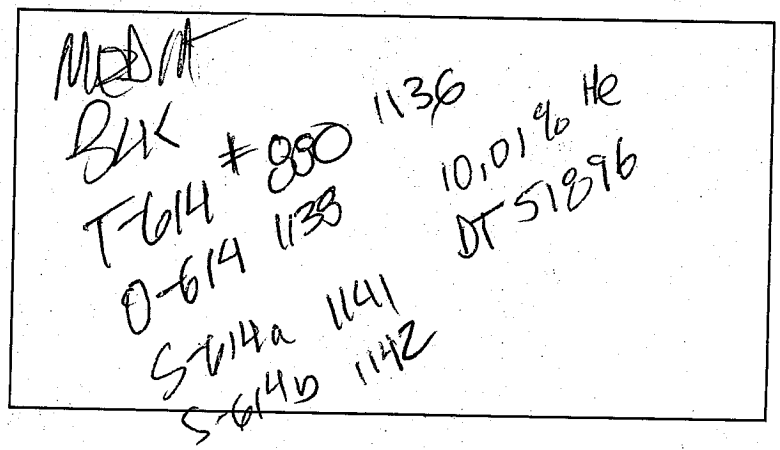
H_2S Outside: 1631: 0.030 1462: 0.000

Coordinates

11 S 348,443

3,811,330

SITE DIAGRAM



CE Schmidt, Ph.D.
Environmental Consultant

ATTACHMENT B

CHAIN OF CUSTODY

19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878

22435 17507

CE Schmidt, Ph. , Environmental Consultant TO- Day 1

Chain of Custody Record

Form Serial Number: CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name: *SCS* / *Chiquita Canyon Landfill*	**Dr. Charles E. Schmidt**
Project Manager: ***Pat Sullivan***	19200 Live Oak Road, Red Bluff, CA 96080
Requested Completion Date	530-529-4256 Cell: 530-200-2473
	E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100*** / ***Long Beach, CA 90806 562-743-7895***

Laboratory Name: *EAS*

Laboratory Address: ***173 Cross Street*** / ***San Luis Obispo, CA 93401***

Laboratory Phone: ***805-781-3585***

Laboratory Contact: ***Dr. Steve Hoyt*** / *stevehoyt@easlab.com*

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 PID (TNMHC)	TO-14 PID (See back)	TO-15 (List on back)	Fixed gases (List on back)	Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/19/2024	851		x	T - 401	636	1		x		x	x	x	x	-29	0	01
	11/19/2024	825		x	T - 402	703	1		x		x	x	x	x	-29	0	02
	11/19/2024	812		x	T - 403	547	1		x		x	x	x	x	-29	0	03
	11/19/2024	824		x	T - 404	789	1		x		x	x	x	x	-29	0	04
	11/19/2024	1020		x	T - 405	331	1		x		x	x	x	x	-29	0	05
	11/19/2024	1006		x	T - 406	826	1		x		x	x	x	x	-29	0	06
	11/19/2024	1005		x	T - 407	720	1		x		x	x	x	x	-29	8	07
	11/19/2024	1019		x	T - 408	888	1		x		x	x	x	x	-29	0	08
	11/19/2024	1145		x	T - 409	631	1		x		x	x	x	x	-29	0	09
	11/19/2024	1159		x	T - 410	714	1		x		x	x	x	x	-29	0	10
	11/19/2024	1151		x	T - 411	551	1		x		x	x	x	x	-29	0	11
	11/19/2024	1206		x	T - 412	891	1		x		x	x	x	x	-29	6	12
	11/19/2024	1337		x	T - 413	766	1		x		x	x	x	x	-29		13
	11/19/2024	1324		x	T - 414	775	1		x		x	x	x	x	-29		14
	11/19/2024	1338		x	T - 415	816	1		x		x	x	x	x	-29		15
	11/19/2024	1334		x	T - 416	654	1		x		x	x	x	x	-29		16
	11/19/2024	1329		x	T - 417	894	1		x		x	x	x	x	-29		17
	11/19/2024			x	T - 418	552	1		x		x	x	x	x	-29		18

Sampler: CE Schmidt	Date/Time: 11/21/24 1209	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1209
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: 11/21/2024 13:5C	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 0	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D1

224435 17807

CE Schmidt, Ph.., Environmental Consultant TO Day 2

Chain of Custody Record

Form Serial Number: CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name: *SCS*	**Dr. Charles E. Schmidt**
Chiquita Canyon Landfill	19200 Live Oak Road, Red Bluff, CA 96080
Project Manager: *Pat Sullivan*	530-529-4256 Cell: 530-200-2473
Requested Completion Date	E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895***

Laboratory Name: *EAS*

Laboratory Address: ***173 Cross Street, San Luis Obispo, CA 93401***

Laboratory Phone: ***805-781-3585***

Laboratory Contact: ***Dr. Steve Hoyt*** *stevehoyt@easlab.com*

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 PID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/20/2024	0850		x	T - 501	604	1		x		x	x	x	x		-19	0	19
	11/20/2024	0837		x	T - 502	716	1		x		x	x	x	x		-29	0	20
	11/20/2024	0852		x	T - 503	751	1		x		x	x	x	x		-29	0	21
	11/20/2024	0842		x	T - 504	645	1		x		x	x	x	x		-29	0	22
	11/20/2024	1055		x	T - 505	883	1		x		x	x	x	x		-29	0	23
	11/20/2024	1071		x	T - 506	654	1		x		x	x	x	x		-29	0	24
	11/20/2024	1056		x	T - 507	711	1		x		x	x	x	x		-29	0	25
	11/20/2024	1040		x	T - 508	549	1		x		x	x	x	x		-29	0	26
	11/20/2024	1220		x	T - 509	882	1		x		x	x	x	x		-5	0	27
	11/20/2024	1218		x	T - 510	660	1		x		x	x	x	x		-29	0	28
	11/20/2024	1231		x	T - 511	627	1		x		x	x	x	x		-29	0	29
	11/20/2024	1241		x	T - 512	407	1		x		x	x	x	x		-29		30
	11/20/2024	1228		x	T - 513	821	1		x		x	x	x	x		-27		31
	11/20/2024	1245		x	T - 514	506	1		x		x	x	x	x		-29	0	32

Sampler: CE Schmidt	Date/Time: 11/21/24 1204	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1200
Recieved by: DRS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: [illegible] 11/21/2024	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

67 of 395

158

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D2

CE Schmidt, Ph., Environmental Consultant

Chain of Custody Record

224435

17807

TO- Day 3

Form Serial Number	CES F1-02106
Client Name	SCS
	Chiquita Canyon Landfill
Project Manager	Pat Sullivan
Requested Completion Date	

For Information Regarding These Samples Please Contact:

Dr. Charles E. Schmidt
19200 Live Oak Road, Red Bluff, CA 96080
530-529-4256 Cell: 530-200-2473
E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: 3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895

Laboratory Name: EAS

Laboratory Address: 173 Cross Street, San Luis Obispo, CA 93401

Laboratory Phone: 805-781-3585

Laboratory Contact: Dr. Steve Hoyt, stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container Vial	Sample Container Can	Sample Container Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/21/2024	810		x	T - 601	700	1		x		x	x	x	x		-29	0	33
	11/21/2024	829		x	T - 602	673	1		x		x	x	x	x		-29	0	34
	11/21/2024	831		x	T - 603	550	1		x		x	x	x	x		-29	0	35
	11/21/2024	818		x	T - 604	738	1		x		x	x	x	x		-29	0	36
	11/21/2024	941		x	T - 605	892	1		x		x	x	x	x		-29	0	37
	11/21/2024	938		x	T - 606	608	1		x		x	x	x	x		-29	0	38
	11/21/2024	952		x	T - 607	771	1		x		x	x	x	x		-29	0	39
	11/21/2024	947		x	T - 608	531	1		x		x	x	x	x		-29	0	40
	11/21/2024	1138		x	T - 609	668	1		x		x	x	x	x		-29		41
	11/21/2024	1111		x	T - 610	730	1		x		x	x	x	x		-29		42
1128	11/21/2024	1125		x	T - 611	701	1		x		x	x	x	x		-29		43
	11/21/2024	1120		x	T - 612	514	1		x		x	x	x	x		-29		44
	11/21/2024	1125		x	T - 613	694	1		x		x	x	x	x		-29		45
	11/21/2024	1136		x	T - 614	880	1		x		x	x	x	x		-29		46

Sampler: CE Schmidt	Date/Time: 11/21/24 1204	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1204
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: [signature] 11/21/2024	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D3

CE Schmidt, PhD, Environmental Consultant — **Odor D1**

Chain of Custody Record

Form Serial Number: **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt**, 19200 Live Oak Road, Red Bluff, CA 96080, 530-529-4256 Cell: 530-200-2473, SCHMIDTCE@aol.com
Client Name: ***SCS Chiquita Canyon Landfill***	Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895***
Project Manager: ***Pat Sullivan***	Laboratory Name: ***Odor Science and Engineering***
Requested Completion Date	Laboratory Address: ***105 Filley Street, Bloomfield, CT 06002***
	Laboratory Phone: ***860-243-9380***
	Laboratory Contact: ***Martha O'Brien***, mobrien911@aol.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: ASTM E-679 Olfactometry	Remarks
	11/19/2024	838		x	O- 401	1	X			X	
	11/19/2024	830		x	O- 402	1	X			X	
	11/19/2024	832		x	O- 403	1	X			X	
	11/19/2024	819		x	O- 404	1	X			X	
	11/19/2024	1013		x	O- 405	1	X			X	
	11/19/2024	1000		x	O- 406	1	X			X	
	11/19/2024	1020		x	O- 407	1	X			X	
	11/19/2024	1014		x	O- 408	1	X			X	
	11/19/2024	1141		x	O- 409	1	X			X	
	11/19/2024	1154		x	O- 410	1	X			X	
	11/19/2024	1147		x	O- 411	1	X			X	
	11/19/2024	1156		x	O- 412	1	X			X	
	11/19/2024	1231		x	O- 413	1	X			X	
	11/19/2024	1320		x	O- 414	1	X			X	
	11/19/2024	1333		x	O- 415	1	X			X	
	11/19/2024	1317		x	O- 416	1	X			X	
BH	11/19/2024	~~1334~~		x	O- 417	1	X			X	
	11/19/2024	1358		x	O- 418	1	X			X	

Sampler: CESchmidt	Date/Time: 11/19/24 1410	Relinquished by: CESchmidt	Date/Time: 11/19/24 1410	HAZWRAP/NEESA Y N	
Recieved by: FEDEX	Date/Time	Relinquished by	Date/Time	QC Level 1 2 3	
Recieved by	Date/Time	Relinquished by	Date/Time	COC	Ice
Recieved by Laboratory: D Brumley	Date/Time: 11/20/24 10:39	Sample Shipped Via: UPS FEDEX BUS Hand Other	Air Bill No.	Ana Req	Temp ***AMB***
Remarks				Cust Seal	pH
				Sample Condition	

File: Odor Forms.xlsb Form: Odor COC D1

CE Schmidt, PhD, Environmental Consultant — **Odor D2**

Chain of Custody Record

Form Serial Number: **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt**, 19200 Live Oak Road, Red Bluff, CA 96080, 530-529-4256 Cell: 530-200-2473, SCHMIDTCE@aol.com
Client Name: ***SCS Chiquita Canyon Landfill***	Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895***
Project Manager: ***Pat Sullivan***	Laboratory Name: ***Odor Science and Engineering***
Requested Completion Date	Laboratory Address: ***105 Filley Street, Bloomfield, CT 06002***
	Laboratory Phone: ***860-243-9380***
	Laboratory Contact: ***Martha O'Brien***, mobrien911@aol.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: ASTM E-679 Olfactometry	Remarks
	11/20/2024	826		x	O- 501	1	X			X	
	11/20/2024	832		x	O- 502	1	X			X	
	11/20/2024	850		x	O- 503	1	X			X	
839	11/20/2024	~~854~~		x	O- 504	1	X			X	
	11/20/2024	1047		x	O- 505	1	X			X	
	11/20/2024	1033		x	O- 506	1	X			X	
	11/20/2024	1049		x	O- 507	1	X			X	
	11/20/2024	1035		x	O- 508	1	X			X	
	11/20/2024	1215		x	O- 509	1	X			X	
	11/20/2024	1200		x	O- 510	1	X			X	
	11/20/2024	1225		x	O- 511	1	X			X	
	11/20/2024	1220		x	O- 512	1	X			X	
	11/20/2024	1230		x	O- 513	1	X			X	
	11/20/2024	1241		x	O- 514	1	X			X	

Sampler: CE SCHMIDT	Date/Time: 11/20/24 1310	Relinquished by: CE SCHMIDT	Date/Time: 11/20/24 1310
Recieved by: FED EX	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: Gary Greenley	Date/Time: 11/21/24 10:44	Sample Shipped Via: UPS FEDEX BUS Hand Other	Air Bill No.
Remarks			

HAZWRAP/NEESA Y N; QC Level 1 2 3; COC; Ice; Ana Req; Temp ***AMB***; Cust Seal; pH; Sample Condition

File: Odor Forms.xlsb Form: Odor COC D2

CE Schmidt, LLnD, Environmental Consultant
Chain of Custody Record

Odor D3

Form Serial Number **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 SCHMIDTCE@aol.com	Client Address and Phone Number ***3900 Kilroy Airport Way, Suite 100*** ***Long Beach, CA 90806 562-743-7895***	Laboratory Name ***Odor Science and Engineering***
Client Name ***SCS*** ***Chiquita Canyon Landfill***		Analysis Requested	Laboratory Address ***105 Filley Street*** ***Bloomfield, CT 06002***
Project Manager ***Pat Sullivan***			Laboratory Phone ***860-243-9380***
Requested Completion Date			Laboratory Contact ***Martha O'Brien*** mobrien911@aol.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container Bag	Can	Tube	ASTM E-679 Olfactometry	Remarks
	11/21/2024	819		x	O- 601	1	X			X	
	11/21/2024	825		x	O- 602	1	X			X	
	11/21/2024	827		x	O- 603	1	X			X	
	11/21/2024	812		x	O- 604	1	X			X	
	11/21/2024	937		x	O- 605	1	X			X	
	11/21/2024	954		x	O- 606	1	X			X	
	11/21/2024	947		x	O- 607	1	X			X	
	11/21/2024	946		x	O- 608	1	X			X	
	11/21/2024	1129		x	O- 609	1	X			X	
	11/21/2024	1101		x	O- 610	1	X			X	
	11/21/2024	1123		x	O- 611	1	X			X	
	11/21/2024	1104		x	O- 612	1	X			X	
	11/21/2024	1112		x	O- 613	1	X			X	
	11/21/2024	1138		x	O- 614	1	X			X	

Sampler: CE Schmidt	Date/Time: 11/21/24 1213	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1213	HAZWRAP/NEESA Y N	
Recieved by: FED EX	Date/Time	Relinquished by	Date/Time	QC Level 1 2 3	
Recieved by	Date/Time	Relinquished by	Date/Time	COC	Ice
				Ana Req	Temp ***AMB***
				Cust Seal	pH
Recieved by Laboratory: Gary Grumley	Date/Time: 11/22/24 12:15	Sample Shipped Via UPS FEDEX BUS Hand Other	Air Bill No.	Sample Condition	
Remarks					

File: Odor Forms.xlsb Form: Odor COC D3

CE Schmidt, PhD, Environmental Consultant 242843 Sulfur L

Chain of Custody Record

Form Serial Number	For Information Regarding These Samples	Client Address and Phone Number	Laboratory Name
CES F1-02106	Please Contact:	***3900 Kilroy Airport Way, Suite 100*** ***Long Beach, CA 90806 562-743-7895***	***Atmospheric Analysis and Consulting***
Client Name: ***SCS*** ***Chiquita Canyon Landfill***	Dr. Charles E. Schmidt 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 SCHMIDTCE@aol.com	Analysis Requested: SCAQMD Method 307-91	Laboratory Address: ***2225 Sperry Avenue*** ***Ventura, CA 93003***
Project Manager: ***Pat Sullivan***			Laboratory Phone: ***805-650-1642***
Requested Completion Date			Laboratory Contact: ***John Yokoyama*** jyokoyama@aaclab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# of Containers	Bag	Can	Tube	SCAQMD Method 307-91	Field H2S (ppmv)	Remarks
67434	11/19/2024	838		x	S- 401 a/b 67435	2	X			X		
67436	11/19/2024	830		x	S- 402 a/b 67437	2	X			X		
67438	11/19/2024	836		x	S- 403 a/b 67439	2	X			X		
67440	11/19/2024	823		x	S- 404 a/b 67441	2	X			X		
67442	11/19/2024	1015		x	S- 405 a/b 67443	2	X			X		
67444	11/19/2024	1002		x	S- 406 a/b 67445	2	X			X		
67446	11/19/2024	1004		x	S- 407 a/b 67447	2	X			X		
67448 67449	11/19/2024	1016		x	S- 408 a/b	2	X			X		
67450 67451	11/19/2024	1145		x	S- 409 a/b	2	X			X		
67452 67453	11/19/2024	1150		x	S- 410 a/b	2	X			X		
67454 67455	11/19/2024	1150		x	S- 411 a/b	2	X			X		
67456 67457	11/19/2024	1202		x	S- 412 a/b	2	X			X		
67458 67459	11/19/2024	1331		x	S- 413 a/b	2	X			X		
67460 67461	11/19/2024	1321		x	S- 414 a/b	2	X			X		
67462 67463	11/19/2024	1337		x	S- 415 a/b	2	X			X		
67464 67465	11/19/2024	1322		x	S- 416 a/b		X			X		
67466 67467	11/19/2024	1323		x	S- 417 a/b		X			X		
HO	11/19/2024	1338		x	S- 418 a/b 67468 67469		X			X		

Sampler: CESchmidt	Date/Time: 11/19/24 1410	Relinquished by: CESchmidt 1410	Date/Time: 11/19/24 1410	HAZWRAP/NEESA Y N	
				QC Level 1 2 3	
Recieved by: [illegible]	Date/Time: 11/19/24 1420	Relinquished by: [illegible]	Date/Time: 11/19/24 1420	COC	Ice
				Ana Req	Temp ***AMB***
Recieved by	Date/Time	Relinquished by	Date/Time	Cust Seal	pH
				Sample Condition	
Recieved by Laboratory	Date/Time: 11/19/24 1532	Sample Shipped Via: UPS FEDEX BUS Hand Other	Air Bill No.		
Remarks					

File: Sulfur Forms.xlsb Form: Sulfur COC D1

CE Schmidt, MD, Environmental Consultant 242862 **Sulfur D**

Chain of Custody Record

Form Serial Number	For Information Regarding These Samples Please Contact:	Client Address and Phone Number	Laboratory Name
CES F1-02106	**Dr. Charles E. Schmidt**	***3900 Kilroy Airport Way, Suite 100***	***Atmospheric Analysis and Consulting***
Client Name	19200 Live Oak Road, Red Bluff, CA 96080	***Long Beach, CA 90806 562-743-7895***	Laboratory Address
SCS	530-529-4256 Cell: 530-200-2473		***2225 Sperry Avenue***
Chiquita Canyon Landfill	SCHMIDTCE@aol.com		***Ventura, CA 93003***
Project Manager			Laboratory Phone
Pat Sullivan			***805-650-1642***
Requested Completion Date			Laboratory Contact
			John Yokoyama
			jyokoyama@aaclab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: SCAQMD Method 307-91	Field H2S (ppmv)	Remarks
	11/20/2024	0854		x	S- 501 a/b 67542 67543	2	X			X		
	11/20/2024	0854		x	S- 502 a/b 67544 67545	2	X			X		
	11/20/2024	0856		x	S- 503 a/b 67546 67547	2	X			X		
	11/20/2024	0858		x	S- 504 a/b 67548 67549	2	X			X		
	11/20/2024	0953		x	S- 505 a/b 67550 67551	2	X			X		
	11/20/2024	1039		x	S- 506 a/b 67552 67553	2	X			X		
	11/20/2024	1034		x	S- 507 a/b 67554 67555	2	X			X		
	11/20/2024	1039		x	S- 508 a/b 67556 67557	2	X			X		
	11/20/2024	1214		x	S- 509 a/b 67558 67559	2	X			X		
	11/20/2024	1216		x	S- 510 a/b 67560 67561	2	X			X		
	11/20/2024	1229		x	S- 511 a/b 67562 67563	2	X			X		
	11/20/2024	1229		x	S- 512 a/b 67564 67565	2	X			X		
	11/20/2024	1238		x	S- 513 a/b 67566 67567	2	X			X		
	11/20/2024	1242		x	S- 514 a/b 67568 67569	2	X			X		

Sampler CE SCHMIDT	Date/Time 11/20/24 1310	Relinquished by CE SCHMIDT	Date/Time 11/20/24 1310	HAZWRAP/NEESA Y N	
Recieved by DELIVERY	Date/Time	Relinquished by	Date/Time 13:50	QC Level 1 2 3	
Recieved by	Date/Time	Relinquished by Tom Lee	Date/Time 11-20-24	COC	Ice
Recieved by Laboratory H	Date/Time 11/20/24 1550	Sample Shipped Via UPS FEDEX BUS Hand Other	Air Bill No.	Ana Req	Temp ***AMB***
				Cust Seal	pH
				Sample Condition	

Remarks

CE Schmidt, PhD, Environmental Consultant 242880 **Sulfur L.**

Chain of Custody Record

Form Serial Number	For Information Regarding These Samples Please Contact:	# OF CONTAINERS	Client Address and Phone Number	Laboratory Name
CES F1-02106	**Dr. Charles E. Schmidt**		***3900 Kilroy Airport Way, Suite 100***	***Atmospheric Analysis and Consulting***
Client Name	19200 Live Oak Road, Red Bluff, CA 96080		***Long Beach, CA 90806 562-743-7895***	Laboratory Address
SCS	530-529-4256 Cell: 530-200-2473		Analysis Requested	***2225 Sperry Avenue***
Chiquita Canyon Landfill	SCHMIDTCE@aol.com		SCAQMD Method 307-91	***Ventura, CA 93003***
Project Manager				Laboratory Phone
Pat Sullivan				***805-650-1642***
Requested Completion Date				Laboratory Contact
				John Yokoyama
				jyokoyama@aaclab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Sample Container: Bag	Can	Tube	SCAQMD Method 307-91	Field H2S (ppmv)	Remarks
	11/21/2024	819		x	S- 601 a/b 67643 67644	2 X			X		
	11/21/2024	825		x	S- 602 a/b 67645 67646	2 X			X		
	11/21/2024	830		x	S- 603 a/b 67647 67648	2 X			X		
	11/21/2024	847		x	S- 604 a/b 67649 67650	2 X			X		
	11/21/2024	910		x	S- 605 a/b 67651 67652	2 X			X		
	11/21/2024	957		x	S- 606 a/b 67653 67654	2 X			X		
	11/21/2024	950		x	S- 607 a/b 67655 67656	2 X			X		
	11/21/2024	940		x	S- 608 a/b 67657 67658	2 X			X		
	11/21/2024	1137		x	S- 609 a/b 67659 67660	2 X			X		
	11/21/2024	1106		x	S- 610 a/b 67661 67662	2 X			X		
	11/21/2024	1125		x	S- 611 a/b 67663 67664	2 X			X		
	11/21/2024	1118		x	S- 612 a/b 67665 67666	2 X			X		
	11/21/2024	1118		x	S- 613 a/b 67667 67668	2 X			X		
	11/21/2024	1141		x	S- 614 a/b 67669 67670	2 X			X		

Sampler	Date/Time	Relinquished by	Date/Time	HAZWRAP/NEESA Y N
C SCHMIDT	11/21/24 1202	C SCHMIDT	11/21/24 1202	QC Level 1 2 3
Recieved by DELIVERED TO	Date/Time	Relinquished by	Date/Time	COC / Ice
Recieved by	Date/Time	Relinquished by	Date/Time 11/21/24 1314	Ana Req / Temp ***AMB***
				Cust Seal / pH
Recieved by Laboratory	Date/Time	Sample Shipped Via UPS FEDEX BUS Hand Other	Air Bill No.	Sample Condition

Remarks

File: Sulfur Forms.xlsb Form: Sulfur COC D3

CE Schmidt, Ph.D.
Environmental Consultant

ATTACHMENT C

LABORATORY REPORTS

19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878

Odor Science & Engineering, Inc.
105 Filley Street, Bloomfield, CT 06002
(860) 243-9380 Fax: (860) 243-9431
www.odorscience.com

November 26, 2024

Chuck E. Schmidt schmidtce@aol.com
19200 Live Oak Road
Red Bluff, CA 96080

RE: Odor Panel Analysis
OS&E Project No. 2458-M-00
Project Name: SCS-Chiquita Canyon Landfill

Dear Chuck:

This letter presents the results of the recent odor panel analyses conducted by Odor Science & Engineering, Inc. (OS&E) for your continued work with SCS Engineering at Chiquita Canyon Landfill. A total of forty-six (46) samples were collected over three separate days (November 19th -21st, 2024). The odor samples were collected into 12 liter Tedlar gas sampling bags provided by OS&E. Immediately following sample collection each day, the bags were shipped under chain of custody via priority overnight delivery service to OS&E's Olfactory Laboratory in Bloomfield, CT for sensory analysis. On days 1 and 3 all samples arrived the following morning as scheduled. On day 2 samples 0-513 & 0-514 were delayed (due to a FedEx shipping issue). These samples were analyzed upon arrival.

Upon arrival the samples were analyzed by dynamic dilution olfactometry using a trained and screened odor panel. The odor panelists were chosen from OS&E's pool of panelists from the Greater Hartford area who actively participate in ongoing olfactory research and represent an average to above average sensitivity when compared to a large population. The samples were quantified in terms of dilution-to-threshold (D/T) ratio and odor intensity in accordance with ASTM Methods E-679-04 and E-544-10, respectively. The odor panelists were also asked to describe the odor character of the samples at varying dilution levels. The odor panel methodology is further described in Attachment A.

The results of the odor panel testing are presented in the attached Tables 1, 2 and 3.

We appreciate the opportunity to assist you on this project. Please feel free to call Martha O'Brien or me if you have any questions concerning these results.

Sincerely,
ODOR SCIENCE & ENGINEERING, INC.

Gary K. Grumley
Associate Scientist

Table 1. Results of dynamic dilution olfactometry analysis – Day 1 - November 20th, 2024
Chuck E. Schmidt: SCS-Chiquita Canyon Landfill
OS&E Project No. 2488-M-00

Sampling Information			Odor Conc. D/T[1]	Stevens' Law Constants[2]		Odor Character[3]
Date	Time	ID		a	b	
Day 1						
11/19/24	08:38	0-401	3,894	.59	.74	sour, sulfur, landfill gas, sewage, rotten cabbage
11/19/24	08:30	0-402	30	.47	.80	sour, sulfur, raw sewage, stagnant water, sour milk, plastic
11/19/24	08:32	0-403	89	.45	.66	sour, sulfur, rotten eggs, sewage, H_2S, stove gas
11/19/24	08:19	0-404	27	.59	.75	sour, menthol, pine, eucalyptus, Vick's vapor rub, crude oil, musty sharp, plastic
11/19/24	10:13	0-405	45	.56	.71	sour, rotten eggs, sulfur, sewage, stove gas
11/19/24	10:00	0-406	69	.51	.65	sour, sulfur, rotten eggs, sewage, H_2S, stove gas
11/19/24	10:00	0-407	38	.47	.73	sour, sulfur, sewage, rotten, gassy, stagnant water, landfill gas, earthy, chemical
11/19/24	10:14	0-408	35	.51	.71	sour, sewage, sulfur, stove gas, rotten garbage, rancid, feces, dirty water, plastic
11/19/24	11:41	0-409*	25	.51	.78	sour, medicated cough drops, menthol, pine fragrance, earthy, rotten, musty, plastic
11/19/24	11:54	0-410*	12	--	--	stale, plastic, exhaust
11/19/24	11:47	0-411	21	.39	.88	sour, rotten sewage, sulfur, earthy, musty, stagnant water, plastic
11/19/24	11:56	0-412	19	.43	.88	sour, menthol, earthy, musty, dirt, plastic, chalky, exhaust
11/19/24	13:31	0-413	17	.47	.88	sour, menthol, pine, rotten sludge, sewage, rotten eggs, wet newspaper, rubber, musty
11/19/24	13:20	0-414*	10	--	--	earthy, stale, plastic, exhaust
11/19/24	13:33	0-415	11	--	--	sour, musty, earthy, swampy, stale, plastic, exhaust
11/19/24	13:17	0-416*	23	.55	.76	sour, menthol, pine, earthy, rotten, plastic
11/19/24	13:14	0-417	12	--	--	sour, earthy, musty, stale, plastic, exhaust
11/19/24	13:58	0-418	13	--	--	sour, sulfur, rotten, menthol, earthy, dirt, plastic, exhaust

1. D/T = dilutions-to-threshold
2. Stevens' Law correlates odor concentration (C) and odor intensity (I): $I = aC^b$. The constants a and b were determined by regression analysis based on the intensity ratings of the odor panel at varying dilution levels. I = 0-8 (based on the n-butanol intensity scale), C = odor concentration (D/T) typical of ambient odor levels.
3. Summary of all odor character descriptors used by the odor panelists at varying dilution levels.

-- Sample too low for Dose Response calculation

* Sample arrived with low sample volume

Odor Science & Engineering, Inc. 105 Filley Street Bloomfield, CT 06002
Phone (860) 243-9380 Fax (860) 243-9431 www.odorscience.com

Table 2. Results of dynamic dilution olfactometry analysis – Day 2 - November 21st& 22nd, 2024
Chuck E. Schmidt: SCS-Chiquita Canyon Landfill
OS&E Project No. 2458-M-00

Sampling Information			Odor Conc. D/T[1]	Stevens' Law Constants[2]		Odor Character[3]
Date	Time	ID		a	b	
Day 2						
11/20/24	08:26	0-501	45	.59	.76	sour, musty, earthy, rotting fruit, garbage, wet cardboard, chemical, stale, plastic
11/20/24	08:32	0-502	82	.45	.67	sour, musty, oily, stove gas, sewage, sulfur, oniony, garlic, mercaptan, gear oil, tinny
11/20/24	08:38	0-503	10	--	--	sour, musty, earthy, oily, rotten fruit, cardboard, plastic, exhaust
11/20/24	08:39	0-504	9	--	--	sour, menthol, stale, plastic, vegetation, exhaust
11/20/24	10:47	0-505	12	--	--	sour, sweet, fermented fruit, menthol, medicinal, oily, chemical, earthy, plastic, exhaust
11/20/24	10:33	0-506	19	.43	.95	sour, wet cardboard, musty, rotten cabbage, cat litter box, vegetation, plastic, exhaust
11/20/24	10:49	0-507	9	--	--	sour, vegetation, stale, plastic, exhaust
11/20/24	10:35	0-508	12	--	--	sour, menthol, glue, vegetation, stale, musty, plastic, exhaust
11/20/24	12:15	0-509	11	--	--	sour, cardboard, stale, musty, plastic, exhaust
11/20/24	12:00	0-510	11	--	--	sour, sewage, vegetation, earthy, rotten, musty, stale, plastic
11/20/24	12:25	0-511	25	.62	.71	sour, rotten, fermenting fruit, garbage, wet cardboard, stale, moldy, musty, earthy, dirt
11/20/24	12:20	0-512	17	.47	.88	sour, rotten vegetation, sewage, swampy, rotten cabbage, sulfur, feces, wet cardboard, musty, plastic
11/20/24	12:30	0-513	13**	--	--	sour, chemical, swampy, menthol, sulfur, sludgy, wet carboard, plastic, musty
11/20/24	12:41	0-514	9**	--	--	sour, stale, earthy, swampy, wet cardboard, musty, plastic, exhaust

1. D/T = dilutions-to-threshold
2. Stevens' Law correlates odor concentration (C) and odor intensity (I): $I = aC^b$. The constants a and b were determined by regression analysis based on the intensity ratings of the odor panel at varying dilution levels. I = 0-8 (based on the n-butanol intensity scale), C = odor concentration (D/T) typical of ambient odor levels.
3. Summary of all odor character descriptors used by the odor panelists at varying dilution levels.

-- Sample too low for Dose Response calculation

** Samples analyzed over 24 hour hold time due to shipping delay

Table 3. Results of dynamic dilution olfactometry analysis – Day 3 - November 22nd, 2024
Chuck E. Schmidt: SCS-Chiquita Canyon Landfill
OS&E Project No. 2458-M-00

Sampling Information			Odor Conc. D/T[1]	Stevens' Law Constants[2]		Odor Character[3]
Date	Time	ID		a	b	
Day 3						
11/21/24	08:19	0-601	163	.59	.77	sour, kerosine, insecticide, pine, menthol, stove gas, rotten eggs, sewage, sausage
11/21/24	08:25	0-602	9	--	--	sour, cardboard, musty, rotten, urine, fecal, garbage, earthy, exhaust
11/21/24	08:27	0-603	15	--	--	sour, garbage, eucalyptus, menthol, glue, earthy, musty, wet cardboard, plastic
11/21/24	08:12	0-604	8	--	--	earthy, musty, plastic, exhaust
11/21/24	09:37	0-605	2,885	.54	.72	sour, rotten sludge, H_2S, garbage, feces, rotten eggs, sewage, stove gas, rancid, rotten compost
11/21/24	09:54	0-606	49	.64	.80	sour, sulfur, rotten eggs, stove gas, sewage, feces, rotten, fecal
11/21/24	09:47	0-607	115	.56	.67	sour, rotten, fecal, sludge, stove gas, sewage, raw onions, garbage, rotten pine, kerosene
11/21/24	09:46	0-608	11	--	--	sour, sewage, garbage, stove gas, sulfur, H_2S, stale, cardboard, earthy, plastic, exhaust
11/21/24	11:27	0-609	15	--	--	sour, rotten, earthy, swampy, sulfur, feces, mercaptan, cardboard, plastic, exhaust
11/21/24	11:01	0-610	75	.45	.78	sour, rotten, fecal, manure, sewage, stove gas, stagnant dirty water, musty,
11/21/24	11:23	0-611	58	.57	.66	sour, rotten sludge, fecal, sewage, sulfur, stove gas, musty
11/21/24	11:04	0-612	11	--	--	sour, sewage, sulfur, swampy, earthy, vegetation, cardboard, plastic, exhaust
11/21/24	11:12	0-613	10	--	--	sour, earthy, swampy, musty, stagnant water, vegetation, plastic, exhaust
11/21/24	11:38	0-614	9	--	--	sour, plastic, musty, exhaust

1. D/T = dilutions-to-threshold
2. Stevens' Law correlates odor concentration (C) and odor intensity (I): $I = aC^b$. The constants a and b were determined by regression analysis based on the intensity ratings of the odor panel at varying dilution levels. I = 0-8 (based on the n-butanol intensity scale), C = odor concentration (D/T) typical of ambient odor levels.
3. Summary of all odor character descriptors used by the odor panelists at varying dilution levels.

-- Sample too low for Dose Response calculation

CE Schmidt, PhD, Environmental Consultant — **Odor D1**

Chain of Custody Record

Form Serial Number: **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt**, 19200 Live Oak Road, Red Bluff, CA 96080, 530-529-4256 Cell: 530-200-2473, SCHMIDTCE@aol.com
Client Name: ***SCS Chiquita Canyon Landfill***	Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895***
Project Manager: ***Pat Sullivan***	Laboratory Name: ***Odor Science and Engineering***
Requested Completion Date	Laboratory Address: ***105 Filley Street, Bloomfield, CT 06002***
	Laboratory Phone: ***860-243-9380***
	Laboratory Contact: ***Martha O'Brien***, mobrien911@aol.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: ASTM E-679 Olfactometry	Remarks
	11/19/2024	838		x	O- 401	1	X			X	
	11/19/2024	830		x	O- 402	1	X			X	
	11/19/2024	832		x	O- 403	1	X			X	
	11/19/2024	819		x	O- 404	1	X			X	
	11/19/2024	1013		x	O- 405	1	X			X	
	11/19/2024	1000		x	O- 406	1	X			X	
	11/19/2024	1020		x	O- 407	1	X			X	
	11/19/2024	1014		x	O- 408	1	X			X	
	11/19/2024	1141		x	O- 409	1	X			X	
	11/19/2024	1154		x	O- 410	1	X			X	
	11/19/2024	1147		x	O- 411	1	X			X	
	11/19/2024	1156		x	O- 412	1	X			X	
	11/19/2024	1231		x	O- 413	1	X			X	
	11/19/2024	1320		x	O- 414	1	X			X	
	11/19/2024	1333		x	O- 415	1	X			X	
	11/19/2024	1317		x	O- 416	1	X			X	
BH	11/19/2024	~~1334~~		x	O- 417	1	X			X	
	11/19/2024	1358		x	O- 418	1	X			X	

Sampler: CESchmidt	Date/Time: 11/19/24 1410	Relinquished by: CESchmidt	Date/Time: 11/19/24 1410	HAZWRAP/NEESA Y N	
Recieved by: FEDEX	Date/Time	Relinquished by	Date/Time	QC Level 1 2 3	
Recieved by	Date/Time	Relinquished by	Date/Time	COC	Ice
Recieved by Laboratory: D Brumley	Date/Time: 11/20/24 10:39	Sample Shipped Via: UPS FEDEX BUS Hand Other	Air Bill No.	Ana Req	Temp ***AMB***
Remarks				Cust Seal	pH
				Sample Condition	

File: Odor Forms.xlsb Form: Odor COC D1

CE Schmidt, PhD, Environmental Consultant — **Odor D2**

Chain of Custody Record

Form Serial Number: **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt**, 19200 Live Oak Road, Red Bluff, CA 96080, 530-529-4256 Cell: 530-200-2473, SCHMIDTCE@aol.com
Client Name: ***SCS Chiquita Canyon Landfill***	Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895***
Project Manager: ***Pat Sullivan***	Laboratory Name: ***Odor Science and Engineering***
Requested Completion Date	Laboratory Address: ***105 Filley Street, Bloomfield, CT 06002***
	Laboratory Phone: ***860-243-9380***
	Laboratory Contact: ***Martha O'Brien***, mobrien911@aol.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: ASTM E-679 Olfactometry	Remarks
	11/20/2024	826		x	O- 501	1	X			X	
	11/20/2024	832		x	O- 502	1	X			X	
	11/20/2024	830		x	O- 503	1	X			X	
829	11/20/2024	854		x	O- 504	1	X			X	
	11/20/2024	1047		x	O- 505	1	X			X	
	11/20/2024	1033		x	O- 506	1	X			X	
	11/20/2024	1049		x	O- 507	1	X			X	
	11/20/2024	1035		x	O- 508	1	X			X	
	11/20/2024	1215		x	O- 509	1	X			X	
	11/20/2024	1200		x	O- 510	1	X			X	
	11/20/2024	1225		x	O- 511	1	X			X	
	11/20/2024	1220		x	O- 512	1	X			X	
	11/20/2024	1230		x	O- 513	1	X			X	
	11/20/2024	1247		x	O- 514	1	X			X	

Sampler: CESCHMIDT	Date/Time: 11/20/24 1310	Relinquished by: CESCHMIDT	Date/Time: 11/20/24 1310
Recieved by: FED EX	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: Gary Greenley	Date/Time: 11/21/24 10:44	Sample Shipped Via: UPS FEDEX BUS Hand Other	Air Bill No.
Remarks			

HAZWRAP/NEESA Y N; QC Level 1 2 3; COC; Ice; Ana Req; Temp ***AMB***; Cust Seal; pH; Sample Condition

File: Odor Forms.xlsb Form: Odor COC D2

CE Schmidt, PhD, Environmental Consultant — **Odor D.**

Chain of Custody Record

Form Serial Number: **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt**, 19200 Live Oak Road, Red Bluff, CA 96080, 530-529-4256 Cell: 530-200-2473, SCHMIDTCE@aol.com
Client Name: ***SCS Chiquita Canyon Landfill***	Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895***
Project Manager: ***Pat Sullivan***	Laboratory Name: ***Odor Science and Engineering***
Requested Completion Date	Laboratory Address: ***105 Filley Street, Bloomfield, CT 06002***
	Laboratory Phone: ***860-243-9380***
	Laboratory Contact: ***Martha O'Brien***, mobrien911@aol.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: ASTM E-679 Olfactometry	Remarks
	11/21/2024	854		x	O- 601	1	X			X	
	11/21/2024	825		x	O- 602	1	X			X	
	11/21/2024	847		x	O- 603	1	X			X	
	11/21/2024	812		x	O- 604	1	X			X	
	11/21/2024	937		x	O- 605	1	X			X	
	11/21/2024	954		x	O- 606	1	X			X	
	11/21/2024	1115		x	O- 607	1	X			X	
	11/21/2024	1146		x	O- 608	1	X			X	
	11/21/2024	1129		x	O- 609	1	X			X	
	11/21/2024	1101		x	O- 610	1	X			X	
	11/21/2024	1123		x	O- 611	1	X			X	
	11/21/2024	1104		x	O- 612	1	X			X	
	11/21/2024	1112		x	O- 613	1	X			X	
	11/21/2024	1133		x	O- 614	1	X			X	

Sampler: CE Schmidt	Date/Time: 11/21/24 1213	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1617	HAZWRAP/NEESA Y N	
Recieved by: FEDEX	Date/Time	Relinquished by	Date/Time	QC Level 1 2 3	
Recieved by	Date/Time	Relinquished by	Date/Time	COC	Ice
Recieved by Laboratory: Barry Brumley	Date/Time: 11/22/24 12:15	Sample Shipped Via: UPS FEDEX BUS Hand Other	Air Bill No.	Ana Req	Temp ***AMB***
Remarks				Cust Seal	pH
				Sample Condition	

File: Odor Forms.xlsb Form: Odor COC D3

ATTACHMENT A
Odor Science & Engineering, Inc.
Odor Panel Methodology

Measurement of Odor Levels by Dynamic Dilution Olfactometry
Odor concentration is defined as the dilution of an odor sample with odor-free air, at which only a specified percent of an odor panel, typically 50%, will detect the odor. This point represents odor threshold and is expressed in terms of "dilutions-to-threshold" (D/T).

Odor concentration was determined by means of OS&E's forced choice dynamic dilution olfactometer. The members of the panel who have been screened for their olfactory sensitivity and their ability to match odor intensities, have participated in on-going olfactory research at OS&E for a number of years.

In olfactometry, known dilutions of the odor sample were prepared by mixing a stream of odor-free air with a stream of the odor sample. The odor-free air is generated in-situ by passing the air from a compressor pump through a bed of activated charcoal and a potassium permanganate medium for purification. A portion of the odor free air is diverted into two sniff ports for direct presentation to a panelist who compares them with the diluted odor sample.

Another portion of the odor-free air is mixed in a known ratio with the odor from the sample bag and is then introduced into the third sniff port. A panelist is thus presented with three identical sniff ports, two of which provide a stream of odor-free air and the third one a known dilution of the odor sample. Unaware of which is which, the panelist is asked to identify the sniff port which is different from the other two, i.e., which contains the odor. The flow rate at all three nose cups is maintained at 3 liters per minute.

The analysis starts at high odor dilutions. Odor concentration in each subsequent evaluation is increased by a factor of 2. Initially a panelist is unlikely to correctly identify the sniff port which contains an odor. As the concentration increases, the likelihood of error is reduced and at one point the response at every subsequently higher concentration becomes consistently correct. The lowest odor concentration at which this consistency is first noticed, represents the **detection odor threshold** for that panelist.

As the odor concentration is increased further in the subsequent steps, the panelist becomes aware of the odor character, i.e. becomes able to differentiate the analyzed odor from other odors. The lowest odor concentration at which odor differentiation first becomes possible, represent the **recognition odor threshold** for the panelist. Essentially all of OS&E's work is done with recognition odor threshold. By definition the threshold odor is equal to 1 D/T (i.e. the volume of odorous air after dilution divided by the volume before dilution equals one).

The panelists typically arrive at threshold values at different concentrations. To interpret the data statistically, the geometric mean of the individual panelist's thresholds is calculated.

The olfactometer and the odor presentation procedure meet the recommendations of ASTM Standard Practice for Determination of Odor and Taste Thresholds by a Forced-Choice Ascending Concentration Series of Limits (ASTM E679-04). The analysis was carried out in the OS&E Olfactory Laboratory in Bloomfield, Connecticut.

Odor Intensity

Odor intensity is determined using reference sample method with n-butanol as the reference compound (ASTM Method E-544-10). The n-butanol odor intensity scale is based on n-butanol vapor as odorant at eight concentrations. The concentration increases by a factor of two at each intensity step, starting with approximately 15 ppm at step 1.

Odors of widely different types can be compared on that scale just like the intensities of the lights of different colors can be compared to the intensity of standard, e.g. white light. Odor character and hedonic tone are ignored in that comparison. Odor intensities are routinely measured as part of the dynamic dilution olfactometry measurements. The n-butanol vapor samples are presented to the panelists in closed jars containing the standard solutions of n-butanol in distilled water. The vapor pressure above the butanol solutions corresponds to the steps on the n-butanol scale. To observe the odor intensity, a panelist opens the jar and sniffs the air above the liquid. The panelist then closes the jar so that the equilibrium vapor pressure of butanol can be re-established before the next panelist uses the jar. The odor in the jar is compared with unknown odor present at the olfactometer sniff port.

The relationship between odor concentration and intensity can be expressed as a psychophysical power function also known as Steven's law (Dose-Response Function). The function is of the form:

$$I = aC^b$$

where:

I = odor intensity on the butanol scale
C = the odor level in dilution-to-threshold ratio (D/T)
a,b = constants specific for each odor

The major significance of the dose-response function in odor control work is that it determines the rate at which odor intensity decreases as the odor concentration is reduced (either by atmospheric dispersion or by an odor control device).

Odor emissions are used as input to an odor dispersion model, which predicts odor impacts downwind under a variety of meteorological conditions. Whether or not an odor is judged objectionable depends primarily in its intensity. The dose-response constants are used to convert predicted ambient odor concentration to intensity levels. OS&E experience has shown that odors are almost universally considered objectionable when their intensity is 3 or higher on the 8-point n-butanol scale. In general, the lower the intensity, the lower the probability of complaints.

Odor Character Description

Odor character refers to our ability to recognize the similarity of odors. It allows us to distinguish odors of different substances on the basis of experience. We use three types of descriptors, general such as “sweet”, “pungent”, “acrid”, etc. or specific references to its source such as “orange”, “skunk”, “paint”, “sewage”, etc., or to a specific chemical, e.g. “methyl mercaptan”, “butyric acid”, or “cyclohexane”. In the course of the dynamic dilution olfactometry measurements, the odor panelists are asked to describe the character of the odors they detect.

Atmospheric Analysis & Consulting, Inc.

CLIENT : Environmental Management Consulting
PROJECT NAME : SCS Chiquita Canyon Landfill
PROJECT NUMBER : CES-F1-02106
AAC PROJECT NO. : 242843
REPORT DATE : 12/02/2024

On November 19th 2024, Atmospheric Analysis & Consulting, Inc. received thirty-five (35) Tedlar Bags for Total Reduced Sulfur analysis by SCAQMD 307.91. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.	Client ID	Lab No.	Client ID	Lab No.
S- 401 a	242843-67434	S- 407 a	242843-67446	S- 413 a	242843-67458
S- 401 b	242843-67435	S- 407 b	242843-67447	S- 413 b	242843-67459
S- 402 a	242843-67436	S- 408 a	242843-67448	S- 414 a	242843-67460
S- 402 b	242843-67437	S- 408 b	242843-67449	S- 414 b	242843-67461
S- 403 a	242843-67438	S- 409 a	242843-67450	S- 415 a	242843-67462
S- 403 b	242843-67439	S- 409 b	242843-67451	S- 415 b	242843-67463
S- 404 a	242843-67440	S- 410 a	242843-67452	S- 416 a	242843-67464
S- 404 b	242843-67441	S- 410 b	242843-67453	S- 416 b	242843-67465
S- 405 a	242843-67442	S- 411 a	242843-67454	S- 417 a	242843-67466
S- 405 b	242843-67443	S- 411 b	242843-67455	S- 417 b	242843-67467
S- 406 a	242843-67444	S- 412 a	242843-67456	S- 418 a	242843-67468
S- 406 b	242843-67445	S- 412 b	242843-67457	S- 418 b	242843-67469

This analysis is performed in accordance with AAC's Quality Manual. Test results apply to the sample(s) as received. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. Per client request, all "b" samples were placed on hold and therefore not analyzed. Sample "S-405 b" was not received. No other problems were encountered during receiving, preparation, and/or analysis of this sample. The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha Parmar, Ph.D.
Technical Director

This report consists of 9 pages.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242843
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/19/2024
RECEIVING DATE : 11/19/2024
ANALYSIS DATE : 11/19/2024
REPORT DATE : 12/02/2024

Total Reduced Sulfur Compounds by ASTM D-5504

Client ID	S- 401 a	S- 402 a	S- 403 a	S- 404 a	S- 405 a	S- 406 a
AAC ID	242843-67434	242843-67436	242843-67438	242843-67440	242843-67442	242843-67444
Analyte	Result	Result	Result	Result	Result	Result
Hydrogen Sulfide	**0.040**	< 0.005	**0.013**	< 0.005	**0.030**	**0.016**
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	**0.116**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	**0.010**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	**0.092**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	**0.275**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	**0.019**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	**0.012**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	**0.018**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	**0.100**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	**0.006**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	**0.009**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	**0.073**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	**0.770**	< 0.005	**0.013**	< 0.005	**0.030**	**0.016**

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242843
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/19/2024
RECEIVING DATE : 11/19/2024
ANALYSIS DATE : 11/19-20/2024
REPORT DATE : 12/02/2024

Total Reduced Sulfur Compounds by ASTM D-5504

Client ID	S- 407 a	S- 408 a	S- 409 a	S- 410 a	S- 411 a	S- 412 a
AAC ID	242843-67446	242843-67448	242843-67450	242843-67452	242843-67454	242843-67456
Analyte	Result	Result	Result	Result	Result	Result
Hydrogen Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	**0.006**	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	< 0.005	< 0.005	< 0.005	**0.006**	< 0.005	< 0.005

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242843
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/19/2024
RECEIVING DATE : 11/19/2024
ANALYSIS DATE : 11/19-20/2024
REPORT DATE : 12/02/2024

Total Reduced Sulfur Compounds by ASTM D-5504

Client ID	S- 413 a	S- 414 a	S- 415 a	S- 416 a	S- 417 a	S- 418 a
AAC ID	242843-67458	242843-67460	242843-67462	242843-67464	242843-67466	242843-67468
Analyte	Result	Result	Result	Result	Result	Result
Hydrogen Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/19/2024
Analyst: NR/DM
Units: ppmV

Instrument ID : SCD-BTU
Calb. Date: : 09/13/2024

Opening Calibration Verification Standard

0.511 ppmV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6940	0.488	95.4	1.9
Duplicate	7277	0.511	100.1	2.8
Triplicate	7016	0.493	96.5	0.9

0.502 ppmV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5909	0.493	98.2	1.9
Duplicate	6090	0.508	101.2	1.1
Triplicate	6077	0.507	101.0	0.9

0.497 ppmV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	8441	0.493	99.1	1.9
Duplicate	8620	0.503	101.2	0.2
Triplicate	8742	0.510	102.7	1.6

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242827-67341**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.000	0.0
MeSH	<PQL	<PQL	0.000	0.0
DMS	<PQL	<PQL	0.000	0.0

Matrix Spike & Duplicate **Sample ID 242827-67341 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	0.256	0.253	0.249	99.0	97.5	1.6
MeSH	<PQL	0.251	0.250	0.235	99.6	93.6	6.2
DMS	<PQL	0.249	0.260	0.260	104.6	104.6	0.0

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	0.511	0.548	107.2
MeSH	0.502	0.515	102.6
DMS	0.497	0.536	107.8

**** Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.***

PQL = 0.05 ppmV
MDL = 0.005 ppmV

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Atmospheric Analysis & Consulting, Inc

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/19/2024
Analyst: NR/DM
Units: ppbV

Instrument ID : SCD#10
Calb. Date: : 07/09/24

Opening Calibration Verification Standard

510.5 ppbV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	11468.97	503	98.5	0.6
Duplicate	11549.47	506	99.2	0.1
Triplicate	11602.46	509	99.7	0.5

501.8 ppbV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	10037.23	495	98.7	0.3
Duplicate	10146.47	500	99.7	0.8
Triplicate	10027	495	98.6	0.4

497.0 ppbV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	14703.6	500	100.6	0.2
Duplicate	14819.27	504	101.4	0.5
Triplicate	14693	500	100.6	0.3

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242827-67340**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate **Sample ID 242827-67340 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	255.3	245.3	255.2	96.1	100.0	3.9
MeSH	<PQL	250.9	255.1	252.3	101.7	100.5	1.1
DMS	<PQL	248.5	256.7	258.6	103.3	104.0	0.7

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	510.5	534.3	104.7
MeSH	501.8	497.1	99.1
DMS	497.0	534.0	107.4

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 50.0 ppbV
MDL =5.0 ppbV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/20/2024
Analyst: NR/DM
Units: ppbV

Instrument ID : SCD#10
Calb. Date: : 07/09/24

Opening Calibration Verification Standard

510.5 ppbV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	11261.25	494	96.7	0.3
Duplicate	11430.94	501	98.2	1.2
Triplicate	11184.59	490	96.1	1.0

501.8 ppbV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	10225.82	504	100.5	0.3
Duplicate	10168.52	502	100.0	0.3
Triplicate	10192	503	100.2	0.0

497.0 ppbV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	15075.74	513	103.2	0.1
Duplicate	14891.35	507	101.9	1.1
Triplicate	15199	517	104.0	1.0

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242843-67466**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate **Sample ID 242843-67466 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	255.3	242.0	249.8	94.8	97.9	3.2
MeSH	<PQL	250.9	250.8	256.4	100.0	102.2	2.2
DMS	<PQL	248.5	254.4	251.1	102.4	101.0	1.3

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	510.5	507.3	99.4
MeSH	501.8	508.8	101.4
DMS	497.0	526.4	105.9

** Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.*
PQL = 50.0 ppbV
MDL =5.0 ppbV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/20/2024
Analyst: NR/DM
Units: ppmV

Instrument ID : SCD-BTU
Calb. Date: : 09/13/2024

Opening Calibration Verification Standard

0.511 ppmV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6933	0.487	95.3	1.2
Duplicate	7096	0.499	97.6	1.1
Triplicate	7028	0.494	96.6	0.1

0.502 ppmV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5947	0.496	98.8	2.3
Duplicate	6195	0.517	102.9	1.8
Triplicate	6113	0.510	101.6	0.5

0.497 ppmV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	8541	0.498	100.3	1.0
Duplicate	8632	0.504	101.4	0.1
Triplicate	8696	0.508	102.1	0.8

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242843-67468**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.000	0.0
MeSH	<PQL	<PQL	0.000	0.0
DMS	<PQL	<PQL	0.000	0.0

Matrix Spike & Duplicate **Sample ID 242843-67468 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	0.256	0.230	0.235	90.0	92.0	2.2
MeSH	<PQL	0.251	0.241	0.250	96.0	99.6	3.7
DMS	<PQL	0.249	0.262	0.251	105.4	'101.0	4.3

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	0.511	0.522	102.2
MeSH	0.502	0.517	103.0
DMS	0.497	0.528	106.2

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 0.05 ppmV
MDL = 0.005 ppmV

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CE Schmidt, nD, Environmental Consultant 242-843 **Sulfur L.**

Chain of Custody Record

Form Serial Number **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 SCHMIDTCE@aol.com	Client Address and Phone Number ***3900 Kilroy Airport Way, Suite 100*** ***Long Beach, CA 90806 562-743-7895***
Client Name ***SCS*** ***Chiquita Canyon Landfill***		Laboratory Name ***Atmospheric Analysis and Consulting***
Project Manager ***Pat Sullivan***		Laboratory Address ***2225 Sperry Avenue*** ***Ventura, CA 93003***
Requested Completion Date		Laboratory Phone ***805-650-1642***
		Laboratory Contact ***John Yokoyama*** jyokoyama@aaclab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	Analysis Requested: SCAQMD Method 307-91	Field H2S (ppmv)	Remarks
67434	11/19/2024	~~0810~~		x	S- 401 a/b 67435	2	X			X		
67436	11/19/2024	~~0830~~		x	S- 402 a/b 67437	2	X			X		
67438	11/19/2024	~~0836~~		x	S- 403 a/b 67439	2	X			X		
67440	11/19/2024	823		x	S- 404 a/b 67441	2	X			X		
67442	11/19/2024	1015		x	S- 405 a/b 67443	2	X			X		
67444	11/19/2024	1002		x	S- 406 a/b 67445	2	X			X		
67446	11/19/2024	1004		x	S- 407 a/b 67447	2	X			X		
67448 67449	11/19/2024	1016		x	S- 408 a/b	2	X			X		
67450 67451	11/19/2024	1145		x	S- 409 a/b	2	X			X		
67452 67453	11/19/2024	~~1150~~		x	S- 410 a/b	2	X			X		
67454 67455	11/19/2024	1150		x	S- 411 a/b	2	X			X		
67456 67457	11/19/2024	1202		x	S- 412 a/b	2	X			X		
67458 67459	11/19/2024	1331		x	S- 413 a/b	2	X			X		
67460 67461	11/19/2024	1321		x	S- 414 a/b	2	X			X		
67462 67463	11/19/2024	1337		x	S- 415 a/b	2	X			X		
67464 67465	11/19/2024	1322		x	S- 416 a/b		X			X		
67466 67467	11/19/2024	1323		x	S- 417 a/b		X			X		
HOZ	11/19/2024	~~1350~~		x	S- 418 a/b 67468 67469		X			X		

Sampler CE SCHMIDT	Date/Time 11/19/24 1410	Relinquished by CE Schmidt	Date/Time 11/19/24 1410	HAZWRAP/NEESA Y N QC Level 1 2 3	
Recieved by RECEIVER	Date/Time 11/19/24 1420	Relinquished by [signature]	Date/Time 11/19/24 1420	COC Ana Req	Ice Temp ***AMB***
Recieved by	Date/Time	Relinquished by	Date/Time	Cust Seal Sample Condition	pH
Recieved by Laboratory	Date/Time 11/19/24 1532	Sample Shipped Via UPS FEDEX BUS Hand Other		Air Bill No.	
Remarks					

File: Sulfur Forms.xlsb Form: Sulfur COC D1

Atmospheric Analysis & Consulting, Inc.

CLIENT	: Environmental Management Consulting
PROJECT NAME	: SCS Chiquita Canyon Landfill
PROJECT NUMBER	: CES F1-02106
AAC PROJECT NO.	: 242862
REPORT DATE	: 12/05/2024

On November 20th 2024, Atmospheric Analysis & Consulting, Inc. received twenty-eight (28) Tedlar Bags for Total Reduced Sulfur analysis by SCAQMD 307.91. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.	Client ID	Lab No.
S- 501 a	242862-67542	S- 508 a	242862-67556
S- 501 b	242862-67543	S- 508 b	242862-67557
S- 502 a	242862-67544	S- 509 a	242862-67558
S- 502 b	242862-67545	S- 509 b	242862-67559
S- 503 a	242862-67546	S- 510 a	242862-67560
S- 503 b	242862-67547	S- 510 b	242862-67561
S- 504 a	242862-67548	S- 511 a	242862-67562
S- 504 b	242862-67549	S- 511 b	242862-67563
S- 505 a	242862-67550	S- 512 a	242862-67564
S- 505 b	242862-67551	S- 512 b	242862-67565
S- 506 a	242862-67552	S- 513 a	242862-67566
S- 506 b	242862-67553	S- 513 b	242862-67567
S- 507 a	242862-67554	S- 514 a	242862-67568
S- 507 b	242862-67555	S- 514 b	242862-67569

This analysis is performed in accordance with AAC's Quality Manual. Test results apply to the sample(s) as received. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. All "b" samples were placed on hold and therefore not analyzed. No problems were encountered during receiving, preparation, and/or analysis of these samples. The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha Parmar, Ph.D.
Technical Director

This report consists of 9 pages.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242862
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/20/2024
RECEIVING DATE : 11/20/2024
ANALYSIS DATE : 11/20/2024
REPORT DATE : 12/05/2024

Total Reduced Sulfur Compounds by SCAQMD 307.91

Client ID	S- 501 a	S- 502 a	S- 503 a	S- 504 a	S- 505 a
AAC ID	242862-67542	242862-67544	242862-67546	242862-67548	242862-67550
Analyte	Result	Result	Result	Result	Result
Hydrogen Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242862
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/20/2024
RECEIVING DATE : 11/20/2024
ANALYSIS DATE : 11/20/2024
REPORT DATE : 12/05/2024

Total Reduced Sulfur Compounds by SCAQMD 307.91

Client ID	S- 506 a	S- 507 a	S- 508 a	S- 509 a	S- 510 a
AAC ID	242862-67552	242862-67554	242862-67556	242862-67558	242862-67560
Analyte	Result	Result	Result	Result	Result
Hydrogen Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242862
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/20/2024
RECEIVING DATE : 11/20/2024
ANALYSIS DATE : 11/20-21/2024
REPORT DATE : 12/05/2024

Total Reduced Sulfur Compounds by SCAQMD 307.91

Client ID	S- 511 a	S- 512 a	S- 513 a	S- 514 a
AAC ID	242862-67562	242862-67564	242862-67566	242862-67568
Analyte	Result	Result	Result	Result
Hydrogen Sulfide	< 0.005	< 0.005	< 0.005	< 0.005
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	< 0.005	< 0.005	< 0.005	< 0.005

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/20/2024
Analyst: NR/DM
Units: ppmV

Instrument ID : SCD-BTU
Calb. Date: : 09/13/2024

Opening Calibration Verification Standard

0.511 ppmV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6933	0.487	95.3	1.2
Duplicate	7096	0.499	97.6	1.1
Triplicate	7028	0.494	96.6	0.1

0.502 ppmV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5947	0.496	98.8	2.3
Duplicate	6195	0.517	102.9	1.8
Triplicate	6113	0.510	101.6	0.5

0.497 ppmV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	8541	0.498	100.3	1.0
Duplicate	8632	0.504	101.4	0.1
Triplicate	8696	0.508	102.1	0.8

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242843-67468**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.000	0.0
MeSH	<PQL	<PQL	0.000	0.0
DMS	<PQL	<PQL	0.000	0.0

Matrix Spike & Duplicate **Sample ID 242843-67468 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	0.256	0.230	0.235	90.0	92.0	2.2
MeSH	<PQL	0.251	0.241	0.250	96.0	99.6	3.7
DMS	<PQL	0.249	0.262	0.251	105.4	101.0	4.3

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	0.511	0.522	102.2
MeSH	0.502	0.517	103.0
DMS	0.497	0.528	106.2

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 0.05 ppmV
MDL = 0.005 ppmV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/20/2024
Analyst: NR/DM
Units: ppbV

Instrument ID : SCD#10
Calb. Date: : 07/09/24

Opening Calibration Verification Standard

510.5 ppbV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	11261.25	494	96.7	0.3
Duplicate	11430.94	501	98.2	1.2
Triplicate	11184.59	490	96.1	1.0

501.8 ppbV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	10225.82	504	100.5	0.3
Duplicate	10168.52	502	100.0	0.3
Triplicate	10192	503	100.2	0.0

497.0 ppbV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	15075.74	513	103.2	0.1
Duplicate	14891.35	507	101.9	1.1
Triplicate	15199	517	104.0	1.0

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242843-67466**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate **Sample ID 242843-67466 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	255.3	242.0	249.8	94.8	97.9	3.2
MeSH	<PQL	250.9	250.8	256.4	100.0	102.2	2.2
DMS	<PQL	248.5	254.4	251.1	102.4	101.0	1.3

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	510.5	507.3	99.4
MeSH	501.8	508.8	101.4
DMS	497.0	526.4	105.9

** Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.*
PQL = 50.0 ppbV
MDL =5.0 ppbV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/21/2024
Analyst: NR/DM
Units: ppmV

Instrument ID : SCD-BTU
Calb. Date: : 09/13/2024

Opening Calibration Verification Standard

0.511 ppmV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	7196	0.506	99.0	1.1
Duplicate	7497	0.527	103.1	3.0
Triplicate	7140	0.502	98.2	1.9

0.502 ppmV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6082	0.507	101.1	1.5
Duplicate	6233	0.520	103.6	1.0
Triplicate	6207	0.518	103.1	0.5

0.497 ppmV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	8524	0.497	100.1	2.5
Duplicate	8896	0.519	104.5	1.7
Triplicate	8813	0.514	103.5	0.8

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242862-67566**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.000	0.0
MeSH	<PQL	<PQL	0.000	0.0
DMS	<PQL	<PQL	0.000	0.0

Matrix Spike & Duplicate **Sample ID 242862-67566 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	0.256	0.259	0.245	101.4	95.9	5.6
MeSH	<PQL	0.251	0.258	0.265	102.8	105.6	2.7
DMS	<PQL	0.249	0.260	0.262	104.6	105.4	0.8

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	0.511	0.481	94.1
MeSH	0.502	0.473	94.2
DMS	0.497	0.510	102.6

** Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.*

PQL = 0.05 ppmV
MDL = 0.005 ppmV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/21/2024
Analyst: NR/DM
Units: ppbV

Instrument ID : SCD#10
Calb. Date: : 07/09/24

Opening Calibration Verification Standard

510.5 ppbV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	11539.23	506	99.1	1.9
Duplicate	11219.63	492	96.4	0.9
Triplicate	11200.67	491	96.2	1.1

501.8 ppbV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	10067.86	497	99.0	1.2
Duplicate	10136.62	500	99.7	0.6
Triplicate	10376	512	102.0	1.8

497.0 ppbV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	14905.79	507	102.0	0.3
Duplicate	15106.95	514	103.4	1.1
Triplicate	14831	505	101.5	0.8

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242862-67568**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate **Sample ID 242862-67568 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	255.3	251.5	253.5	98.5	99.3	0.8
MeSH	<PQL	250.9	253.6	258.6	101.1	103.1	2.0
DMS	<PQL	248.5	256.8	255.1	103.3	102.6	0.7

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	510.5	494.9	96.9
MeSH	501.8	501.7	100.0
DMS	497.0	524.4	105.5

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 50.0 ppbV
MDL =5.0 ppbV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

CE Schmidt, MD, Environmental Consultant 242862 **Sulfur D**

Chain of Custody Record

Form Serial Number	For Information Regarding These Samples Please Contact:	# OF CONTAINERS	Client Address and Phone Number	Laboratory Name
CES F1-02106	**Dr. Charles E. Schmidt**		***3900 Kilroy Airport Way, Suite 100***	***Atmospheric Analysis and Consulting***
Client Name	19200 Live Oak Road, Red Bluff, CA 96080		***Long Beach, CA 90806 562-743-7895***	Laboratory Address
SCS	530-529-4256 Cell: 530-200-2473		Analysis Requested	***2225 Sperry Avenue***
Chiquita Canyon Landfill	SCHMIDTCE@aol.com		SCAQMD Method 307-91	***Ventura, CA 93003***
Project Manager				Laboratory Phone
Pat Sullivan				***805-650-1642***
Requested Completion Date				Laboratory Contact
				John Yokoyama
				jyokoyama@aaclab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container: Bag	Can	Tube	SCAQMD Method 307-91	Field H2S (ppmv)	Remarks
	11/20/2024	0854		x	S- 501 a/b 67542 67543	2	X			X		
	11/20/2024	0857		x	S- 502 a/b 67544 67545	2	X			X		
	11/20/2024	0859		x	S- 503 a/b 67546 67547	2	X			X		
	11/20/2024	0903		x	S- 504 a/b 67548 67549	2	X			X		
	11/20/2024	0955		x	S- 505 a/b 67550 67551	2	X			X		
	11/20/2024	1059		x	S- 506 a/b 67552 67553	2	X			X		
	11/20/2024	1104		x	S- 507 a/b 67554 67555	2	X			X		
	11/20/2024	1059		x	S- 508 a/b 67556 67557	2	X			X		
	11/20/2024	1204		x	S- 509 a/b 67558 67559	2	X			X		
	11/20/2024	1216		x	S- 510 a/b 67560 67561	2	X			X		
	11/20/2024	1729		x	S- 511 a/b 67562 67563	2	X			X		
	11/20/2024	1729		x	S- 512 a/b 67564 67565	2	X			X		
	11/20/2024	1738		x	S- 513 a/b 67566 67567	2	X			X		
	11/20/2024	1742		x	S- 514 a/b 67568 67569	2	X			X		

Sampler	CE SCHMIDT	Date/Time	11/20/24 1310	Relinquished by	CE SCHMIDT	Date/Time	11/20/24 1310
Recieved by	DELIVERY	Date/Time		Relinquished by		Date/Time	13:50
Recieved by		Date/Time		Relinquished by	Tom Lee	Date/Time	11-20-24
Recieved by Laboratory	H	Date/Time	11/20/24 1550	Sample Shipped Via	UPS FEDEX BUS Hand Other	Air Bill No.	
Remarks							

HAZWRAP/NEESA Y N			
QC Level 1 2 3			
COC		Ice	
Ana Req		Temp ***AMB***	
Cust Seal		pH	
Sample Condition			

File: Sulfur Forms.xlsb Form: Sulfur COC D2

Atmospheric Analysis & Consulting, Inc

CLIENT	:	Environmental Management Consulting
PROJECT NAME	:	SCS Chiquita Canyon Landfill
PROJECT NUMBER	:	CES F1-02106
AAC PROJECT NO.	:	242880
REPORT DATE	:	12/05/2024

On November 21st 2024, Atmospheric Analysis & Consulting, Inc. received twenty-eight (28) Tedlar Bags for Total Reduced Sulfur analysis by SCAQMD 307.91. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.	Client ID	Lab No.
S- 601 a	242880-67643	S- 608 a	242880-67657
S- 601 b	242880-67644	S- 608 b	242880-67658
S- 602 a	242880-67645	S- 609 a	242880-67659
S- 602 b	242880-67646	S- 609 b	242880-67660
S- 603 a	242880-67647	S- 610 a	242880-67661
S- 603 b	242880-67648	S- 610 b	242880-67662
S- 604 a	242880-67649	S- 611 a	242880-67663
S- 604 b	242880-67650	S- 611 b	242880-67664
S- 605 a	242880-67651	S- 612 a	242880-67665
S- 605 b	242880-67652	S- 612 b	242880-67666
S- 606 a	242880-67653	S- 613 a	242880-67667
S- 606 b	242880-67654	S- 613 b	242880-67668
S- 607 a	242880-67655	S- 614 a	242880-67669
S- 607 b	242880-67656	S- 614 b	242880-67670

This analysis is performed in accordance with AAC's Quality Manual. Test results apply to the sample(s) as received. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. Per client request, all "b" samples were placed on hold and therefore not analyzed. No other problems were encountered during receiving, preparation, and/or analysis of this sample. The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha Parmar, Ph.D.
Technical Director

This report consists of 9 pages.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242880
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/21/2024
RECEIVING DATE : 11/21/2024
ANALYSIS DATE : 11/21/2024
REPORT DATE : 12/05/2024

Total Reduced Sulfur Compounds by SCAQMD 307.91

Client ID	S- 601 a	S- 602 a	S- 603 a	S- 604 a	S- 605 a
AAC ID	242880-67643	242880-67645	242880-67647	242880-67649	242880-67651
Analyte	Result	Result	Result	Result	Result
Hydrogen Sulfide	**0.034**	< 0.005	< 0.005	< 0.005	**0.373**
COS / SO2	**0.017**	< 0.005	< 0.005	< 0.005	**0.421**
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	**0.469**
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	**0.019**
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	**0.158**
Carbon Disulfide	**0.009**	< 0.005	< 0.005	< 0.005	**0.277**
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	**0.077**
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005	**0.024**
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	**0.029**
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	**0.120**
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005	**0.118**
Total Reduced Sulfurs	**0.043**	< 0.005	< 0.005	< 0.005	**1.66**

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242880
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/21/2024
RECEIVING DATE : 11/21/2024
ANALYSIS DATE : 11/21/2024
REPORT DATE : 12/05/2024

Total Reduced Sulfur Compounds by SCAQMD 307.91

Client ID	S- 606 a	S- 607 a	S- 608 a	S- 609 a	S- 610 a
AAC ID	242880-67653	242880-67655	242880-67657	242880-67659	242880-67661
Analyte	Result	Result	Result	Result	Result
Hydrogen Sulfide	**0.016**	**0.015**	< 0.005	< 0.005	**0.017**
COS / SO2	< 0.005	**0.160**	< 0.005	< 0.005	**0.091**
Methyl Mercaptan	< 0.005	**0.005**	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	**0.023**	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	**0.016**	< 0.005	< 0.005	**0.005**
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	**0.007**	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	**0.016**	**0.066**	< 0.005	< 0.005	**0.022**

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc

LABORATORY ANALYSIS REPORT

CLIENT : Environmental Management Consulting
PROJECT NO. : 242880
MATRIX : AIR
UNITS : ppmv

SAMPLING DATE : 11/21/2024
RECEIVING DATE : 11/21/2024
ANALYSIS DATE : 11/22/2024
REPORT DATE : 12/05/2024

Total Reduced Sulfur Compounds by SCAQMD 307.91

Client ID	S- 611 a	S- 612 a	S- 613 a	S- 614 a
AAC ID	242880-67663	242880-67665	242880-67667	242880-67669
Analyte	Result	Result	Result	Result
Hydrogen Sulfide	< 0.005	< 0.005	< 0.005	< 0.005
COS / SO2	< 0.005	< 0.005	< 0.005	< 0.005
Methyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Ethyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005
Carbon Disulfide	< 0.005	< 0.005	< 0.005	< 0.005
Isopropyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
tert-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
n-Propyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Methylethylsulfide	< 0.005	< 0.005	< 0.005	< 0.005
sec-Butyl Mercaptan / Thiophene	< 0.005	< 0.005	< 0.005	< 0.005
iso-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Sulfide	< 0.005	< 0.005	< 0.005	< 0.005
n-Butyl Mercaptan	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005
3-Methylthiophene	< 0.005	< 0.005	< 0.005	< 0.005
Tetrahydrothiophene	< 0.005	< 0.005	< 0.005	< 0.005
Bromothiophene	< 0.005	< 0.005	< 0.005	< 0.005
Thiophenol	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl Disulfide	< 0.005	< 0.005	< 0.005	< 0.005
Total Unidentified Sulfur	< 0.005	< 0.005	< 0.005	< 0.005
Total Reduced Sulfurs	< 0.005	< 0.005	< 0.005	< 0.005

All unidentified compound's concentrations expressed in terms of H_2S
Sample Reporting Limit (SRL) is equal to Reporting Limit x Analysis Dil. Fac.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

Atmospheric Analysis & Consulting, Inc

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/21/2024
Analyst: NR/DM
Units: ppmV

Instrument ID : SCD-BTU
Calb. Date: : 09/13/2024

Opening Calibration Verification Standard

0.511 ppmV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	7196	0.506	99.0	1.1
Duplicate	7497	0.527	103.1	3.0
Triplicate	7140	0.502	98.2	1.9

0.502 ppmV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	6082	0.507	101.1	1.5
Duplicate	6233	0.520	103.6	1.0
Triplicate	6207	0.518	103.1	0.5

0.497 ppmV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	8524	0.497	100.1	2.5
Duplicate	8896	0.519	104.5	1.7
Triplicate	8813	0.514	103.5	0.8

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242862-67566**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.000	0.0
MeSH	<PQL	<PQL	0.000	0.0
DMS	<PQL	<PQL	0.000	0.0

Matrix Spike & Duplicate **Sample ID 242862-67566 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	0.256	0.259	0.245	101.4	95.9	5.6
MeSH	<PQL	0.251	0.258	0.265	102.8	105.6	2.7
DMS	<PQL	0.249	0.260	0.262	104.6	105.4	0.8

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	0.511	0.481	94.1
MeSH	0.502	0.473	94.2
DMS	0.497	0.510	102.6

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 0.05 ppmV
MDL = 0.005 ppmV

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/21/2024
Analyst: NR/DM
Units: ppbV

Instrument ID : SCD#10
Calb. Date: : 07/09/24

Opening Calibration Verification Standard

510.5 ppbV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	11539.23	506	99.1	1.9
Duplicate	11219.63	492	96.4	0.9
Triplicate	11200.67	491	96.2	1.1

501.8 ppbV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	10067.86	497	99.0	1.2
Duplicate	10136.62	500	99.7	0.6
Triplicate	10376	512	102.0	1.8

497.0 ppbV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	14905.79	507	102.0	0.3
Duplicate	15106.95	514	103.4	1.1
Triplicate	14831	505	101.5	0.8

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242862-67568**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate **Sample ID 242862-67568 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	255.3	251.5	253.5	98.5	99.3	0.8
MeSH	<PQL	250.9	253.6	258.6	101.1	103.1	2.0
DMS	<PQL	248.5	256.8	255.1	103.3	102.6	0.7

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	510.5	494.9	96.9
MeSH	501.8	501.7	100.0
DMS	497.0	524.4	105.5

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 50.0 ppbV
MDL =5.0 ppbV

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Atmospheric Analysis & Consulting, Inc

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/22/2024
Analyst: NR/DM
Units: ppmV

Instrument ID : SCD-BTU
Calb. Date: : 09/13/2024

Opening Calibration Verification Standard

0.511 ppmV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	7088	0.498	97.5	0.3
Duplicate	7130	0.501	98.0	0.3
Triplicate	7110	0.500	97.8	0.0

0.502 ppmV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5862	0.489	97.4	1.2
Duplicate	5868	0.489	97.5	1.1
Triplicate	6072	0.506	100.9	2.3

0.497 ppmV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	8669	0.506	101.8	0.4
Duplicate	8680	0.507	101.9	0.3
Triplicate	8761	0.511	102.9	0.7

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242880-67669**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.000	0.0
MeSH	<PQL	<PQL	0.000	0.0
DMS	<PQL	<PQL	0.000	0.0

Matrix Spike & Duplicate **Sample ID 242880-67669 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	0.256	0.240	0.232	93.9	90.8	3.4
MeSH	<PQL	0.251	0.239	0.238	95.2	94.8	0.4
DMS	<PQL	0.249	0.258	0.257	103.8	103.4	0.4

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	0.511	0.498	97.5
MeSH	0.502	0.486	96.8
DMS	0.497	0.487	98.0

**** Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.***

PQL = 0.05 ppmV
MDL = 0.005 ppmV

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
SCAQMD 307.91

Date Analyzed: 11/22/2024
Analyst: NR/DM
Units: ppbV

Instrument ID : SCD#10
Calb. Date: : 07/09/24

Opening Calibration Verification Standard

510.5 ppbV H2S (GC-110223-01)

H_2S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	11585.45	508	99.5	1.3
Duplicate	11582.96	508	99.5	1.3
Triplicate	11142.47	489	95.7	2.6

501.8 ppbV MeSH (GC-110223-01)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	10016.57	494	98.5	1.2
Duplicate	10191.92	503	100.2	0.6
Triplicate	10198	503	100.3	0.6

497.0 ppbV DMS (GC-110223-01)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	14528.82	494	99.4	0.7
Duplicate	14745.01	502	100.9	0.7
Triplicate	14638	498	100.2	0.0

Method Blank

Analyte	Result
H_2S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis **Sample ID 242880-67665**

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H_2S	<PQL	<PQL	0.0	0.0
MeSH	<PQL	<PQL	0.0	0.0
DMS	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate **Sample ID 242880-67665 x2**

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H_2S	<PQL	255.3	251.5	253.9	98.5	99.5	0.9
MeSH	<PQL	250.9	251.3	253.5	100.2	101.0	0.9
DMS	<PQL	248.5	258.0	255.6	103.8	102.9	0.9

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H_2S	510.5	513.4	100.6
MeSH	501.8	506.1	100.9
DMS	497.0	516.5	103.9

Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, * Must be < 5% RPD from Mean result.***

PQL = 50.0 ppbV
MDL =5.0 ppbV

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com (805) 650-1642

242880

CE Schmidt, . nD, Environmental Consultant
Chain of Custody Record

Sulfur L.

Form Serial Number **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 SCHMIDTCE@aol.com	Client Address and Phone Number ***3900 Kilroy Airport Way, Suite 100*** ***Long Beach, CA 90806 562-743-7895***	Laboratory Name ***Atmospheric Analysis and Consulting***
Client Name ***SCS*** ***Chiquita Canyon Landfill***		Analysis Requested	Laboratory Address ***2225 Sperry Avenue*** ***Ventura, CA 93003***
Project Manager ***Pat Sullivan***			Laboratory Phone ***805-650-1642***
Requested Completion Date			Laboratory Contact ***John Yokoyama*** jyokoyama@aaclab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	# OF CONTAINERS	Sample Container Bag	Can	Tube	SCAQMD Method 307-91										Field H2S (ppmv)	Remarks
	11/21/2024	817		x	S- 601 a/b 67643 67644	2	X			X											
826	11/21/2024	[illegible]		x	S- 602 a/b 67645 67646	2	X			X											
	11/21/2024	830		x	S- 603 a/b 67647 67648	2	X			X											
	11/21/2024	817		x	S- 604 a/b 67649 67650	2	X			X											
	11/21/2024	910		x	S- 605 a/b 67651 67652	2	X			X											
	11/21/2024	957		x	S- 606 a/b 67653 67654	2	X			X											
	11/21/2024	950		x	S- 607 a/b 67655 67656	2	X			X											
	11/21/2024	940		x	S- 608 a/b 67657 67658	2	X			X											
	11/21/2024	1137		x	S- 609 a/b 67659 67660	2	X			X											
	11/21/2024	1108		x	S- 610 a/b 67661 67662	2	X			X											
	11/21/2024	1125		x	S- 611 a/b 67663 67664	2	X			X											
	11/21/2024	1118		x	S- 612 a/b 67665 67666	2	X			X											
	11/21/2024	1118		x	S- 613 a/b 67667 67668	2	X			X											
	11/21/2024	1141		x	S- 614 a/b 67669 67670	2	X			X											

Sampler CE SCHMIDT	Date/Time 11/21/24 1202	Relinquished by CE SCHMIDT	Date/Time 11/21/24 1202	HAZWRAP/NEESA Y N	
Recieved by DELIVERY TO	Date/Time	Relinquished by	Date/Time	QC Level 1 2 3	
				COC	Ice
				Ana Req	Temp ***AMB***
Recieved by	Date/Time	Relinquished by [signature]	Date/Time 11/21/24 1314	Cust Seal	pH
				Sample Condition	
Recieved by Laboratory	Date/Time	Sample Shipped Via UPS FEDEX BUS Hand Other	Air Bill No.		
Remarks					

File: Sulfur Forms.xlsb Form: Sulfur COC D3

ENVIRONMENTAL
Analytical Service, Inc.

Data Deliverable Package

Prepared For:
C.E. Schmidt
19200 Live Oak Road
Red Bluff CA 96080

EAS SDG Number: **224435**
Project Number: 17807
Report Sent:
Sample Event Date: 1/20,11/21/2024

Client Project Manager: Chuck Schmidt
Project Name: Chiquita Canyon
Project Number: Data Package GC Helium

This is the Laboratory Data Deliverable Package for the samples in the indicated Sample Delivery Group (SDG).

INDEX TO DATA PACKAGE:

Section 1 **Project Summary**
- Laboratory Work Order
- Sample Data
- Laboratory Case Narrative and Chain of Custody

Section 2 **Quality Control**
- Project QC Criteria
- DAB QC Reports

Section 3 **Analytical Methods**
- Analytical Method Description(s)
- Analytical Reports

Section 4 **Data Package with Quant Report and Chromatogram**
- DAB Run Logs and Preparation Log
- Sample Data Package
- Blank Data Package
- Continuing Calibration Package
- Initial Calibration Package

Section 5 **Standard Certificates**

Section 6 **SDG Documentation, Notes, Correspondence**

173 Cross Street, San Luis Obispo, California, 93401 (805) 781-3585

Section 1 Project Summary

The following pages provide detailed information about the sample receipt, log-in, and sample preparation. The Laboratory Work Order provides a cross reference between the Client ID number and the EAS Lab Number as well as a list of the analytical tests preformed. The items included in this section are listed below.

Section Contents

Laboratory Work Order

Sample Data

Laboratory Case Narrative

Chain of Custody

Laboratory Work Order

SDG Number: 224435
Client: Chuck Schmidt
C.E. Schmidt

Project Number: 17807
Received: 11/21/2024

SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-401	224435 1	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-401	224435 1	ASTM D3416 Low Level Methane	11/19/2024
T-401	224435 1	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-401	224435 1	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-401	224435 1	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-402	224435 2	ASTM D3416 Low Level Methane	11/19/2024
T-402	224435 2	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-402	224435 2	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-403	224435 3	ASTM D3416 Low Level Methane	11/19/2024
T-403	224435 3	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-403	224435 3	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-403	224435 3	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-403	224435 3	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-404	224435 4	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-404	224435 4	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-404	224435 4	ASTM D3416 Low Level Methane	11/19/2024
T-404	224435 4	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-404	224435 4	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-405	224435 5	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-405	224435 5	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-405	224435 5	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-405	224435 5	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-405	224435 5	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-406	224435 6	ASTM D3416 Low Level Methane	11/19/2024
T-406	224435 6	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-406	224435 6	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-406	224435 6	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-406	224435 6	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-407	224435 7	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-407	224435 7	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-407	224435 7	ASTM D3416 Low Level Methane	11/19/2024
T-407	224435 7	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-407	224435 7	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-408	224435 8	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-408	224435 8	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-408	224435 8	ASTM D3416 Low Level Methane	11/19/2024
T-408	224435 8	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-408	224435 8	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-409	224435 9	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D3416 Low Level Methane	11/19/2024
T-409	224435 9	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-409	224435 9	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-410	224435 10	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-410	224435 10	ASTM D3416 Low Level Methane	11/19/2024
T-410	224435 10	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-411	224435 11	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-411	224435 11	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-411	224435 11	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-411	224435 11	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-411	224435 11	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-412	224435 12	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-412	224435 12	ASTM D3416 Low Level Methane	11/19/2024
T-412	224435 12	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-413	224435 13	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-413	224435 13	ASTM D3416 Low Level Methane	11/19/2024
T-413	224435 13	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-414	224435 14	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-414	224435 14	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-414	224435 14	ASTM D3416 Low Level Methane	11/19/2024
T-414	224435 14	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-414	224435 14	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-415	224435 15	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-415	224435 15	ASTM D3416 Low Level Methane	11/19/2024
T-415	224435 15	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-416	224435 16	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-416	224435 16	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-416	224435 16	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-416	224435 16	ASTM D3416 Low Level Methane	11/19/2024
T-416	224435 16	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-417	224435 17	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-417	224435 17	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-417	224435 17	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-418	224435 18	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-418	224435 18	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-418	224435 18	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D3416 Low Level Methane	11/19/2024
T-501	224435 19	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-501	224435 19	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-501	224435 19	ASTM D3416 Low Level Methane	11/20/2024
T-501	224435 19	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-501	224435 19	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-502	224435 20	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-502	224435 20	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-502	224435 20	ASTM D3416 Low Level Methane	11/20/2024
T-502	224435 20	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-502	224435 20	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-503	224435 21	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-503	224435 21	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-503	224435 21	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-504	224435 22	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-504	224435 22	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-504	224435 22	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-505	224435 23	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-505	224435 23	ASTM D3416 Low Level Methane	11/20/2024
T-505	224435 23	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-506	224435 24	ASTM D3416 Low Level Methane	11/20/2024
T-506	224435 24	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-506	224435 24	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-507	224435 25	ASTM D3416 Low Level Methane	11/20/2024
T-507	224435 25	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-507	224435 25	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-508	224435 26	ASTM D3416 Low Level Methane	11/20/2024
T-508	224435 26	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-508	224435 26	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-508	224435 26	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-508	224435 26	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-509	224435 27	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-509	224435 27	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-509	224435 27	ASTM D3416 Low Level Methane	11/20/2024
T-509	224435 27	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-509	224435 27	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-510	224435 28	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-510	224435 28	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-510	224435 28	ASTM D3416 Low Level Methane	11/20/2024
T-510	224435 28	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-510	224435 28	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-511	224435 29	ASTM D3416 Low Level Methane	11/20/2024
T-511	224435 29	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-511	224435 29	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-511	224435 29	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-511	224435 29	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-512	224435 30	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-512	224435 30	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-512	224435 30	ASTM D3416 Low Level Methane	11/20/2024
T-512	224435 30	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-512	224435 30	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-513	224435 31	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-513	224435 31	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-513	224435 31	ASTM D3416 Low Level Methane	11/20/2024
T-513	224435 31	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-513	224435 31	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-514	224435 32	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D3416 Low Level Methane	11/20/2024
T-514	224435 32	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-514	224435 32	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-601	224435 33	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-601	224435 33	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-601	224435 33	ASTM D3416 Low Level Methane	11/21/2024
T-601	224435 33	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-601	224435 33	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-602	224435 34	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-602	224435 34	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-602	224435 34	ASTM D3416 Low Level Methane	11/21/2024
T-602	224435 34	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-602	224435 34	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-603	224435 35	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D3416 Low Level Methane	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-603	224435 35	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-603	224435 35	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-604	224435 36	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-604	224435 36	ASTM D3416 Low Level Methane	11/21/2024
T-604	224435 36	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-605	224435 37	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-605	224435 37	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-605	224435 37	ASTM D3416 Low Level Methane	11/21/2024
T-605	224435 37	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-605	224435 37	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-606	224435 38	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-606	224435 38	ASTM D3416 Low Level Methane	11/21/2024
T-606	224435 38	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-607	224435 39	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-607	224435 39	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-607	224435 39	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-607	224435 39	ASTM D3416 Low Level Methane	11/21/2024
T-607	224435 39	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-608	224435 40	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	ASTM D3416 Low Level Methane	11/21/2024
T-608	224435 40	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-608	224435 40	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-609	224435 41	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-609	224435 41	EPA TO-12 C2 to C12 CRYO	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-609	224435 41	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-610	224435 42	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-610	224435 42	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-610	224435 42	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-611	224435 43	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-611	224435 43	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-611	224435 43	ASTM D3416 Low Level Methane	11/21/2024
T-611	224435 43	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-611	224435 43	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-612	224435 44	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-612	224435 44	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-612	224435 44	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-613	224435 45	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-613	224435 45	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-613	224435 45	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-614	224435 46	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-614	224435 46	ASTM D3416 Low Level Methane	11/21/2024
T-614	224435 46	EPA TO-12 C2 to C12 CRYO	11/21/2024

Project Sample Media

SDG Number: 224435

The following sample media was used for this Sample Delivery Group (SDG). The Sample Media column identifies the type of media. For canisters, the Sample Media Batch gives the canister number followed by the cleaning batch number, which is a unique identification. The initial pressure of the canister when it is received is recorded. If the canister is not pressurized, the final pressure will be the same as the initial pressure. If the canister is pessurized the final pressure will be recorded, and the canister dilution factor is calculated as the ratio of the final to initial pressure. The results are adjusted for the can dilution factor.

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	1	T-401	636		737	921	1.25
224435	2	T-402	703		739	922	1.25
224435	3	T-403	547		727	920	1.27
224435	4	T-404	749		740	920	1.24
224435	5	T-405	837		720	921	1.28
224435	6	T-406	626		735	924	1.26
224435	7	T-407	740		698	922	1.32
224435	8	T-408	805		699	917	1.31
224435	9	T-409	631		675	919	1.36
224435	10	T-410	714		678	921	1.36
224435	11	T-411	551		722	922	1.28
224435	12	T-412	881		704	930	1.32
224435	13	T-413	766		690	924	1.34
224435	14	T-414	725		699	923	1.32
224435	15	T-415	896		704	919	1.31
224435	16	T-416	659		651	922	1.42
224435	17	T-417	899		709	920	1.30
224435	18	T-418	522		739	927	1.25
224435	19	T-501	664		721	923	1.28
224435	20	T-502	716		690	920	1.33
224435	21	T-503	751		717	921	1.28
224435	22	T-504	644		719	920	1.28
224435	23	T-505	883		684	921	1.35
224435	24	T-506	784		679	921	1.36
224435	25	T-507	712		670	924	1.38

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	26	T-508	549		669	920	1.38
224435	27	T-509	882		661	924	1.40
224435	28	T-510	860		649	921	1.42
224435	29	T-511	627		674	921	1.37
224435	30	T-512	417		676	916	1.36
224435	31	T-513	781		681	925	1.36
224435	32	T-514	506		669	926	1.38
224435	33	T-601	700		712	929	1.30
224435	34	T-602	673		714	913	1.28
224435	35	T-603	550		736	916	1.24
224435	36	T-604	738		691	922	1.33
224435	37	T-605	892		703	920	1.31
224435	38	T-606	608		666	922	1.38
224435	39	T-607	771		703	920	1.31
224435	40	T-608	531		685	925	1.35
224435	41	T-609	668		707	926	1.31
224435	42	T-610	730		674	921	1.37
224435	43	T-611	701		680	920	1.35
224435	44	T-612	514		666	927	1.39
224435	45	T-613	694		663	924	1.39
224435	46	T-614	880		668	925	1.38

Laboratory Case Narrative

EAS SDG Number: 224435 **Project Number:** 17807

Client: C.E. Schmidt

The Laboratory Case Narrative for the SDG is below. The Chain of Custody form(s) follow the Laboratory Case Narrative.

Sample Control Narrative

The samples were all received in good condition and with proper preservation.

Analytical Methods

The methods used for sample analysis are listed on the Analytyical Report header, and have been modified as described in the EAS Quality Manual..

Case Narrative

QC Narrative

All analyses met EAS method criteria as defined in the Quality Manual, except as noted in the report or QC reports with data qualifiers.

Subcontract Narrative

No sample analysis was subcontracted for this project

Laboratory Certification

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition(s) noted above. The Laboratory Report is property of EAS and its client. The entire report has been reviewed and approved.

Date Approved:

Steven D. Hoyt, Ph.D.
Environmental Analytical Service
Laboratory Director

Section 2 Quality Control

This section contains the QC Reports for each Daily Analytical Batch (DAB) which make up the Sample Delivery Group (SDG). It also contains either the EAS or Project QC criteria that was used for the DAB. The methods used for this project have been modified from the original method. The modifications include modifications to the QC for the method. This is either because the method did not specify certain aspects of the QC, the method was originally designed for a different matrix, or additional compounds were added to the target list of the method which required modified QC. The QC modifications used by EAS follows those used by other air testing laboratories.

The Daily Analytical Batch data was checked against the QC criteria for the method. Any deviations from the QC criteria are listed on the QC Reports for each DAB, which are summarized in this section and are given in more detail in Section 4 which has the Quantitation Reports and Calculations for the Samples, Method Blank, Lab Control Spikes, as well as the Initial Calibration and Continuing Calibration. This section contains the following:

Section Contents

Project QC Critera

DAB Quality Control Reports

- Method Blank
- Laboratory Control Spike
- Laboratory Control Duplicate
- Continuing Calibration

Quality Control Report

EAS SDG Number: 224435

Project Number: 17807

QC Narrative

Samples were anlayzed in a daily analytical batch (DAB) designated by a QC batch number, and were analyzed using EAS standard laboratory QC specified in the EAS Quality Manual which may be different then the referrenced agency method. Any deviations from the EAS QC criteria are flagged in the Laboratory Control Reports or in the sample Analytical Reports.

Standard Laboratory QC Report

Unless project specific QC was requested, this Section containing the standard laboratory QC (Level 2) supplied with the Analytical Reports. Each sample is analyzed in a Daily Analytical Batch (DAB) which includes the method blank, a laboratory control spike (LCS) and a laboratory control duplicate (LCD). A Daily Analytical Batch QC report is supplied for each method requested.

Method Blank

The method blank is a laboratory generated sample which assesses the degree to which laboratory operations cause a false positive. The target analytes in the analytical reports for a daily analytical batch are "B" flagged if their concentrations are present in the Method Blank above the RL, unless the result is greater then ten times the blank value..

Laboratory Control Spike

A laboratory control spike is a well characterized matrix similar to the sample which is spiked and run in duplicate with each Daily Analytical Batch. The laboratory control spike results are reported as a percent recovery. The QC Criteria for the control spike is listed in the Laboratory Control Report. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report. The control spike contains an abbreviated list of compounds in the method, and may contain compounds not on the target list for the specified report.

Laboratory Control Duplicate

The laboratory control duplicate is a duplicate analysis of the laboratory control spike, a standard, or a sample depending on the method. The results are reported as a relative percent difference (RPD). The criteria for the duplicate is in the Laboratory Control Report for the Daily Analytical Batch. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: LABQC
Analytical Method: D1945 **Laboratory Number:** B12064

File Name: B12064MA **Date Sampled:** **Time:**
Description: METHOD BLANK **Date Analyzed:** 12/06/24 **Time:** 13:25
Can/Tube#:
QC_Batch: 120624-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.020	0.060	ND	200	600	ND	

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

ASTM D 1945 GC/TCD
Analytical Method: **D1945**

Date: 12/06/24
QC_Batch: 12064-GCO

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
7440-59-7	Helium	80		81		70	130	1	25	

Section 3 Analytical Methods

This section has information on the analytial methods and a copy of the analytical reports for the Sample Delivery Group (SDG) listed below. The reports are organized in order of the EAS Laboratory Number.

Section Contents

Analytical Method Description(s)

Analytical Reports

Analytical Reports

EAS SDG Number: 224435

Project Number: 17807

The following pages contain the certified Analytical Reports for the samples submitted in the Sample Delivery Group (SDG) and are in order of the EAS Lab ID number. All of the analytical methods used are modifications of the published methods. Procedural method modifications, QC modifications, QC Criteria modifications, target lists, definitions of detection limits, and flags are all explained in detail in the EAS Quality Manual. The Analytical Report has columns for the method detection limit (MDL), the reporting limit (RL), and the Amount. The Amount is the concentration of the compound in the sample. The report usually has the results reported with two commonly used units. The MDL, RL, and Amount are adjusted for the canister dilution factor and any dilution caused by sample matrix effects.

NELAC CERTIFICATION

EAS is accredited by the National Environmental Laboratory Accreditation (NELAC) with the Florida Department of Health, one of the NELAC certifying states. EAS is certified for the EPA TO-15, EPA TO-11 and EPA TO-4 methods. A list of accredited compounds is available on request.

DETECTION LIMITS

MDL: The MDL is lowest concentration that can be measured to be statistically above the noise level and is determined using the EPA 2016 method which uses the standard deviation of replicate measurements made over time. The method also incorporates systematic instrumentation blank levels. See Quality Manual for detailed explanation.

RL: The reporting limit (RL) is the lowest concentration that can be reliably reported for each compound that meets the QC Criteria for the method, background levels, or project specific considerations. The QC criteria level for the method blank is to be less then the RL See Quality Manual for more information.

DATA FLAGS

In the standard report, if a compound is not detected above the method detection limit, a "ND" is in the Amount column. The flag column is used for both the not detect flag and for any data flags.

B - This compound was detected in the batch method blank above the reporting limit and is greater then one tenth the amount in the sample.

E - This compound exceeds the calibration range for this sample volume.

J - The amount reported is estimated because it was below the RL and could be below the lowest calibration point, have higher uncertainty, or could be the result of system background

SIGNIFICANT FIGURES

Based on the uncertainty in the methods, the numbers on the Analytical Reports should be used with only two significant digits. Additional significant figures are reported for ease of use and to avoid rounding errors when used in further calculations.

UNITS

PPBV or PPMV: Parts-per-billion (or million) by volume is a mole (volume) ratio of the moles of analyte divided by the moles of air (gas). This is the primary unit used to report air or gas concentrations and is independent of temperature and pressure.

UG/M3 OR MG/M3: The reported result was calculated based on 1 atm pressure and a temperature of 25C. The conversion from PPBV is: UG/M3 = PPBV x MW/24.46 where 24.26 is the gas constant and MW is the Compounds Molecular Weight (sometimes called Formula Weight)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 01

File Name: 2443501A
Description: T-401
Can/Tube#: 636
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 12/06/24 **Time:** 14:30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.094	2.533	250	750	25,329	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 02

File Name: 2443502A
Description: T-402
Can/Tube#: 703
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 12/06/24 **Time:** 14:34

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.093	1.631	250	749	16,310	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 03

File Name: 2443503A
Description: T-403
Can/Tube#: 547
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 12/06/24 **Time:** 14:38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.032	0.096	1.389	253	759	13,893	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD **SDG: 224435**

Analytical Method: **D1945** **Laboratory Number:** **04**

File Name: 2443504A **Date Sampled:** 11/19/24 **Time:** 8:24
Description: T-404 **Date Analyzed:** 12/06/24 **Time:** 14:41
Can/Tube#: 749
QC_Batch: 120624-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.092	3.600	248	744	35,998	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: **D1945**

SDG: **224435**

Laboratory Number: **05**

File Name: 2443505A
Description: T-405
Can/Tube#: 837
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:20
Date Analyzed: 12/06/24 **Time:** 14:45

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	0.955	256	768	9,550	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 06

File Name: 2443506A
Description: T-406
Can/Tube#: 626
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 12/06/24 **Time:** 14:48

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.032	0.095	0.462	252	756	4,625	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435

Laboratory Number: 07

File Name: 2443507A
Description: T-407
Can/Tube#: 740
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 12/06/24 **Time:** 14:56

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.105	1.174	264	792	11,740	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Can/Tube#: 805
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 12/06/24 **Time:** 14:59

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	1.353	262	786	13,527	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435

Laboratory Number: 09

File Name: 2443509A
Description: T-409
Can/Tube#: 631
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/06/24 **Time:** 15:03

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	0.642	272	816	6,417	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Can/Tube#: 714
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/06/24 **Time:** 15:07

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	1.959	272	816	19,593	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 11

File Name: 2443511A
Description: T-411
Can/Tube#: 551
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 12/06/24 **Time:** 15:11

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	1.379	256	768	13,794	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD
Analytical Method: D1945

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Can/Tube#: 881
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 12/06/24 **Time:** 15:14

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.105	1.082	264	792	10,816	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 13

File Name: 2443513A
Description: T-413
Can/Tube#: 766
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/06/24 **Time:** 15:52

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.108	2.619	268	804	26,186	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Can/Tube#: 725
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/06/24 **Time:** 16:26

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.105	7.378	264	792	73,781	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 15

File Name: 2443515A
Description: T-415
Can/Tube#: 896
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 12/06/24 **Time:** 16:30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	4.901	262	786	49,009	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 16

File Name: 2443516A
Description: T-416
Can/Tube#: 659
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/06/24 **Time:** 16:42

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.040	0.121	2.343	284	852	23,432	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 17

File Name: 2443517A
Description: T-417
Can/Tube#: 899
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/06/24 **Time:** 16:47

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.101	1.248	260	780	12,482	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Can/Tube#: 522
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/06/24 **Time:** 16:52

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.094	9.632	250	750	96,315	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 19

File Name: 2443519A
Description: T-501
Can/Tube#: 664
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 12/06/24 **Time:** 17:02

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	3.574	256	768	35,741	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 20

File Name: 2443520A
Description: T-502
Can/Tube#: 716
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 12/06/24 **Time:** 17:13

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.106	4.539	266	798	45,393	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 21

File Name: 2443521A
Description: T-503
Can/Tube#: 751
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 12/06/24 **Time:** 17:18

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	3.642	256	768	36,421	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Can/Tube#: 644
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 12/06/24 **Time:** 17:23

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	5.210	256	768	52,099	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 23

File Name: 2443523A
Description: T-505
Can/Tube#: 883
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/06/24 **Time:** 17:27

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.109	3.620	270	810	36,202	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 24

File Name: 2443524A
Description: T-506
Can/Tube#: 784
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/06/24 **Time:** 17:46

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	9.237	272	816	92,374	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 25

File Name: 2443525A
Description: T-507
Can/Tube#: 712
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/06/24 **Time:** 17:55

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	8.534	276	828	85,336	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Can/Tube#: 549
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/06/24 **Time:** 18:01

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	8.369	276	828	83,693	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 27

File Name: 2443527A
Description: T-509
Can/Tube#: 882
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/06/24 **Time:** 18:18

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.039	0.118	6.821	280	840	68,211	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 28

File Name: 2443528A
Description: T-510
Can/Tube#: 860
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/06/24 **Time:** 18:22

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.040	0.121	5.457	284	852	54,574	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 29

File Name: 2443529A
Description: T-511
Can/Tube#: 627
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/06/24 **Time:** 18:30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.113	6.575	274	822	65,745	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 30

File Name: 2443530A
Description: T-512
Can/Tube#: 417
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/06/24 **Time:** 18:34

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	5.332	272	816	53,320	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 31

File Name: 2443531A
Description: T-513
Can/Tube#: 781
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/06/24 **Time:** 18:39

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	7.980	272	816	79,800	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Can/Tube#: 506
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/06/24 **Time:** 18:43

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	10.030	276	828	100,300	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Can/Tube#: 700
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/06/24 **Time:** 18:55

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.101	2.325	260	780	23,248	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 34

File Name: 2443534A
Description: T-602
Can/Tube#: 673
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:29
Date Analyzed: 12/06/24 **Time:** 19:00

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	4.099	256	768	40,989	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Can/Tube#: 550
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/06/24 **Time:** 19:05

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.092	3.755	248	744	37,549	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Can/Tube#: 738
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/06/24 **Time:** 19:16

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.106	2.863	266	798	28,627	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 37

File Name: 2443537A
Description: T-605
Can/Tube#: 892
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:41
Date Analyzed: 12/06/24 **Time:** 19:22

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	3.104	262	786	31,037	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 38

File Name: 2443538A
Description: T-606
Can/Tube#: 608
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:58
Date Analyzed: 12/06/24 **Time:** 19:32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	2.075	276	828	20,753	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 39

File Name: 2443539A
Description: T-607
Can/Tube#: 771
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:52
Date Analyzed: 12/06/24 **Time:** 19:38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	1.879	262	786	18,790	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 40

File Name: 2443540A
Description: T-608
Can/Tube#: 531
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:47
Date Analyzed: 12/06/24 **Time:** 19:43

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.109	3.340	270	810	33,403	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 41

File Name: 2443541A
Description: T-609
Can/Tube#: 668
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/06/24 **Time:** 19:48

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	6.627	262	786	66,267	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 42

File Name: 2443542A
Description: T-610
Can/Tube#: 730
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/06/24 **Time:** 19:54

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.113	2.277	274	822	22,772	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 43

File Name: 2443543A
Description: T-611
Can/Tube#: 701
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/06/24 **Time:** 19:59

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.109	3.709	270	810	37,085	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 44

File Name: 2443544A
Description: T-612
Can/Tube#: 514
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/06/24 **Time:** 20:35

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.039	0.116	4.213	278	834	42,128	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 45

File Name: 2443545A
Description: T-613
Can/Tube#: 694
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/06/24 **Time:** 20:44

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.039	0.116	6.104	278	834	61,040	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 46

File Name: 2443546A
Description: T-614
Can/Tube#: 880
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/06/24 **Time:** 20:50

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	10.654	276	828	106,542	

22435 17507

CE Schmidt, Ph. , Environmental Consultant TO- Day 1

Chain of Custody Record

Form Serial Number: CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name: *SCS* / *Chiquita Canyon Landfill*	**Dr. Charles E. Schmidt**
Project Manager: ***Pat Sullivan***	19200 Live Oak Road, Red Bluff, CA 96080
Requested Completion Date	530-529-4256 Cell: 530-200-2473
	E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: ***3900 Kilroy Airport Way, Suite 100 / Long Beach, CA 90806 562-743-7895***

Laboratory Name: *EAS*

Laboratory Address: ***173 Cross Street / San Luis Obispo, CA 93401***

Laboratory Phone: ***805-781-3585***

Laboratory Contact: ***Dr. Steve Hoyt*** / *stevehoyt@easlab.com*

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/19/2024	851		x	T - 401	636	1		x		x	x	x	x		-29	0	01
	11/19/2024	825		x	T - 402	703	1		x		x	x	x	x		-29	0	02
	11/19/2024	812		x	T - 403	547	1		x		x	x	x	x		-29	0	03
	11/19/2024	824		x	T - 404	789	1		x		x	x	x	x		-29	0	04
	11/19/2024	1020		x	T - 405	337	1		x		x	x	x	x		-29	0	05
	11/19/2024	1006		x	T - 406	826	1		x		x	x	x	x		-29	0	06
	11/19/2024	1005		x	T - 407	760	1		x		x	x	x	x		-29	0	07
	11/19/2024	1019		x	T - 408	888	1		x		x	x	x	x		-29	0	08
	11/19/2024	1145		x	T - 409	631	1		x		x	x	x	x		-29	0	09
	11/19/2024	1159		x	T - 410	714	1		x		x	x	x	x		-29	0	10
	11/19/2024	1151		x	T - 411	551	1		x		x	x	x	x		-29	0	11
	11/19/2024	1206		x	T - 412	891	1		x		x	x	x	x		-29	6	12
	11/19/2024	1337		x	T - 413	766	1		x		x	x	x	x		-29		13
	11/19/2024	1324		x	T - 414	775	1		x		x	x	x	x		-29		14
	11/19/2024	1338		x	T - 415	816	1		x		x	x	x	x		-29		15
	11/19/2024	1334		x	T - 416	654	1		x		x	x	x	x		-29		16
	11/19/2024	1329		x	T - 417	891	1		x		x	x	x	x		-29		17
	11/19/2024			x	T - 418	552	1		x		x	x	x	x		-29		18

Sampler: CE Schmidt	Date/Time: 11/21/24 1209	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1209
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: 11/21/2024 13:5C	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 0	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N

QC Level 1 2 3

COC

Ana Req

Cust Seal

Sample Condition

224435 17807

CE Schmidt, Ph.., Environmental Consultant TO Day 2

Chain of Custody Record

Form Serial Number: CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name: SCS / Chiquita Canyon Landfill	Dr. Charles E. Schmidt
Project Manager: Pat Sullivan	19200 Live Oak Road, Red Bluff, CA 96080
Requested Completion Date	530-529-4256 Cell: 530-200-2473
	E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: 3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895

Laboratory Name: EAS

Laboratory Address: 173 Cross Street, San Luis Obispo, CA 93401

Laboratory Phone: 805-781-3585

Laboratory Contact: Dr. Steve Hoyt, stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)	Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/20/2024	0850		x	T - 501	604	1		x		x	x	x	x	-29	0	19
	11/20/2024	0837		x	T - 502	716	1		x		x	x	x	x	-29	0	20
	11/20/2024	0852		x	T - 503	751	1		x		x	x	x	x	-29	0	21
	11/20/2024	0842		x	T - 504	645	1		x		x	x	x	x	-29	0	22
	11/20/2024	1055		x	T - 505	633	1		x		x	x	x	x	-29	0	23
	11/20/2024	1071		x	T - 506	654	1		x		x	x	x	x	-29	0	24
	11/20/2024	1056		x	T - 507	711	1		x		x	x	x	x	-29	0	25
	11/20/2024	1040		x	T - 508	549	1		x		x	x	x	x	-29	0	26
	11/20/2024	1220		x	T - 509	682	1		x		x	x	x	x	-5	0	27
	11/20/2024	1218		x	T - 510	660	1		x		x	x	x	x	-29	0	28
	11/20/2024	1231		x	T - 511	627	1		x		x	x	x	x	-29	0	29
	11/20/2024	1241		x	T - 512	707	1		x		x	x	x	x	-29		30
	11/20/2024	1228		x	T - 513	621	1		x		x	x	x	x	-27		31
	11/20/2024	1245		x	T - 514	506	1		x		x	x	x	x	-29	0	32

Sampler: CE Schmidt	Date/Time: 11/21/24 1204	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1200
Recieved by: DRS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: [illegible] 11/21/2024	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

67 of 395

269

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D2

CE Schmidt, Ph.D., Environmental Consultant

Chain of Custody Record

224435

17807

TO- Day 3

Form Serial Number: CES F1-02106

Client Name: SCS

Chiquita Canyon Landfill

Project Manager: Pat Sullivan

Requested Completion Date:

For Information Regarding These Samples Please Contact:

Dr. Charles E. Schmidt
19200 Live Oak Road, Red Bluff, CA 96080
530-529-4256 Cell: 530-200-2473
E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: 3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895

Laboratory Name: EAS

Laboratory Address: 173 Cross Street, San Luis Obispo, CA 93401

Laboratory Phone: 805-781-3585

Laboratory Contact: Dr. Steve Hoyt, stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container Vial	Sample Container Can	Sample Container Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/21/2024	810		x	T - 601	700	1		x		x	x	x	x		-29	0	33
	11/21/2024	829		x	T - 602	673	1		x		x	x	x	x		-29	0	34
	11/21/2024	831		x	T - 603	550	1		x		x	x	x	x		-29	0	35
	11/21/2024	818		x	T - 604	738	1		x		x	x	x	x		-29	0	36
	11/21/2024	941		x	T - 605	892	1		x		x	x	x	x		-29	0	37
	11/21/2024	938		x	T - 606	608	1		x		x	x	x	x		-29	0	38
	11/21/2024	952		x	T - 607	771	1		x		x	x	x	x		-29	0	39
	11/21/2024	947		x	T - 608	531	1		x		x	x	x	x		-29	0	40
	11/21/2024	1138		x	T - 609	668	1		x		x	x	x	x		-29		41
	11/21/2024	1111		x	T - 610	730	1		x		x	x	x	x		-29		42
1128	11/21/2024	1125		x	T - 611	701	1		x		x	x	x	x		-29		43
	11/21/2024	1120		x	T - 612	514	1		x		x	x	x	x		-29		44
	11/21/2024	1125		x	T - 613	694	1		x		x	x	x	x		-29		45
	11/21/2024	1136		x	T - 614	880	1		x		x	x	x	x		-29		46

Sampler: CE Schmidt	Date/Time: 11/21/24 1204	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1204
Recieved by: EAS	Date/Time:	Relinquished by:	Date/Time:
Recieved by:	Date/Time:	Relinquished by:	Date/Time:
Recieved by Laboratory: [signature] 11/21/2024	Date/Time:	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D3

Section 4 Data Package

This section contains the Data Packages for the samples, blanks, and calibration. Each package has the analytical report, quantitation report, calculation sheet, instrument quantation report, and chromatograms.

Items provided in Data Package:

DAB Run Logs and Preparation Logs

Sample Packages

Blank Package for each Daily Analytical Batch

Quality Control Reports, LCS,LCD for each Daily Analytical Batch

Continuing Calibration Package for Each Daily Analytical Batch

Initial Calibration Data

Tune Data (if required)

DAB Run Logs and Preparation Logs

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
This section contains the DAB Log Sheets and Preparation Logs.

Index

DAB Run Logs
Preparation Logs
Other Log Sheets

DAILY ANALYTICAL BATCH FORM

DAB 120624 - GCO

ANALYST REPORT

Method AST1946 H Chemist [signature]

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

[signature]
Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID L46

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

[signature]
Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

FORM
DAB.v14

Daily Analytical Batch

DAB: 120624-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120624-GCO	01	GCO	STD			C12064A		ST63427	10% He	0.5	DA		AST1946H	ALL DBL INJE		
120624-GCO	02	GCO	STD			C12064B		ST63427	10% He	0.5	DA		AST1946H			
120624-GCO	03	GCO	STD			C12064C		ST63427	10% He	0.5	DA		AST1946H			
120624-GCO	04	GCO	STD			C12064D		ST63427	10% He	0.5	DA		AST1946H			
120624-GCO	05	GCO	BLK			B12064A	307	METHOD BLANK		0.5	DA		AST1946H			
120624-GCO	06	GCO	SA	224427	01	2442701A	139	V-SV-4A	EA	0.5	DA		AST1946H			
120624-GCO	07	GCO	SA	224427	02	2442702A	136	V-SV-2-6A	EA	0.5	DA		AST1946H			
120624-GCO	08	GCO	SA	224427	03	2442703A	126	V-SV-2-11A	EA	0.5	DA		AST1946H			
120624-GCO	09	GCO	SA	224427	04	2442704A	102	V-SV-2-3A	EA	0.5	DA		AST1946H			
120624-GCO	10	GCO	SA	224427	05	2442705A	120	V-SV-5A	EA	0.5	DA		AST1946H			
120624-GCO	11	GCO	SA	224427	06	2442706A	140	V-SV-1-6A	EA	0.5	DA		AST1946H			
120624-GCO	12	GCO	SA	224427	07	2442707A	133	V-SV-1-11A	EA	0.5	DA		AST1946H			
120624-GCO	13	GCO	SA	224427	08	244270A	125	V-SV-1-11B	EA	0.5	DA		AST1946H			
120624-GCO	14	GCO	SA	224435	01	2443501A	636	T-401	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	15	GCO	SA	224435	02	2443502A	703	T-402	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	16	GCO	SA	224435	03	2443503A	547	T-403	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	17	GCO	SA	224435	04	2443504A	749	T-404	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	18	GCO	SA	224435	05	2443505A	837	T-405	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	19	GCO	SA	224435	06	2443506A	626	T-406	SCHMIDT	0.5	DA		AST1946H			

REVIEWED

Daily Analytical Batch

DAB: 120624-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120624-GCO	20	GCO	SA	224435	07	2443507A	740	T-407	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	21	GCO	SA	224435	08	2443508A	805	T-408	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	22	GCO	SA	224435	09	2443509A	631	T-409	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	23	GCO	SA	224435	10	2443510A	714	T-410	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	24	GCO	SA	224435	11	2443511A	551	T-411	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	25	GCO	SA	224435	12	2443512A	881	T-412	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	26	GCO	SA	224435	13	2443513A	766	T-413	SCHMIDT	0.5	DA		AST1946H			
120624-GCO	27	GCO	SA	224435	14	2443514A	725	T-414	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	28	GCO	SA	224435	15	2443515A	896	T-415	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	29	GCO	SA	224435	16	2443516A	659	T-416	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	30	GCO	SA	224435	17	2443517A	899	T-417	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	31	GCO	SA	224435	18	2443518A	552	T-418	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	32	GCO	SA	224435	19	2443519A	664	T-501	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	33	GCO	SA	224435	18	2443518B	552	T-418	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	34	GCO	SA	224435	20	2443520A	716	T-502	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	35	GCO	SA	224435	21	2443521A	751	T-503	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	36	GCO	SA	224435	22	2443522A	644	T-504	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	37	GCO	SA	224435	23	2443523A	883	T-505	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	38	GCO	SA	224435	24	2443524A	784	T-506	SCHMIDT	0.5	LR		AST1946H			

REVIEWED

Daily Analytical Batch

DAB: 120624-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120624-GCO	39	GCO	SA	224435	25	2443525A	712	T-507	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	40	GCO	SA	224435	26	2443526A	549	T-508	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	41	GCO	SA	224435	26	2443526B	549	T-508	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	42	GCO	SA	224435	27	2443527A	882	T-509	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	43	GCO	SA	224435	28	2443528A	860	T-510	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	44	GCO	SA	224435	29	2443529A	627	T-511	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	45	GCO	SA	224435	30	2443530A	417	T-512	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	46	GCO	SA	224435	31	2443531A	781	T-513	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	47	GCO	SA	224435	32	2443532A	506	T-514	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	48	GCO	SA	224435	33	2443533A	700	T-601	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	49	GCO	SA	224435	34	2443534A	673	T-602	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	50	GCO	SA	224435	35	2443535A	550	T-603	SCHMIDT	0.5	LR		AST1946H	LATE SECON		
120624-GCO	51	GCO	SA	224435	35	2443535B	550	T-603	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	52	GCO	SA	224435	36	2443536A	738	T-604	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	53	GCO	SA	224435	37	2443537A	892	T-605	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	54	GCO	SA	224435	38	2443538A	608	T-606	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	55	GCO	SA	224435	39	2443539A	771	T-607	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	56	GCO	SA	224435	40	2443540A	531	T-608	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	57	GCO	SA	224435	41	2443541A	668	T-609	SCHMIDT	0.5	LR		AST1946H			

REVIEWED

Daily Analytical Batch

DAB: 120624-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120624-GCO	58	GCO	SA	224435	42	2443542A	730	T-610	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	59	GCO	SA	224435	43	2443543A	701	T-611	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	60	GCO	SA	224435	44	2443544A	514	T-612	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	61	GCO	SA	224435	45	2443545A	694	T-613	SCHMIDT	0.5	LR		AST1946H			
120624-GCO	62	GCO	SA	224435	46	2443546A	880	T-614	SCHMIDT	0.5	LR		AST1946H			

REVIEWED

Sample Data Packages

SDG Number **224435**

Lab Id Number **1**

Client ID T-401

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 1

Client: C.E. Schmidt
Client ID: T-401
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 636
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:51
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

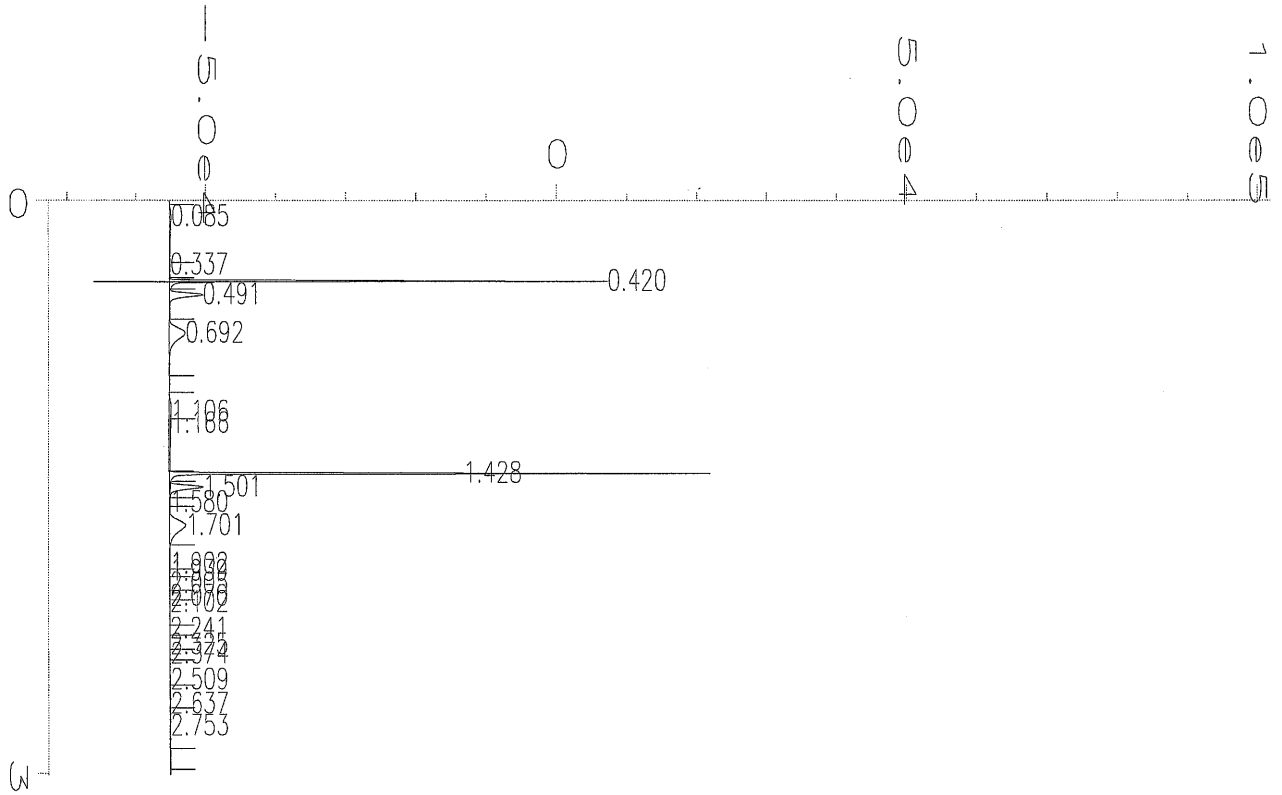
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443501MA.D
Operator : DA
Instrument : GCL
Sample Name : T-401
Run Time Bar Code:
Acquired on : 06 Dec 24 02:30 PM
Report Created on: 06 Dec 24 02:34 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443501MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.085	2286	215	PH	0.134	2.4865
2	0.337	253	104	VV	0.041	0.2754
3	0.420	20073	28225	VV	0.012	21.8334
4	0.491	7770	4804	VV	0.026	8.4515
5	0.692	10652	2294	VV	0.071	11.5869
6	1.106	1664	303	VV	0.090	1.8096
7	1.166	3049	277	VV	0.139	3.3167
8	1.428	26113	64007	HBAS	0.007	28.4035
9	1.501	6879	4582	BV T	0.025	7.4826
10	1.580	39	-19	VV T	0.000	0.0429
11	1.701	10311	2284	PV T	0.069	11.2159
12	1.902	357	41	VV T	0.145	0.3882
13	1.939	47	38	VV T	0.020	0.0512

14	2.005	85	37	PV T	0.039	0.0919
15	2.070	86	49	PV T	0.029	0.0935
16	2.102	207	54	VV T	0.081	0.2247
17	2.241	94	40	VV T	0.040	0.1025
18	2.325	186	55	VV T	0.050	0.2024
19	2.374	171	71	VV T	0.040	0.1862
20	2.509	444	114	VV T	0.065	0.4827
21	2.637	514	109	VV T	0.078	0.5594
22	2.753	655	111	VV T	0.098	0.7125

Total area = 91935

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**01**			Cal Update:	**04/15/24**
File Name:	**2443501A**			SF:	3
Description:	**T-401**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**8:51**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**14:30**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**636**				
Can Factor:	**1.25**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**20073**	2.53	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

File Name:	2443501A		Detect Flag:	ND	**Laboratory Number: 01**
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.25		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.25		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.533	2.533	25,329	25,329	2.533	200	0.025	0.031	0.094	250	750			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 01

File Name: 2443501A
Description: T-401
Can/Tube#: 636
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 12/06/24 **Time:** 14:30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.094	2.533	250	750	25,329	

Sample Data Packages

SDG Number 224435
Lab Id Number 2

Client ID T-402

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 2

Client: C.E. Schmidt
Client ID: T-402
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 703
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:35
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

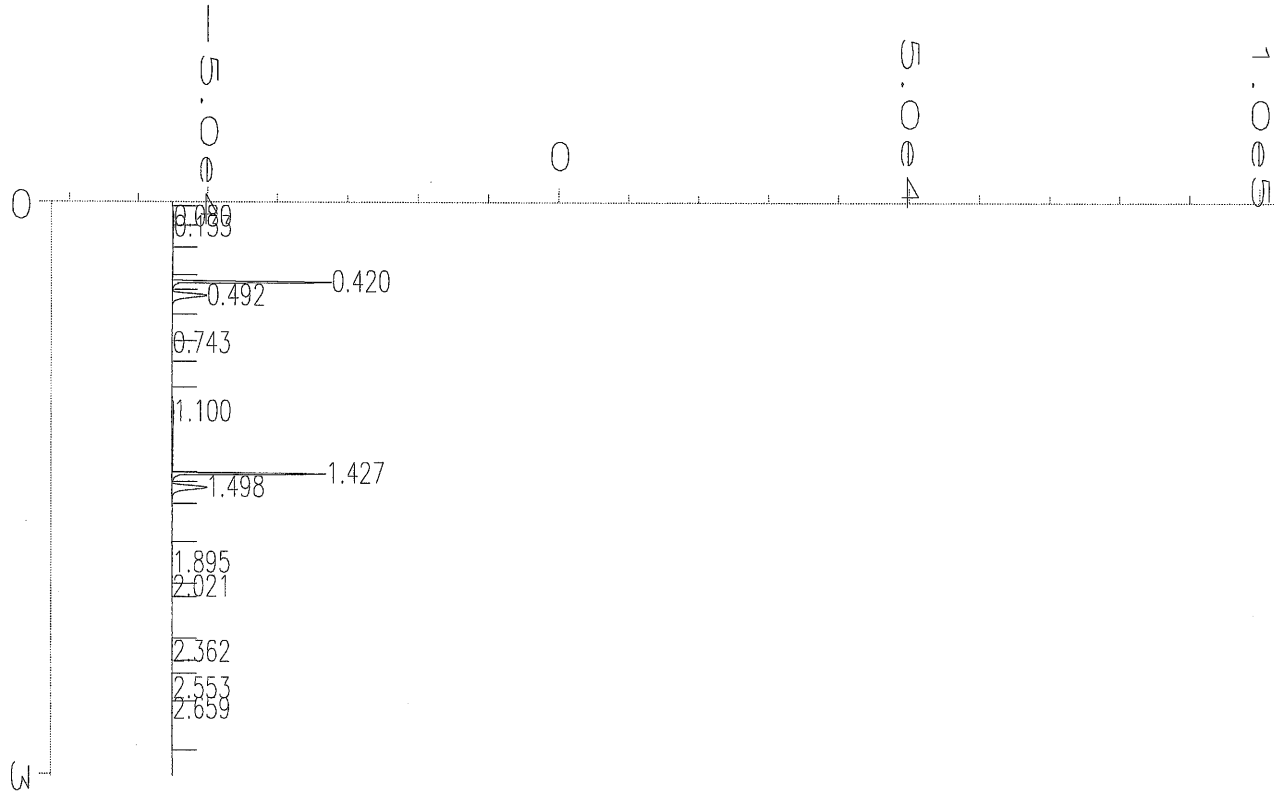
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443502MA.D
Operator : DA
Instrument : GCL
Sample Name : T-402
Run Time Bar Code:
Acquired on : 06 Dec 24 02:34 PM
Report Created on: 06 Dec 24 02:37 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443502MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.080	682	185	PH	0.062	1.4238
2	0.133	561	161	VV	0.058	1.1720
3	0.420	12946	23839	BV	0.009	27.0234
4	0.492	7665	4846	VV	0.042	15.9993
5	0.743	183	67	PV	0.043	0.3824
6	1.100	3519	229	PV	0.191	7.3465
7	1.427	12602	21294	VV	0.010	26.3049
8	1.498	7888	4910	VV	0.042	16.4663
9	1.895	590	77	PV	0.120	1.2320
10	2.021	219	77	VV	0.048	0.4578
11	2.362	389	78	VV	0.083	0.8120
12	2.553	354	84	VV	0.068	0.7383
13	2.659	307	76	PB	0.076	0.6415

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	02			Cal Update:	04/15/24
File Name:	2443502A			SF:	3
Description:	T-402			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	8:35	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	14:34	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	703				
Can Factor:	1.25				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	12946	1.63	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 02

File Name:	2443502A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.25		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.25		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.631	1.631	16,310	16,310	1.631	200	0.025	0.031	0.093	250	749			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 02

File Name: 2443502A
Description: T-402
Can/Tube#: 703
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 12/06/24 **Time:** 14:34

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.093	1.631	250	749	16,310	

Sample Data Packages

SDG Number 224435

Lab Id Number 3

Client ID T-403

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 3

Client: C.E. Schmidt
Client ID: T-403
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 547
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 8:12
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

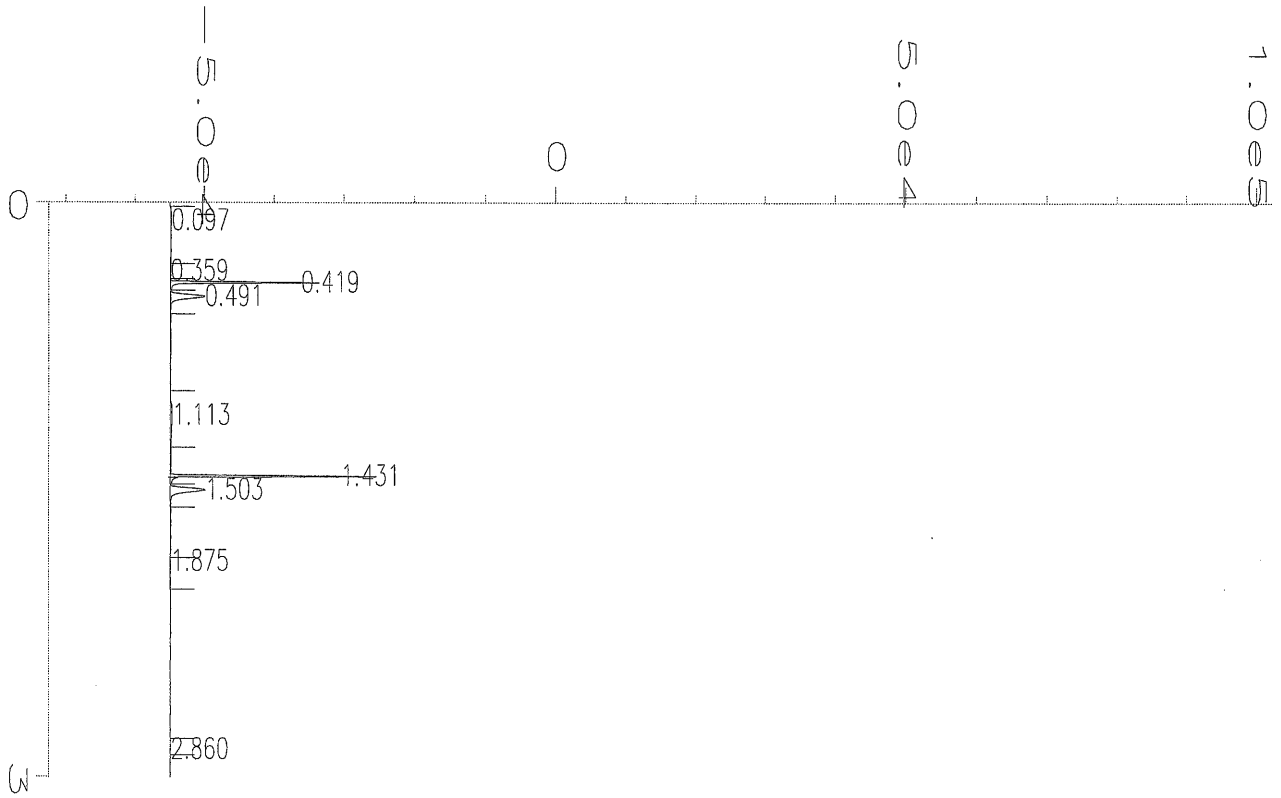
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443503MA.D
Operator : DA
Instrument : GCL
Sample Name : T-403
Run Time Bar Code:
Acquired on : 06 Dec 24 02:38 PM
Report Created on: 06 Dec 24 02:41 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443503MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.097	1088	130	PH	0.119	2.3781
2	0.359	80	47	PV	0.032	0.1741
3	0.419	10872	14808	PV	0.012	23.7520
4	0.491	7662	4996	VV	0.025	16.7392
5	1.113	2596	252	PV	0.136	5.6727
6	1.431	14966	19996	VV	0.012	32.6980
7	1.503	8036	5069	VV	0.042	17.5572
8	1.875	320	73	PB	0.074	0.6996
9	2.860	151	71	PV	0.035	0.3291

Total area = 45771

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**03**			Cal Update:	**04/15/24**
File Name:	**2443503A**			SF:	3
Description:	**T-403**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**8:12**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**14:38**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**547**				
Can Factor:	**1.27**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**10872**	1.39	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: ####

Laboratory Number: 03

File Name:	2443503A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.27		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.27		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.389	1.389	13,893	13,893	1.389	200	0.025	0.032	0.096	253	759			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 03

File Name: 2443503A
Description: T-403
Can/Tube#: 547
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 12/06/24 **Time:** 14:38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.032	0.096	1.389	253	759	13,893	

Sample Data Packages

SDG Number 224435

Lab Id Number 4

Client ID T-404

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 | 4

Client: C.E. Schmidt
Client ID: T-404
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 749
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:24
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

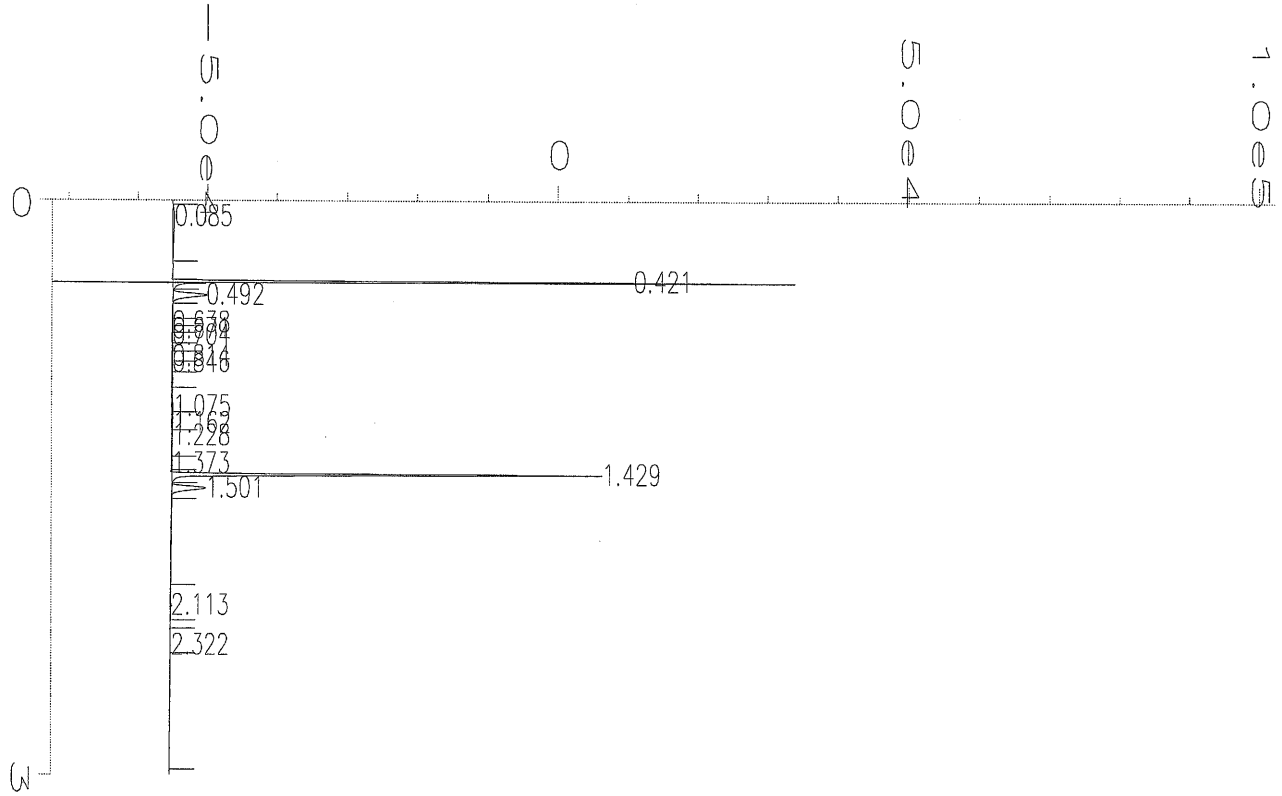
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443504MA.D
Operator : DA
Instrument : GCL
Sample Name : T-404
Run Time Bar Code:
Acquired on : 06 Dec 24 02:41 PM
Report Created on: 06 Dec 24 02:44 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443504MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.085	1884	151	BV	0.161	2.5065
2	0.421	28750	86667	HH S	0.006	38.2511
3	0.492	6878	4600	BV T	0.025	9.1515
4	0.638	30	37	PV T	0.014	0.0400
5	0.671	33	28	VV T	0.020	0.0433
6	0.704	68	35	VV T	0.033	0.0899
7	0.814	114	59	PV T	0.033	0.1516
8	0.846	100	43	VV T	0.039	0.1334
9	1.075	745	191	PV T	0.065	0.9907
10	1.162	921	176	VV T	0.087	1.2258
11	1.228	715	126	VV T	0.094	0.9507
12	1.373	169	71	VV T	0.039	0.2242
13	1.429	27018	58066	HBAS	0.008	35.9466

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	04			Cal Update:	04/15/24
File Name:	2443504A			SF:	3
Description:	T-404			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	8:24	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	14:41	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	749				
Can Factor:	1.24				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	28750	3.60	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: ####

Laboratory Number: 04

File Name:	2443504A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.24		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.24		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.600	3.600	35,998	35,998	3.600	200	0.025	0.031	0.092	248	744			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 04

File Name: 2443504A
Description: T-404
Can/Tube#: 749
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 8:24
Date Analyzed: 12/06/24 **Time:** 14:41

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.092	3.600	248	744	35,998	

Sample Data Packages

SDG Number **224435**

Lab Id Number **5**

Client ID T-405

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 5

Client: C.E. Schmidt
Client ID: T-405
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 837
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Initial :
Final:
Factor:

Date:

Sampled: 11/19/2024 Time: 10:20
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

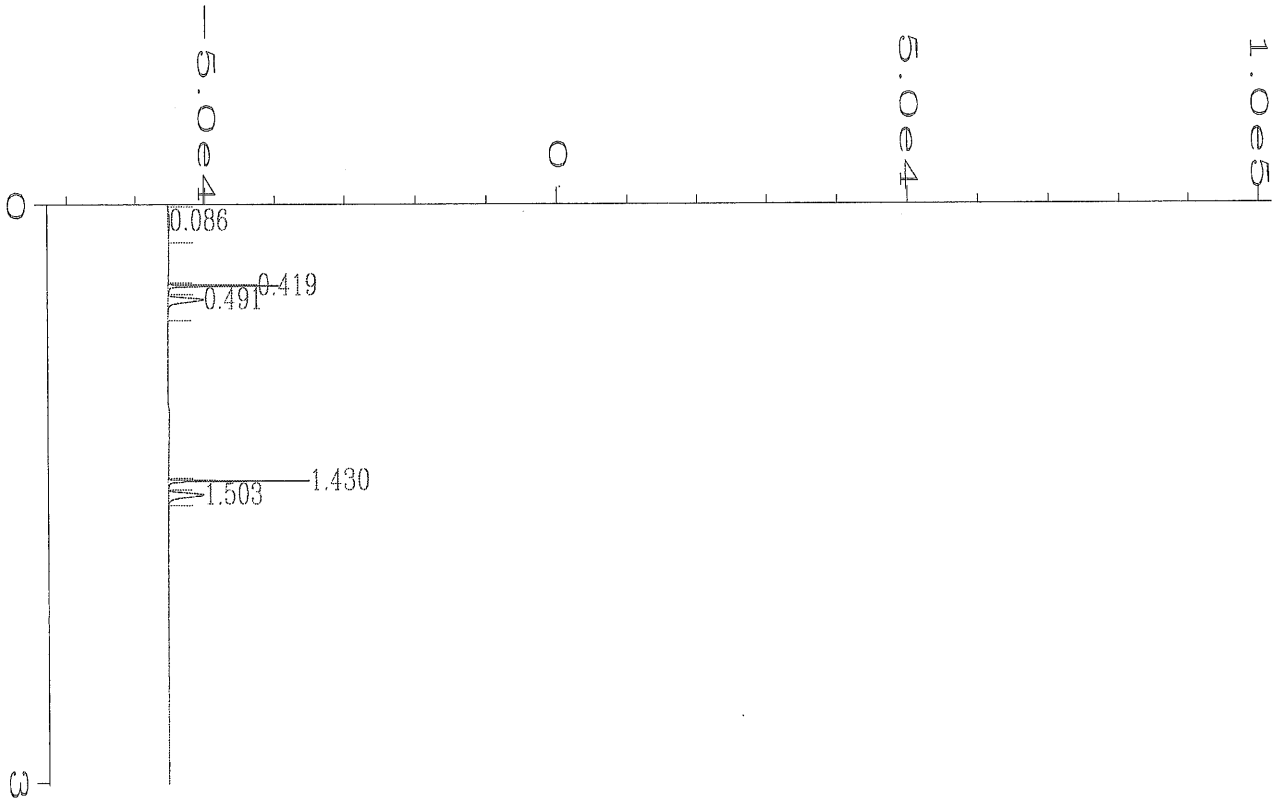
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\GCO\12064GCO\443505MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-405
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 06 Dec 24 02:45 PM
Instrument Method: AST1946H.MTH
Report Created on: 12 Dec 24 11:56 AM
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCO\12064GCO\443505MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.086	1297	217	BB	0.086	4.1983
2	0.419	7389	17051	PV	0.014	23.9122
3	0.491	7799	5144	VV	0.024	25.2390
4	1.430	6842	21911	PV	0.012	22.1415
5	1.503	7574	5097	VV	0.023	24.5091

Total area = 30902

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QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**05**			Cal Update:	**04/15/24**
File Name:	**2443505A**			SF:	3
Description:	**T-405**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**10:20**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**14:45**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**837**				
Can Factor:	**1.28**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**7389**	0.96	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: ####

Laboratory Number: 05

File Name:	2443505A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.28		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	0.955	0.955	9,550	9,550	0.955	200	0.026	0.033	0.098	256	768			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 05

File Name: 2443505A
Description: T-405
Can/Tube#: 837
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:20
Date Analyzed: 12/06/24 **Time:** 14:45

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	0.955	256	768	9,550	

Sample Data Packages

SDG Number 224435
Lab Id Number 6

Client ID T-406

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 6

Client: C.E. Schmidt
Client ID: T-406
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 626
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:06
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

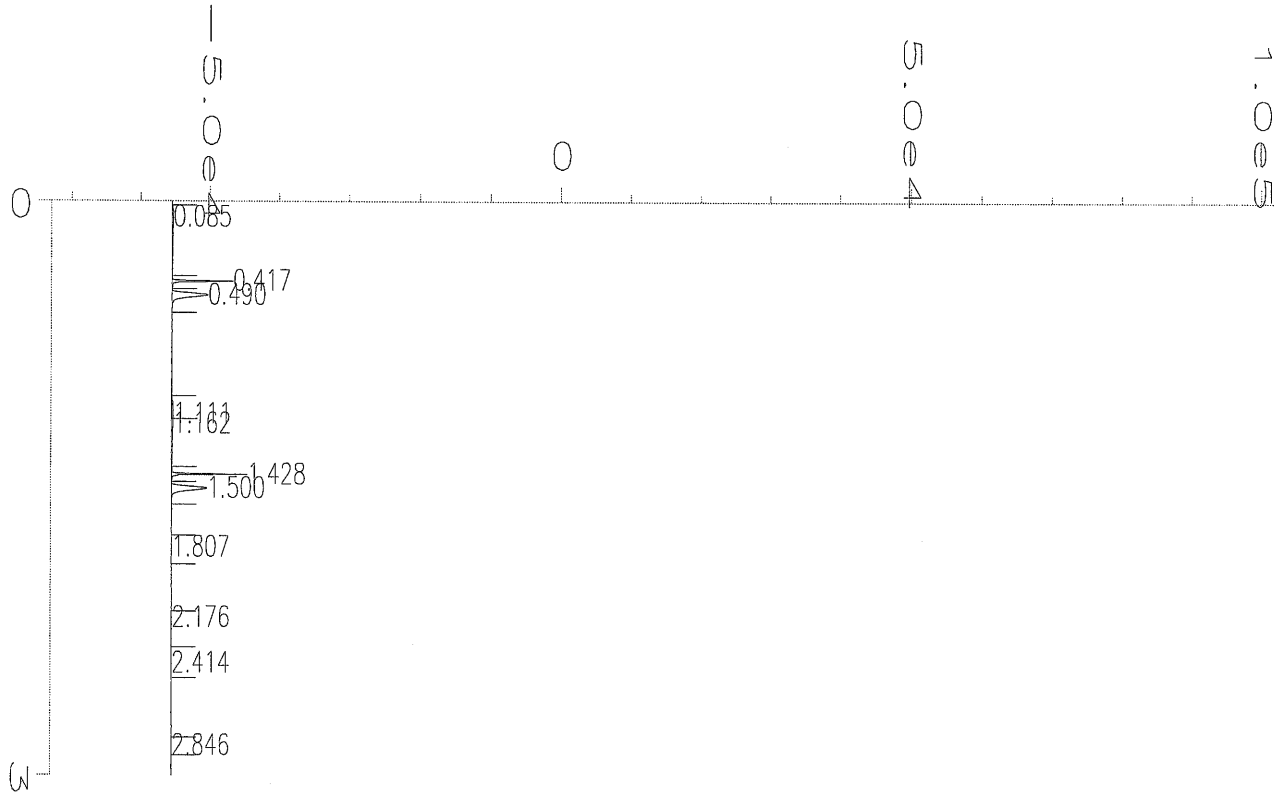
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443506MA.D
Operator : DA
Instrument : GCL
Sample Name : T-406
Run Time Bar Code:
Acquired on : 06 Dec 24 02:48 PM
Report Created on: 06 Dec 24 02:52 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443506MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.085	1818	162	BV	0.140	6.1982
2	0.417	3635	5634	VV	0.011	12.3954
3	0.490	7794	5161	PV	0.039	26.5763
4	1.111	1181	234	PV	0.073	4.0255
5	1.162	2132	227	VV	0.157	7.2688
6	1.428	3675	6480	VV	0.009	12.5299
7	1.500	7929	5061	VV	0.040	27.0349
8	1.807	315	62	VV	0.071	1.0748
9	2.176	400	69	PV	0.087	1.3646
10	2.414	287	60	PV	0.089	0.9788
11	2.846	162	58	VV	0.044	0.5529

Total area = 29328

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	06			Cal Update:	04/15/24
File Name:	2443506A			SF:	3
Description:	T-406			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	10:06	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	14:48	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	626				
Can Factor:	1.26				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	3635	0.46	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: ####

Laboratory Number: 06

File Name:	2443506A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.26		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.26		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	0.462	0.462	4,625	4,625	0.462	200	0.025	0.032	0.095	252	756			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 06

File Name: 2443506A
Description: T-406
Can/Tube#: 626
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 12/06/24 **Time:** 14:48

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.032	0.095	0.462	252	756	4,625	

Sample Data Packages

SDG Number 224435
Lab Id Number 7

Client ID T-407

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Due:

Expires: 12/19/2024

224435 7

Client: C.E. Schmidt
Client ID: T-407
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 740
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Initial :
Final:
Factor:

Date:

Sampled: 11/19/2024 Time: 10:05
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:**

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

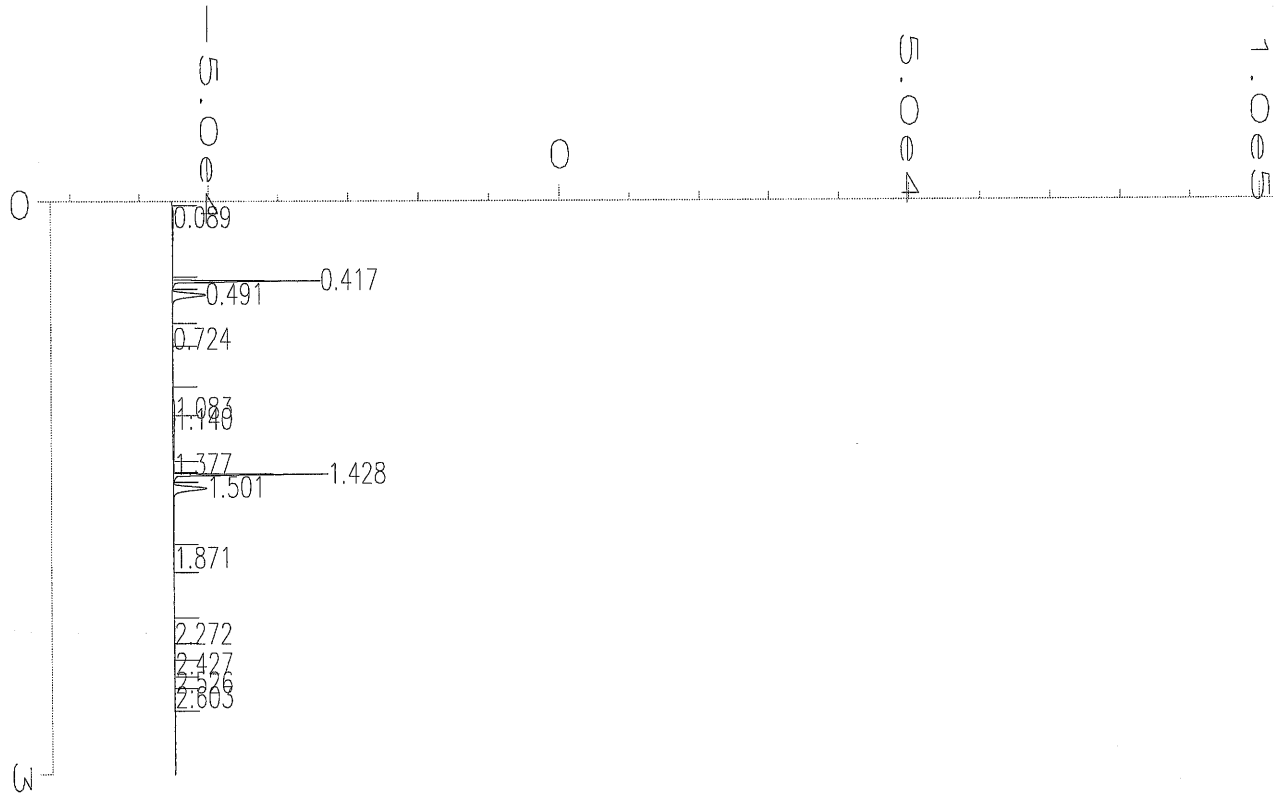
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443507MA.D
Operator : DA
Instrument : GCL
Sample Name : T-407
Run Time Bar Code:
Acquired on : 06 Dec 24 02:56 PM
Report Created on: 06 Dec 24 02:59 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443507MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.089	1771	175	PH	0.135	4.3095
2	0.417	8808	14063	PV	0.010	21.4277
3	0.491	7559	4816	VV	0.025	18.3891
4	0.724	263	69	PV	0.063	0.6400
5	1.083	1249	246	VV	0.070	3.0397
6	1.140	2361	249	VV	0.123	5.7437
7	1.377	359	118	VV	0.051	0.8728
8	1.428	9084	16968	VV	0.009	22.0997
9	1.501	8303	4772	VV	0.042	20.2004
10	1.871	401	80	PV	0.072	0.9755
11	2.272	281	58	VV	0.078	0.6845
12	2.427	290	95	VV	0.053	0.7054
13	2.526	161	63	VV	0.043	0.3927

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**07**			Cal Update:	**04/15/24**
File Name:	**2443507A**			SF:	3
Description:	**T-407**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**10:05**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**14:56**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**740**				
Can Factor:	**1.32**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**8808**	1.17	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 07

File Name:	2443507A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.32		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.32		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.174	1.174	11,740	11,740	1.174	200	0.026	0.035	0.105	264	792			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 07

File Name: 2443507A
Description: T-407
Can/Tube#: 740
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 12/06/24 **Time:** 14:56

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.105	1.174	264	792	11,740	

Sample Data Packages

SDG Number 224435

Lab Id Number 8

Client ID T-408

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 8

Client: C.E. Schmidt
Client ID: T-408
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 805
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:19
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

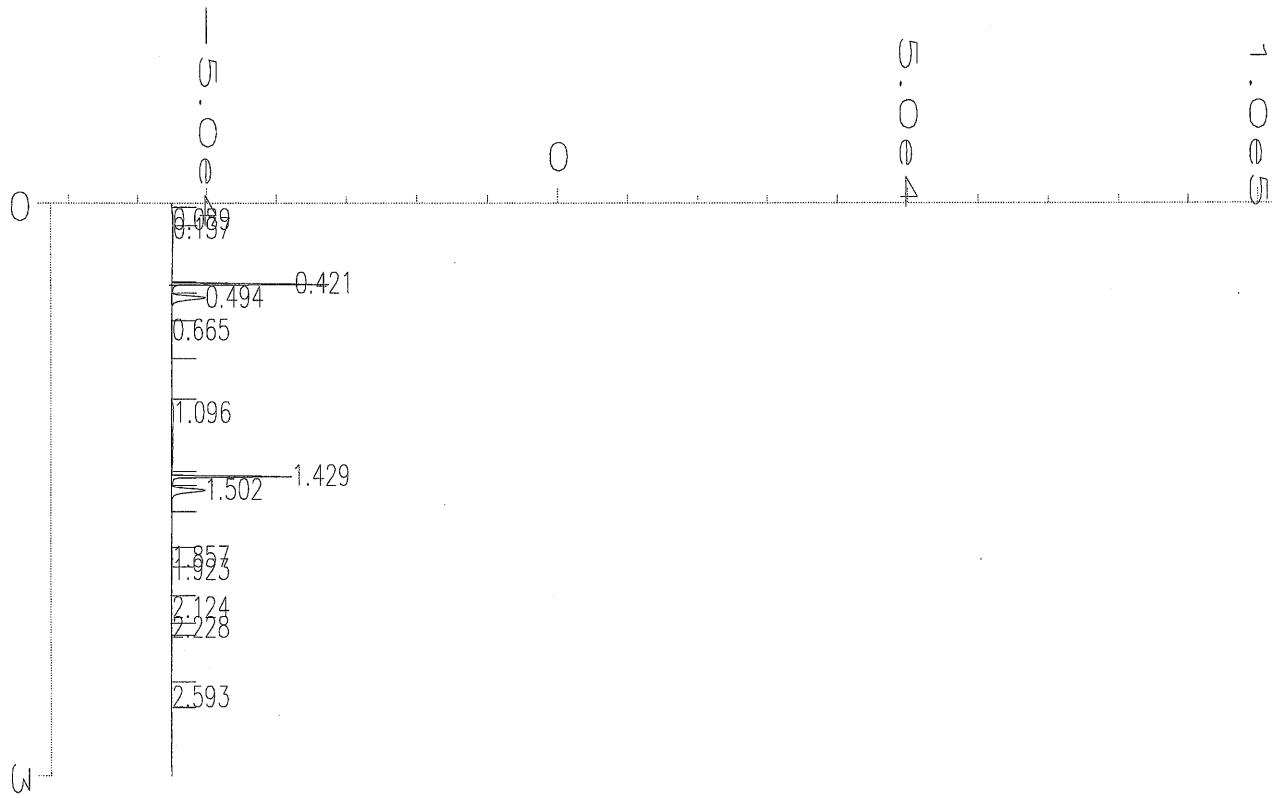
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443508MA.D
Operator : DA
Instrument : GCL
Sample Name : T-408
Run Time Bar Code:
Acquired on : 06 Dec 24 02:59 PM
Report Created on: 06 Dec 24 03:03 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443508MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.089	353	71	PV	0.067	0.8480
2	0.137	254	23	PV	0.182	0.6096
3	0.421	10226	22048	PV	0.015	24.5553
4	0.494	7433	4808	VV	0.037	17.8500
5	0.665	257	77	PV	0.048	0.6160
6	1.096	4103	299	VV	0.184	9.8530
7	1.429	8808	16084	VV	0.009	21.1516
8	1.502	8029	4948	VV	0.040	19.2804
9	1.857	489	126	VV	0.065	1.1751
10	1.923	691	121	VV	0.086	1.6603
11	2.124	465	90	PV	0.079	1.1167
12	2.228	292	105	VV	0.046	0.7012
13	2.593	243	63	PV	0.054	0.5828

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	08			Cal Update:	04/15/24
File Name:	2443508A			SF:	3
Description:	T-408			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	10:19	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	14:59	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	805				
Can Factor:	1.31				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	10226	1.35	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 08

File Name:	2443508A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.31		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.353	1.353	13,527	13,527	1.353	200	0.026	0.034	0.103	262	786			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Can/Tube#: 805
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 12/06/24 **Time:** 14:59

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	1.353	262	786	13,527	

Sample Data Packages

SDG Number 224435

Lab Id Number 9

Client ID T-409

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 9

Client: C.E. Schmidt
Client ID: T-409
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 631
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 11:45
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

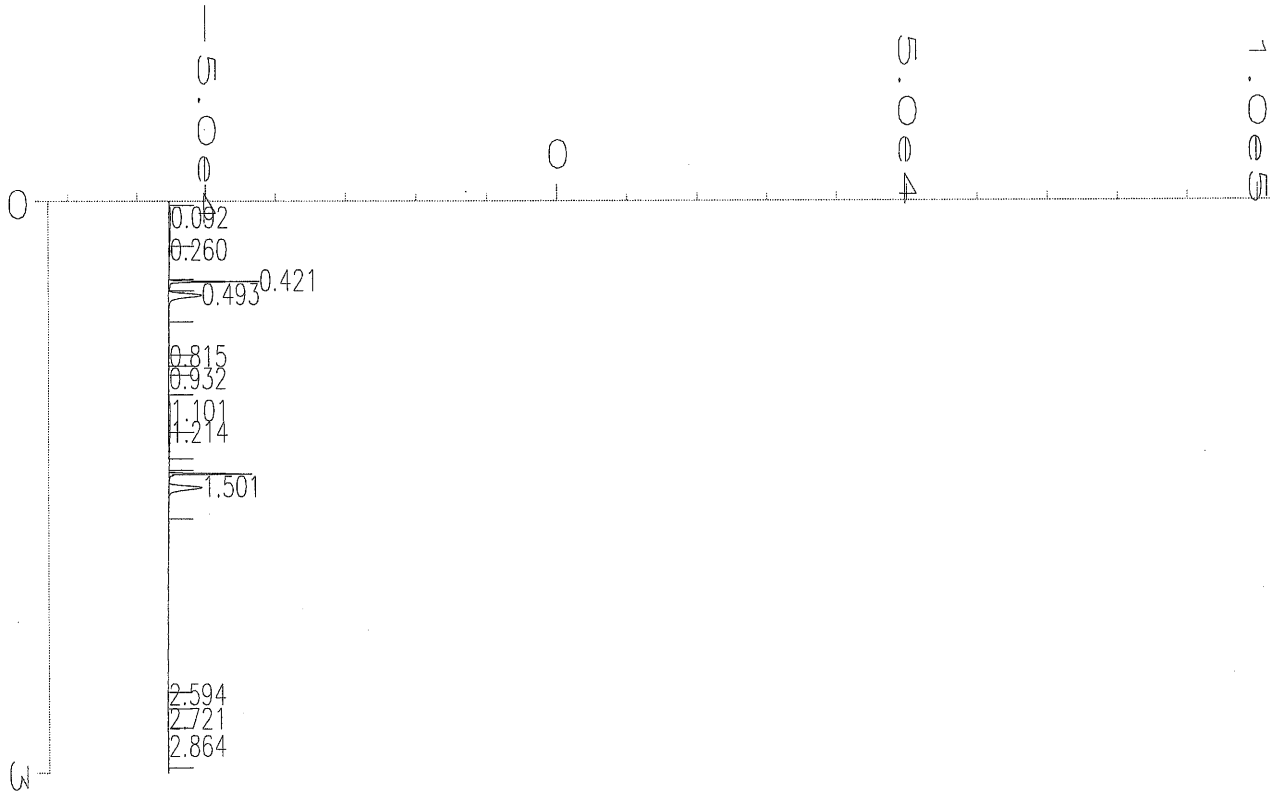
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443509MA.D
Operator : DA
Instrument : GCL
Sample Name : T-409
Run Time Bar Code:
Acquired on : 06 Dec 24 03:03 PM
Report Created on: 06 Dec 24 03:06 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443509MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.092	1804	203	BV	0.126	5.6962
2	0.260	882	144	VV	0.102	2.7841
3	0.421	4673	8620	VV	0.018	14.7596
4	0.493	7721	4735	VV	0.038	24.3860
5	0.815	266	93	VV	0.047	0.8410
6	0.932	300	61	PV	0.068	0.9459
7	1.101	1969	249	VV	0.105	6.2178
8	1.214	797	171	VB	0.078	2.5171
9	1.501	12085	4803	BV	0.050	38.1683
10	2.594	216	69	PV	0.058	0.6836
11	2.721	307	84	VV	0.057	0.9700
12	2.864	643	104	PBA	0.098	2.0304

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**09**			Cal Update:	**04/15/24**
File Name:	**2443509A**			SF:	3
Description:	**T-409**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**11:45**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**15:03**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**631**				
Can Factor:	**1.36**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**4673**	0.64	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 09

File Name:	2443509A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.36		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	0.642	0.642	6,417	6,417	0.642	200	0.027	0.037	0.111	272	816			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Can/Tube#: 631
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/06/24 **Time:** 15:03

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	0.642	272	816	6,417	

Sample Data Packages

SDG Number **224435**

Lab Id Number **10**

Client ID T-410

Analytical Method ASTM D1945

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 10

Client: C.E. Schmidt
Client ID: T-410
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 714
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:59
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

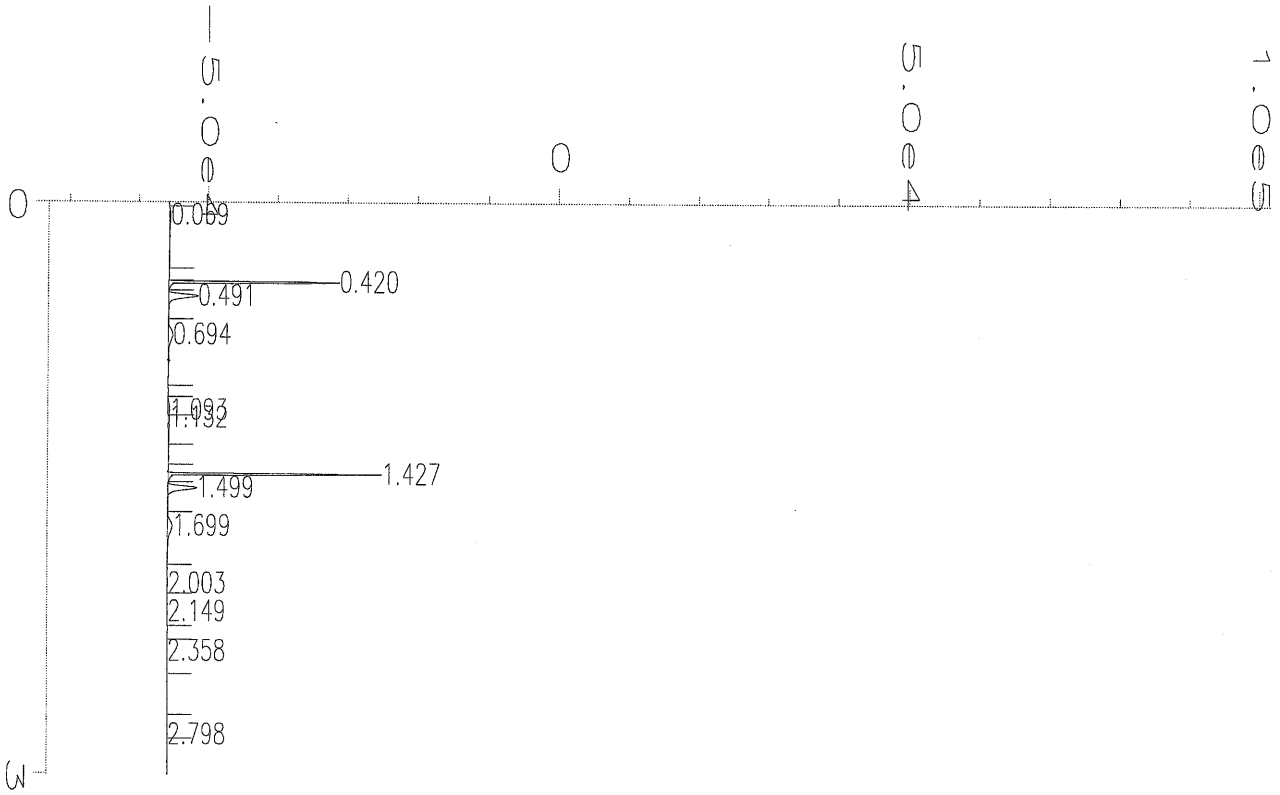
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443510MA.D
Operator : DA
Instrument : GCL
Sample Name : T-410
Run Time Bar Code:
Acquired on : 06 Dec 24 03:07 PM
Report Created on: 06 Dec 24 03:10 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443510MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.069	1089	165	PH	0.095	2.0849
2	0.420	14267	25093	PV	0.009	27.3204
3	0.491	6436	4160	VV	0.025	12.3245
4	0.694	3050	647	PV	0.072	5.8396
5	1.093	836	206	PV	0.068	1.6011
6	1.132	937	153	VB	0.093	1.7942
7	1.427	14790	28687	PV	0.009	28.3223
8	1.499	6366	4009	VV	0.044	12.1896
9	1.699	3331	688	VV	0.076	6.3784
10	2.003	342	82	PV	0.061	0.6543
11	2.149	349	73	PV	0.078	0.6684
12	2.358	351	66	PV	0.075	0.6719
13	2.798	79	62	PV	0.021	0.1504

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	10			Cal Update:	04/15/24
File Name:	2443510A			SF:	3
Description:	T-410			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	11:59	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	15:07	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	714				
Can Factor:	1.36				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	14267	1.96	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 10

File Name:	2443510A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.36		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.959	1.959	19,593	19,593	1.959	200	0.027	0.037	0.111	272	816			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Can/Tube#: 714
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/06/24 **Time:** 15:07

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	1.959	272	816	19,593	

Sample Data Packages

SDG Number 224435
Lab Id Number 11

Client ID T-411

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 11

Client: C.E. Schmidt
Client ID: T-411
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 551
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:51
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

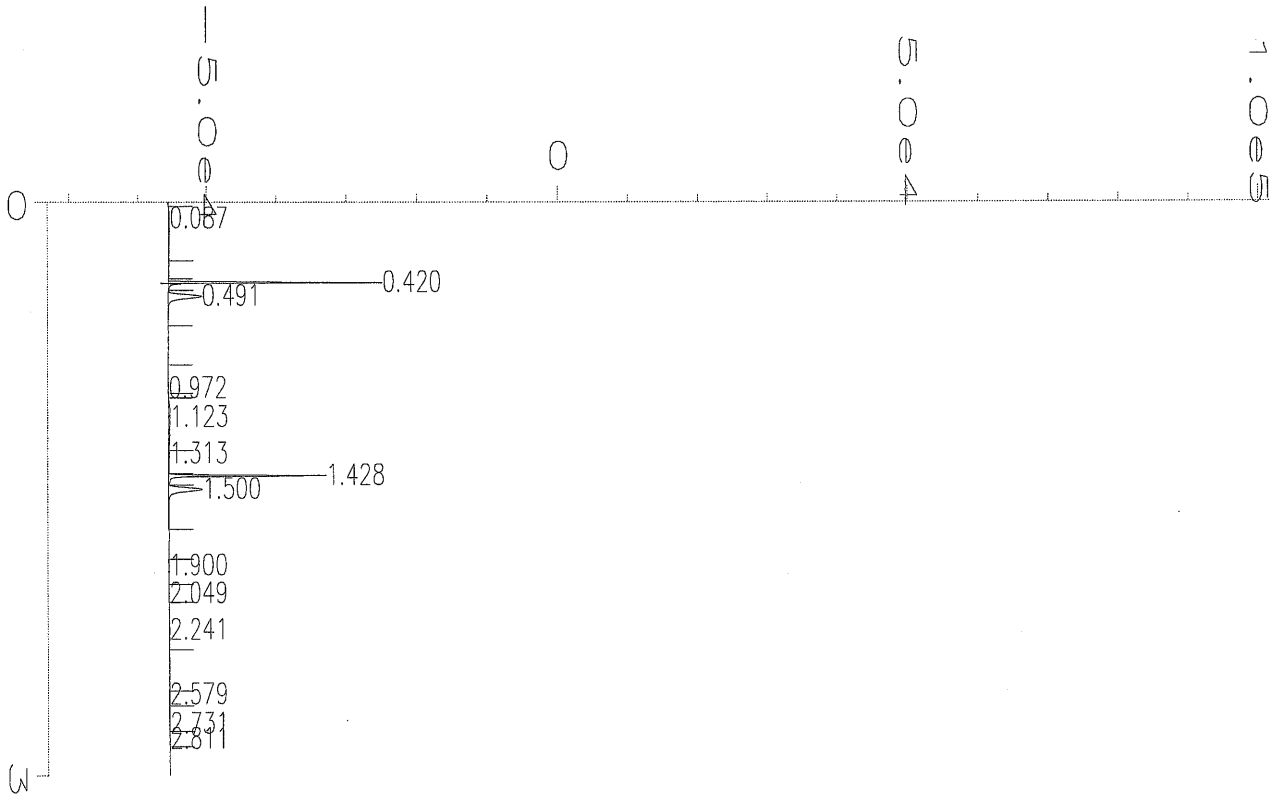
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443511MA.D
Operator : DA
Instrument : GCL
Sample Name : T-411
Run Time Bar Code:
Acquired on : 06 Dec 24 03:11 PM
Report Created on: 06 Dec 24 03:14 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443511MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.087	784	93	PH	0.109	1.8263
2	0.420	10672	16415	PV	0.011	24.8454
3	0.491	7587	4854	VV	0.025	17.6640
4	0.972	311	64	PV	0.094	0.7243
5	1.123	2777	235	VV	0.150	6.4651
6	1.313	777	161	VV	0.080	1.8080
7	1.428	10354	20784	VV	0.008	24.1048
8	1.500	8221	4852	VV	0.046	19.1391
9	1.900	321	85	VV	0.053	0.7471
10	2.049	219	78	VV	0.047	0.5091
11	2.241	583	70	VV	0.125	1.3577
12	2.579	108	52	VV	0.039	0.2507
13	2.731	185	51	PV	0.073	0.4304

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**11**			Cal Update:	**04/15/24**
File Name:	**2443511A**			SF:	3
Description:	**T-411**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**11:51**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**15:11**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**551**				
Can Factor:	**1.28**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**10672**	1.38	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 11

File Name:	2443511A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.28		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.379	1.379	13,794	13,794	1.379	200	0.026	0.033	0.098	256	768			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 11

File Name: 2443511A
Description: T-411
Can/Tube#: 551
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 12/06/24 **Time:** 15:11

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	1.379	256	768	13,794	

Sample Data Packages

SDG Number 224435

Lab Id Number 12

Client ID T-412

Analytical Method ASTM D1945

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 12

Client: C.E. Schmidt
Client ID: T-412
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 881
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 12:06
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

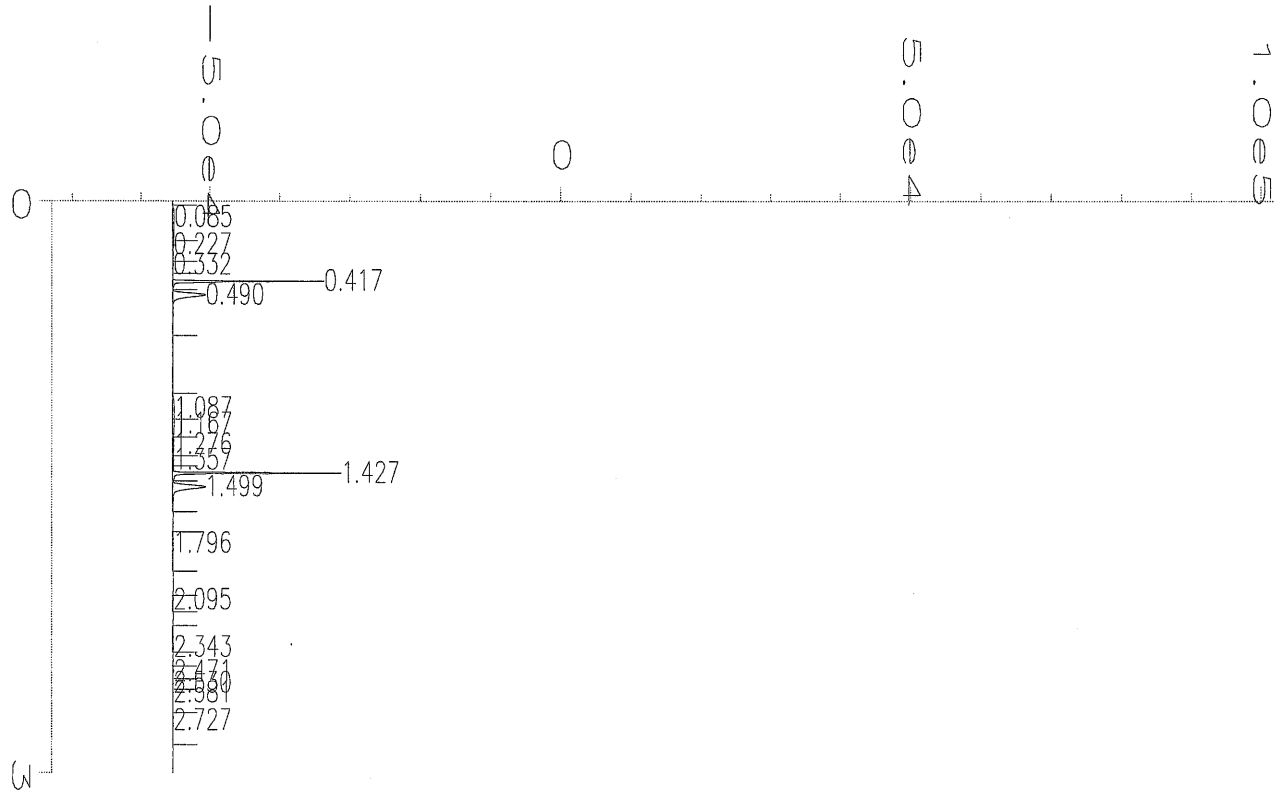
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443512MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-412
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 06 Dec 24 03:14 PM
Instrument Method: AST1946H.MTH
Report Created on: 06 Dec 24 03:18 PM
Analysis Method : AST1946H.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443512MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.085	1592	203	BV	0.111	3.6948
2	0.227	570	131	VV	0.061	1.3238
3	0.332	250	125	VV	0.035	0.5806
4	0.417	8115	13122	VV	0.010	18.8398
5	0.490	7707	4794	VV	0.041	17.8936
6	1.087	1393	249	VV	0.076	3.2337
7	1.167	1035	222	VV	0.066	2.4027
8	1.276	813	164	VV	0.083	1.8874
9	1.357	430	155	VV	0.046	0.9972
10	1.427	9811	15972	VV	0.010	22.7767
11	1.499	7969	4669	VV	0.041	18.5002
12	1.796	991	117	VV	0.117	2.2997
13	2.095	401	123	VV	0.054	0.9312

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	12			Cal Update:	04/15/24
File Name:	2443512A			SF:	3
Description:	T-412			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	12:06	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	15:14	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	881				
Can Factor:	1.32				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	8115	1.08	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 12

File Name:	2443512A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.32		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.32		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.082	1.082	10,816	10,816	1.082	200	0.026	0.035	0.105	264	792			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Can/Tube#: 881
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 12/06/24 **Time:** 15:14

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.105	1.082	264	792	10,816	

Sample Data Packages

SDG Number **224435**

Lab Id Number **13**

Client ID T-413

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 13

Client: C.E. Schmidt
Client ID: T-413
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 766
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

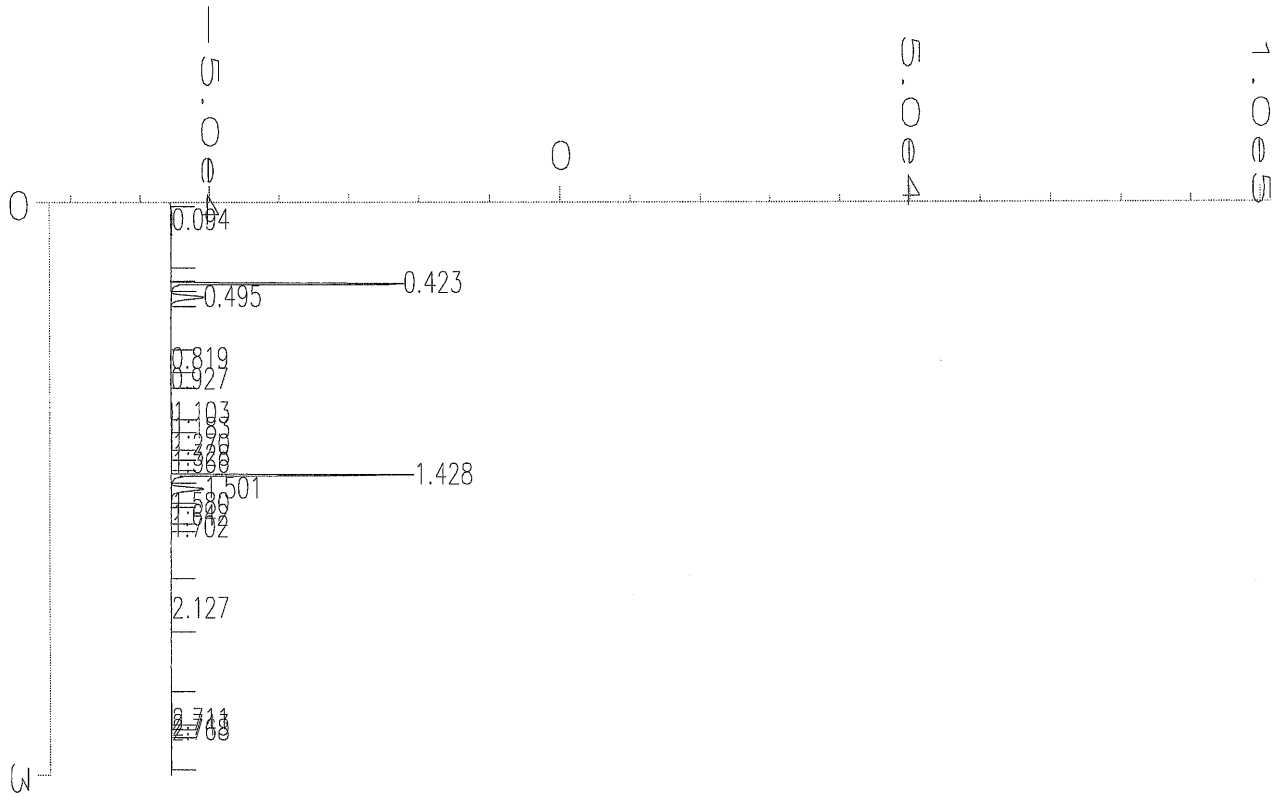
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443513MA.D
Operator : DA
Instrument : GCL
Sample Name : T-413
Run Time Bar Code:
Acquired on : 06 Dec 24 03:52 PM
Report Created on: 06 Dec 24 03:56 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443513MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.094	2099	213	PH	0.136	3.8794
2	0.423	19353	31018	HH S	0.010	35.7736
3	0.495	6779	4605	BV T	0.025	12.5307
4	0.819	214	67	PV T	0.058	0.3953
5	0.927	146	55	VV T	0.045	0.2698
6	1.103	1168	216	PV T	0.090	2.1595
7	1.183	707	200	VV T	0.059	1.3070
8	1.270	616	118	VV T	0.087	1.1390
9	1.328	233	98	VV T	0.040	0.4303
10	1.366	115	74	VV T	0.026	0.2124
11	1.428	14878	34840	HBAS	0.007	27.5014
12	1.501	6950	4639	BV T	0.037	12.8480
13	1.580	22	44	VV T	0.008	0.0408

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**13**			Cal Update:	**04/15/24**
File Name:	**2443513A**			SF:	3
Description:	**T-413**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**13:37**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**15:52**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**766**				
Can Factor:	**1.34**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**19353**	2.62	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 13

File Name:	2443513A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.34		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.34		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.619	2.619	26,186	26,186	2.619	200	0.027	0.036	0.108	268	804			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 13

File Name: 2443513A
Description: T-413
Can/Tube#: 766
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/06/24 **Time:** 15:52

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.108	2.619	268	804	26,186	

Sample Data Packages

SDG Number 224435
Lab Id Number 14

Client ID T-414

Analytical Method ASTM D1945

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Due:

Expires: 12/19/2024

224435 | 14

Client: C.E. Schmidt
Client ID: T-414
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 725
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: ~~13:37~~ 17 24
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

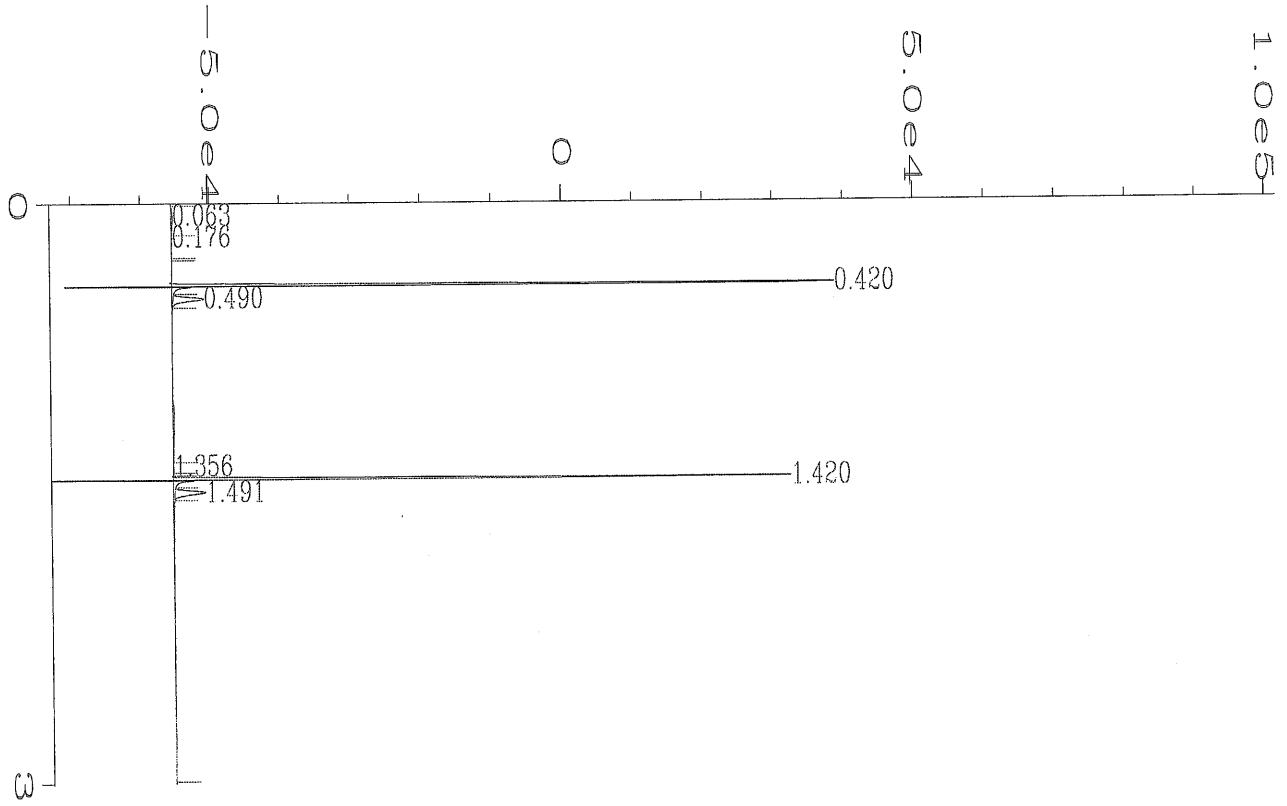
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCO\12064GCO\443514MA.D
Operator : LR
Instrument : GCL
Sample Name : T-414
Run Time Bar Code:
Acquired on : 06 Dec 24 04:26 PM
Report Created on: 17 Dec 24 07:29 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCO\12064GCO\443514MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.063	1164	203	BV	0.078	1.0841
2	0.176	352	125	VB	0.047	0.3280
3	0.420	50839	101034	BH R	0.011	47.3664
4	0.490	6469	4436	BV T	0.023	6.0270
5	1.356	143	88	VF T	0.029	0.1329
6	1.420	41966	93038	HBAR	0.010	39.0994
7	1.491	6399	4431	BF T	0.023	5.9623

Total area = 107330

User Modified

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	14			Cal Update:	04/15/24
File Name:	2443514A			SF:	3
Description:	T-414			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	13:24	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	16:26	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	725				
Can Factor:	1.32				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	55354	7.38	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 14

File Name:	2443514A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.32		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.32		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	7.378	7.378	73,781	73,781	7.378	200	0.026	0.035	0.105	264	792			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Can/Tube#: 725
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/06/24 **Time:** 16:26

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.105	7.378	264	792	73,781	

Sample Data Packages

SDG Number **224435**

Lab Id Number **15**

Client ID T-415

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Chromatogram

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Due: | Expires: 12/19/2024 | 224435 | 15

Client: C.E. Schmidt
Client ID: T-415
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 896
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: ~~13:38~~ 1324
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location: | Holding Time:

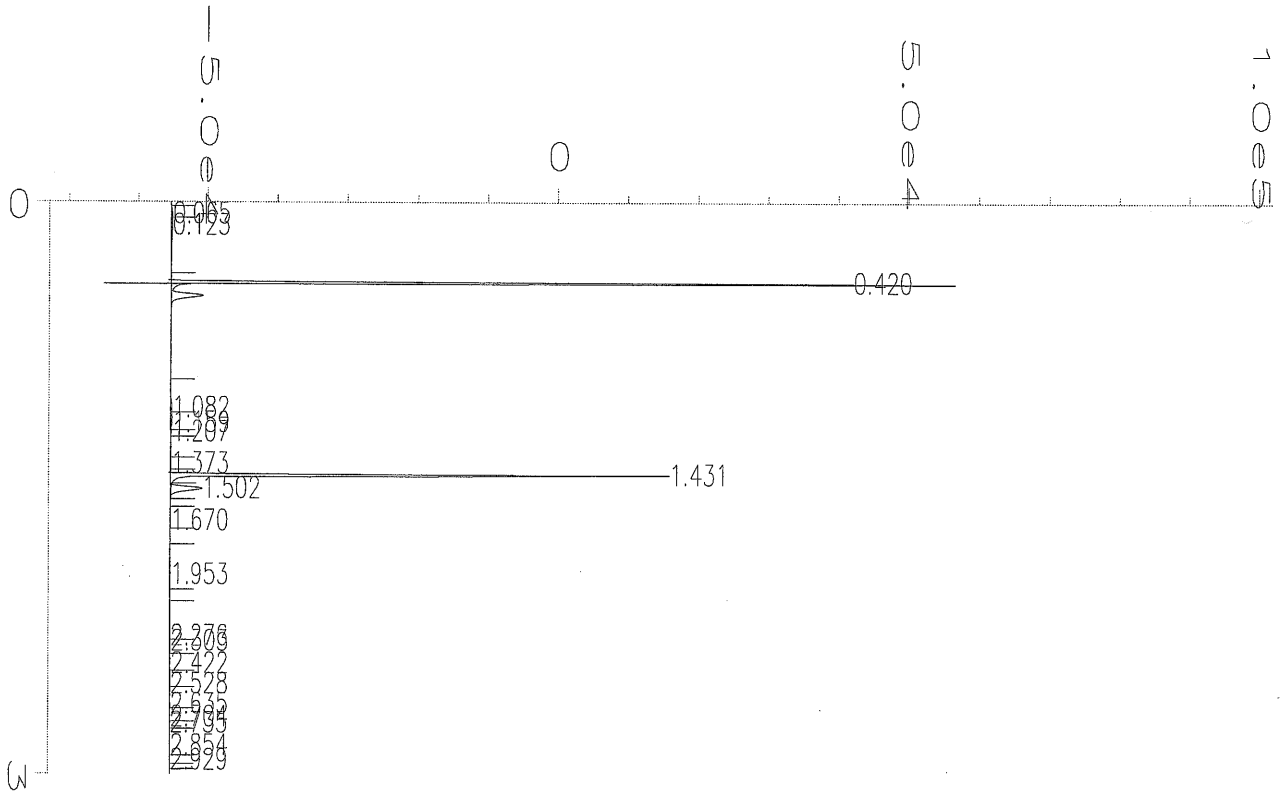
InstrumentMethod:	Item Description:	
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation 30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443515MA.D
Operator : LR
Instrument : GCL
Sample Name : T-415
Run Time Bar Code:
Acquired on : 06 Dec 24 04:30 PM
Report Created on: 06 Dec 24 04:33 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443515MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.065	438	163	BV	0.039	0.3869
2	0.123	1561	183	VV	0.142	1.3796
3	0.420	63105	117179	HH S	0.049	55.7707
4	1.082	418	157	PV T	0.044	0.3696
5	1.159	768	171	VV T	0.075	0.6788
6	1.207	136	105	VB T	0.022	0.1200
7	1.373	78	30	BV T	0.043	0.0693
8	1.431	37050	55176	HBAS	0.011	32.7436
9	1.502	6571	4446	BV T	0.025	5.8073
10	1.670	163	49	PV T	0.064	0.1437
11	1.953	394	83	PV T	0.080	0.3486
12	2.276	708	91	PV T	0.130	0.6255
13	2.303	391	112	VV T	0.058	0.3456

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**15**			Cal Update:	**04/15/24**
File Name:	**2443515A**			SF:	3
Description:	**T-415**			Not Detected Flag:	ND
Date Sampled:	**11/19/24**	Time:	**13:38**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**16:30**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**896**				
Can Factor:	**1.31**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**37050**	4.90	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 15

File Name:	2443515A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.31		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	4.901	4.901	49,009	49,009	4.901	200	0.026	0.034	0.103	262	786			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 **SDG:** 224435
Laboratory Number: 15

File Name: 2443515A
Description: T-415
Can/Tube#: 896
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 12/06/24 **Time:** 16:30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	4.901	262	786	49,009	

Sample Data Packages

SDG Number 224435
Lab Id Number 16

Client ID T-416

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 16

Client: C.E. Schmidt
Client ID: T-416
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 659
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:24
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

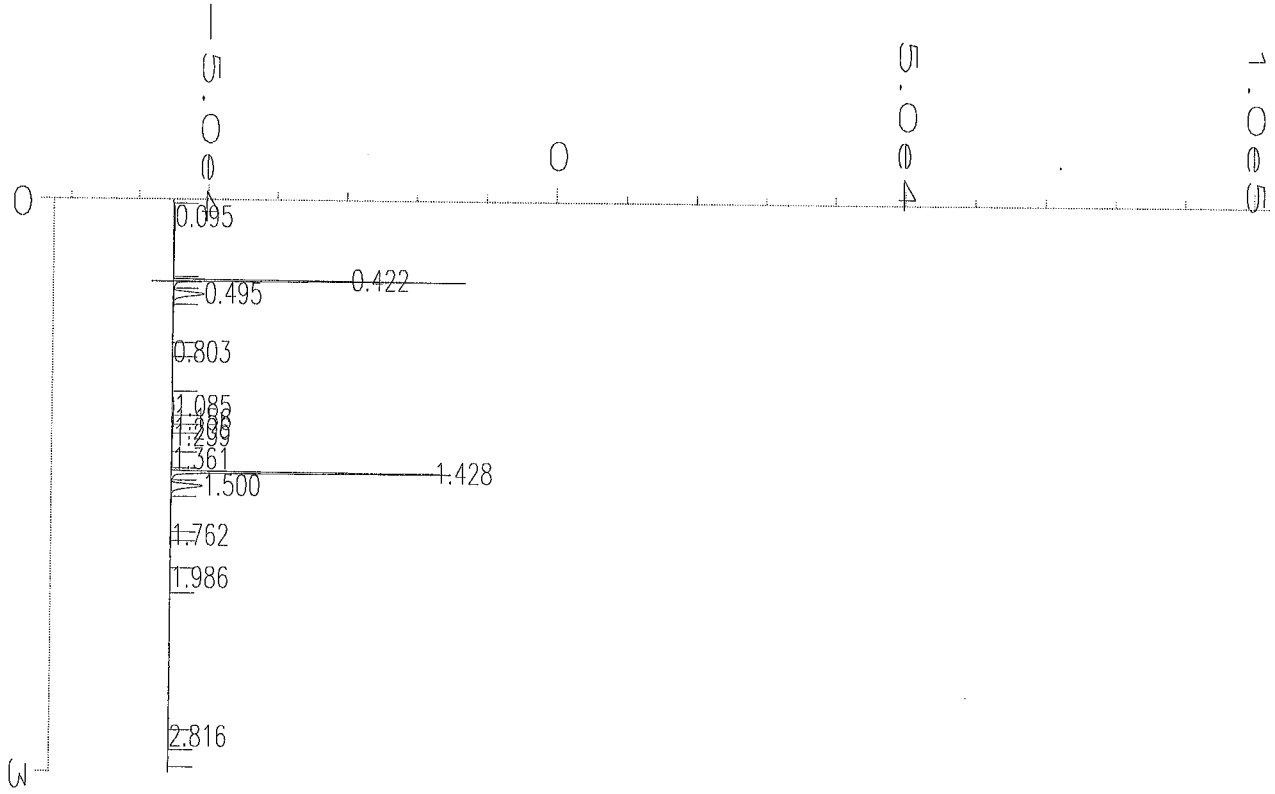
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443516MA.D
Operator : LR
Instrument : GCL
Sample Name : T-416
Run Time Bar Code:
Acquired on : 06 Dec 24 04:42 PM
Report Created on: 06 Dec 24 04:45 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443516MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.095	2701	188	BV	0.184	4.8292
2	0.422	16342	36593	HH S	0.007	29.2205
3	0.495	6462	4333	BV T	0.025	11.5543
4	0.803	104	66	PV T	0.026	0.1853
5	1.085	1219	224	VV T	0.077	2.1798
6	1.156	541	213	VV T	0.042	0.9681
7	1.206	382	128	VV T	0.050	0.6833
8	1.239	539	128	VV T	0.070	0.9641
9	1.361	262	101	VV T	0.044	0.4679
10	1.428	20331	42129	HBAS	0.008	36.3533
11	1.500	6555	4319	BV T	0.025	11.7199
12	1.762	47	88	PV T	0.009	0.0849
13	1.986	326	86	PV T	0.067	0.5832

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	16			Cal Update:	04/15/24
File Name:	2443516A			SF:	3
Description:	T-416			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	13:24	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	16:42	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	659				
Can Factor:	1.42				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	16342	2.34	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

File Name:	2443516A		Detect Flag:	ND	**SDG: 224435**
QCBatch	120624-GCO		Report Normalized:	No	**Laboratory Number: 16**
Can Factor	1.42		Decimal Places:	3	
Air Volume:	0.5 ml		Temp	25 C	
Base Volume	0.5 ml		Atm P	760 torr	
Dilution Factor	1.42		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	Fixed ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.343	2.343	23,432	23,432	2.343	200	0.028	0.040	0.121	284	852			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Can/Tube#: 659
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/06/24 **Time:** 16:42

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.040	0.121	2.343	284	852	23,432	

Sample Data Packages

SDG Number 224435
Lab Id Number 17

Client ID T-417

Analytical Method ASTM D1945

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 17

Client: C.E. Schmidt
Client ID: T-417
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 13:29
Received: 11/21/2024 Time: 13:00

Can Number: 899
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:
Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

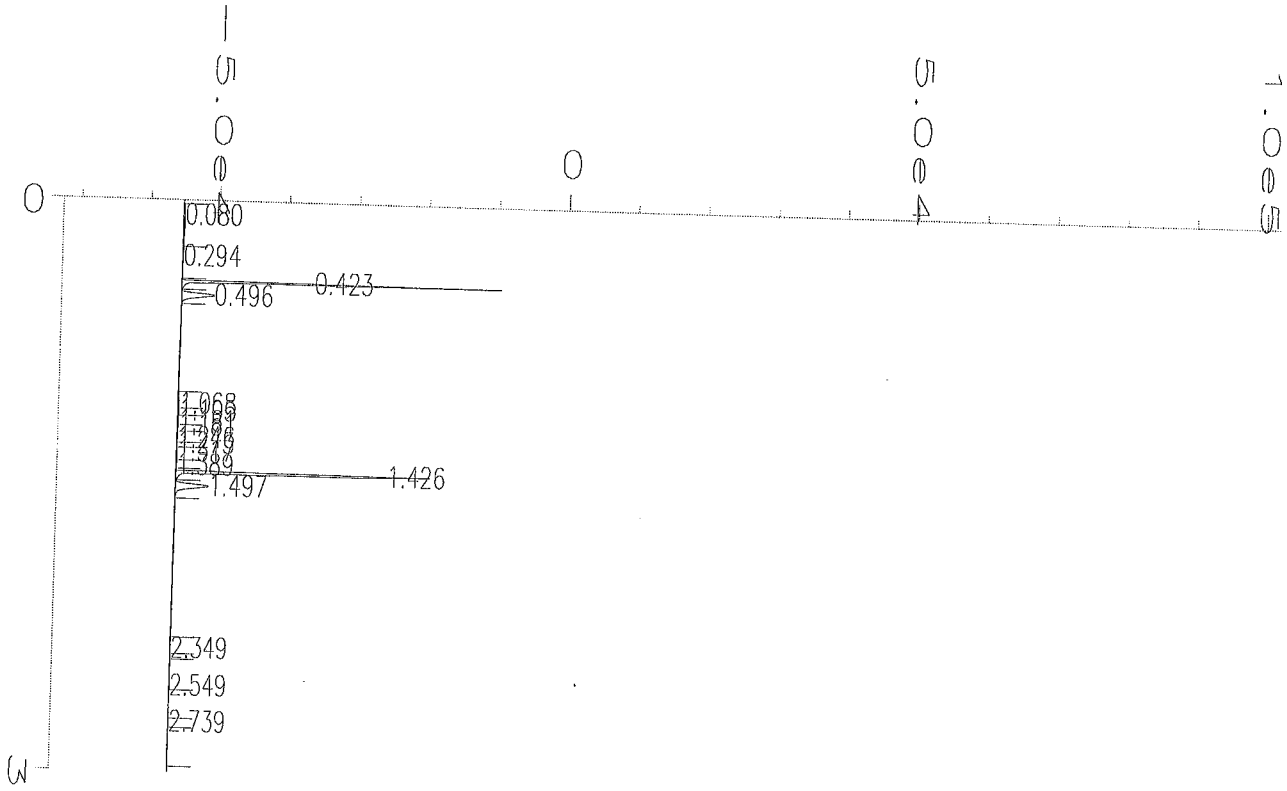
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443517MA.D
Operator : LR
Instrument : GCL
Sample Name : T-417
Run Time Bar Code:
Acquired on : 06 Dec 24 04:47 PM
Report Created on: 06 Dec 24 04:50 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443517MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.080	1800	204	BV	0.127	3.3678
2	0.294	601	131	VV	0.077	1.1247
3	0.423	9509	34201	HBAS	0.005	17.7908
4	0.496	7135	4844	BV T	0.025	13.3493
5	1.068	792	222	PV T	0.048	1.4824
6	1.105	509	251	VV T	0.034	0.9526
7	1.161	590	207	VV T	0.048	1.1030
8	1.181	321	197	VV T	0.027	0.6010
9	1.246	446	149	VV T	0.050	0.8337
10	1.273	161	120	VV T	0.022	0.3003
11	1.317	518	139	VV T	0.050	0.9695
12	1.389	312	140	VV T	0.037	0.5839
13	1.426	22298	33108	VV T	0.011	41.7196

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	17			Cal Update:	04/15/24
File Name:	2443517A			SF:	3
Description:	T-417			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	13:29	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	16:47	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	899				
Can Factor:	1.30				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	9509	1.25	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

File Name:	2443517A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.30		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.30		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

SDG: 224435
Laboratory Number: 17

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.248	1.248	12,482	12,482	1.248	200	0.026	0.034	0.101	260	780			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 17

File Name: 2443517A
Description: T-417
Can/Tube#: 899
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/06/24 **Time:** 16:47

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.101	1.248	260	780	12,482	

Sample Data Packages

SDG Number 224435

Lab Id Number 18

Client ID T-418

Analytical Method ASTM D1945

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 18

Client: C.E. Schmidt
Client ID: T-418
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 522
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:40
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions | Sample Type:

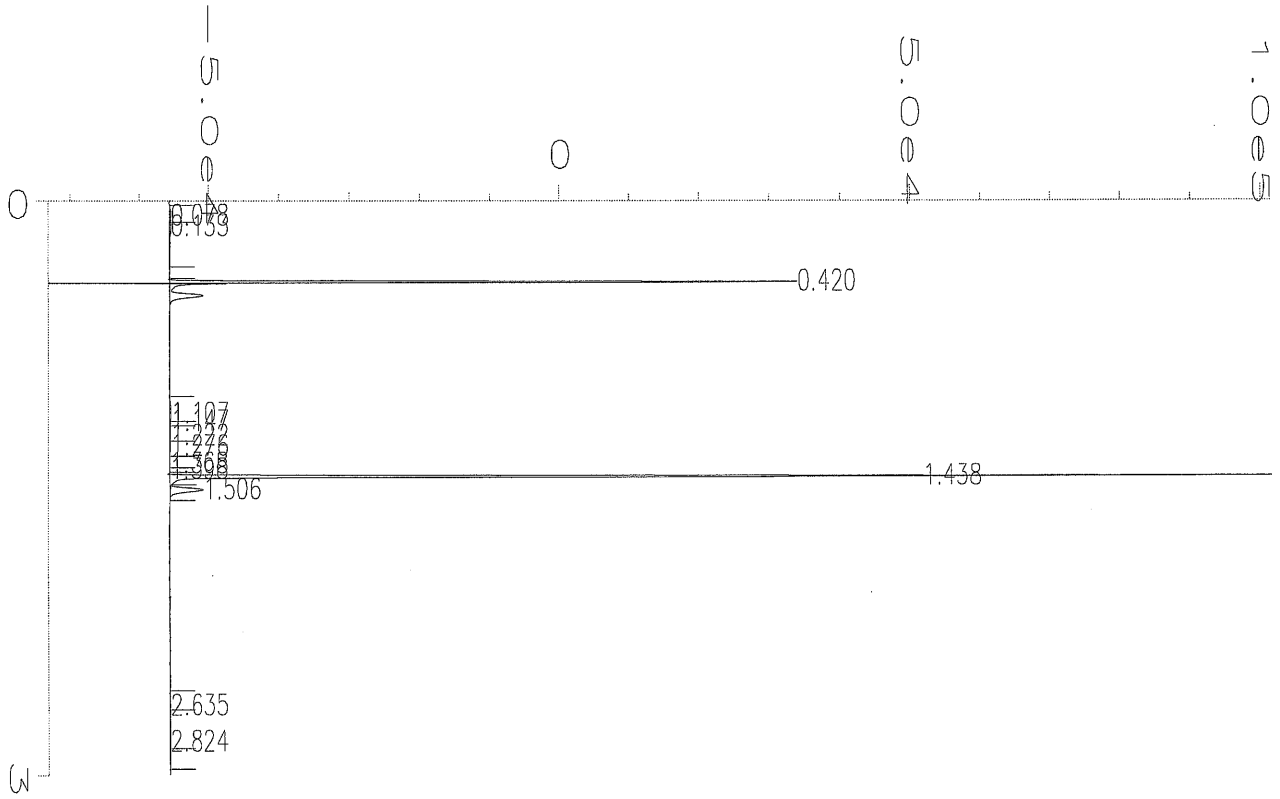
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

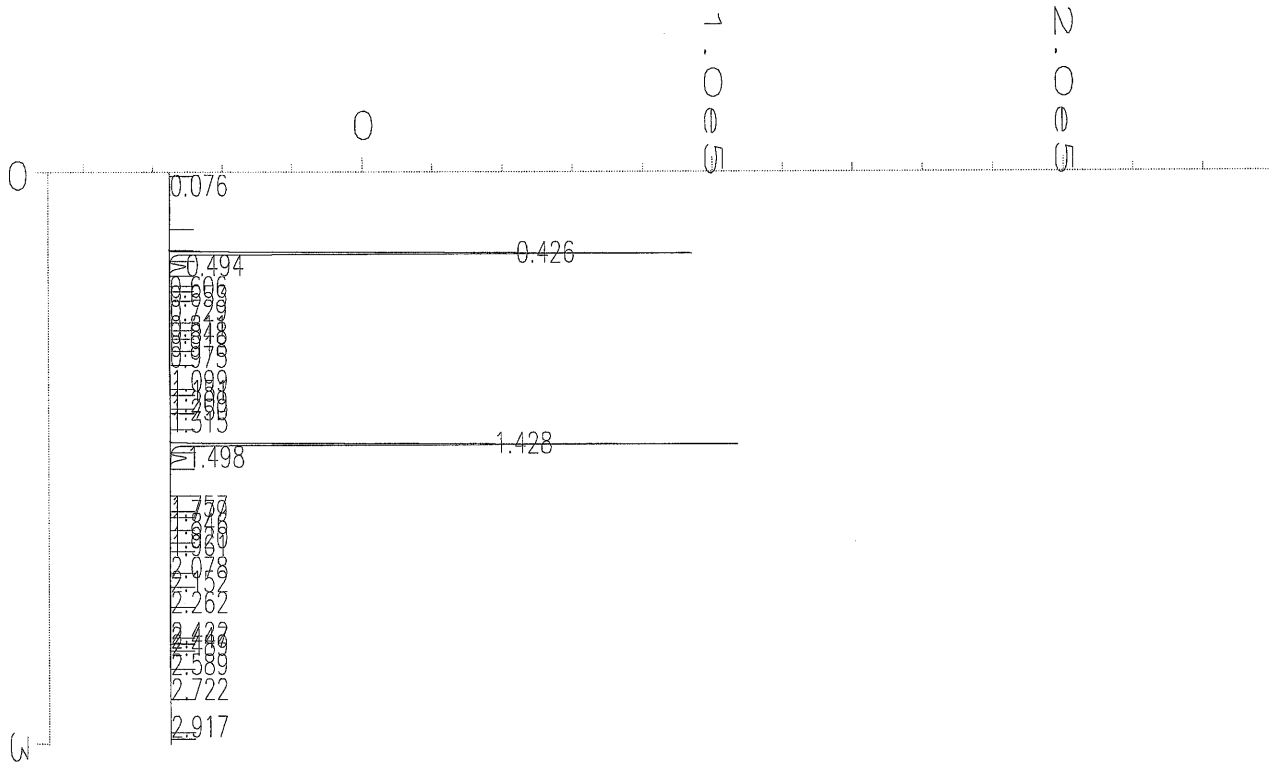
==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443518MA.D
Operator : LR
Instrument : GCL
Sample Name : T-418
Run Time Bar Code:
Acquired on : 06 Dec 24 04:52 PM
Report Created on: 06 Dec 24 04:55 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443518MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.078	530	151	BV	0.052	0.4098
2	0.133	1086	150	VV	0.120	0.8395
3	0.420	41824	100066	HH S	0.032	32.3457
4	1.107	1147	216	PV T	0.072	0.8873
5	1.147	231	171	VV T	0.022	0.1784
6	1.222	570	121	VV T	0.063	0.4409
7	1.276	352	100	VV T	0.059	0.2725
8	1.368	131	62	VV T	0.035	0.1012
9	1.398	28	32	VV T	0.015	0.0219
10	1.438	76307	103223	HBAS	0.012	59.0132
11	1.506	6851	4611	BV T	0.025	5.2981
12	2.635	71	65	PV T	0.018	0.0553
13	2.824	176	48	PV T	0.052	0.1362



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443518MB.D
Operator : LR
Instrument : GCL
Sample Name : T-418
Run Time Bar Code:
Acquired on : 06 Dec 24 05:06 PM
Report Created on: 06 Dec 24 05:10 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443518MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.076	1947	187	PH	0.133	1.1711
2	0.426	78448	119383	HH S	0.011	47.1768
3	0.494	6822	4576	BV T	0.025	4.1028
4	0.606	21	37	PV T	0.010	0.0128
5	0.653	72	24	PV T	0.049	0.0434
6	0.729	154	38	VV T	0.067	0.0925
7	0.811	41	40	PV T	0.017	0.0249
8	0.848	60	32	PV T	0.031	0.0358
9	0.918	67	34	VV T	0.033	0.0404
10	0.975	112	60	VV T	0.034	0.0673
11	1.099	1157	219	VV T	0.073	0.6958
12	1.151	361	208	VV T	0.029	0.2173
13	1.209	670	180	VV T	0.062	0.4029

14	1.250	158	141	VV T	0.019	0.0951
15	1.315	444	140	VV T	0.055	0.2671
16	1.428	67074	138453	HBAS	0.008	40.3367
17	1.498	6680	4494	BV T	0.024	4.0171
18	1.757	97	31	PV T	0.052	0.0580
19	1.779	50	67	VV T	0.012	0.0302
20	1.846	135	62	PV T	0.039	0.0815
21	1.920	102	46	VV T	0.037	0.0616
22	1.961	73	44	VV T	0.028	0.0438
23	2.078	197	62	PV T	0.062	0.1185
24	2.152	176	58	VV T	0.044	0.1061
25	2.262	175	44	VV T	0.066	0.1055
26	2.422	418	74	PV T	0.094	0.2515
27	2.447	55	44	VV T	0.021	0.0328
28	2.489	58	49	PV T	0.020	0.0352
29	2.589	174	47	VV T	0.051	0.1046
30	2.722	129	40	VV T	0.054	0.0773
31	2.917	156	52	VV T	0.044	0.0936

Total area = 166285

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	18			Cal Update:	04/15/24
File Name:	2443518A			SF:	3
Description:	T-418			Not Detected Flag:	ND
Date Sampled:	11/19/24	Time:	13:40	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	16:52	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	522				
Can Factor:	1.25				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	76307	9.63	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 18

File Name:	2443518A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.25		Decimal Places:	. 3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.25		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	9.632	9.632	96,315	96,315	9.632	200	0.025	0.031	0.094	250	750			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Can/Tube#: 522
QC_Batch: 120624-GCO

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/06/24 **Time:** 16:52

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.094	9.632	250	750	96,315	

Sample Data Packages

SDG Number **224435**

Lab Id Number **19**

Client ID T-501

Analytical Method ASTM D1945

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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 19

Client: C.E. Schmidt
Client ID: T-501
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 664
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 8:30
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

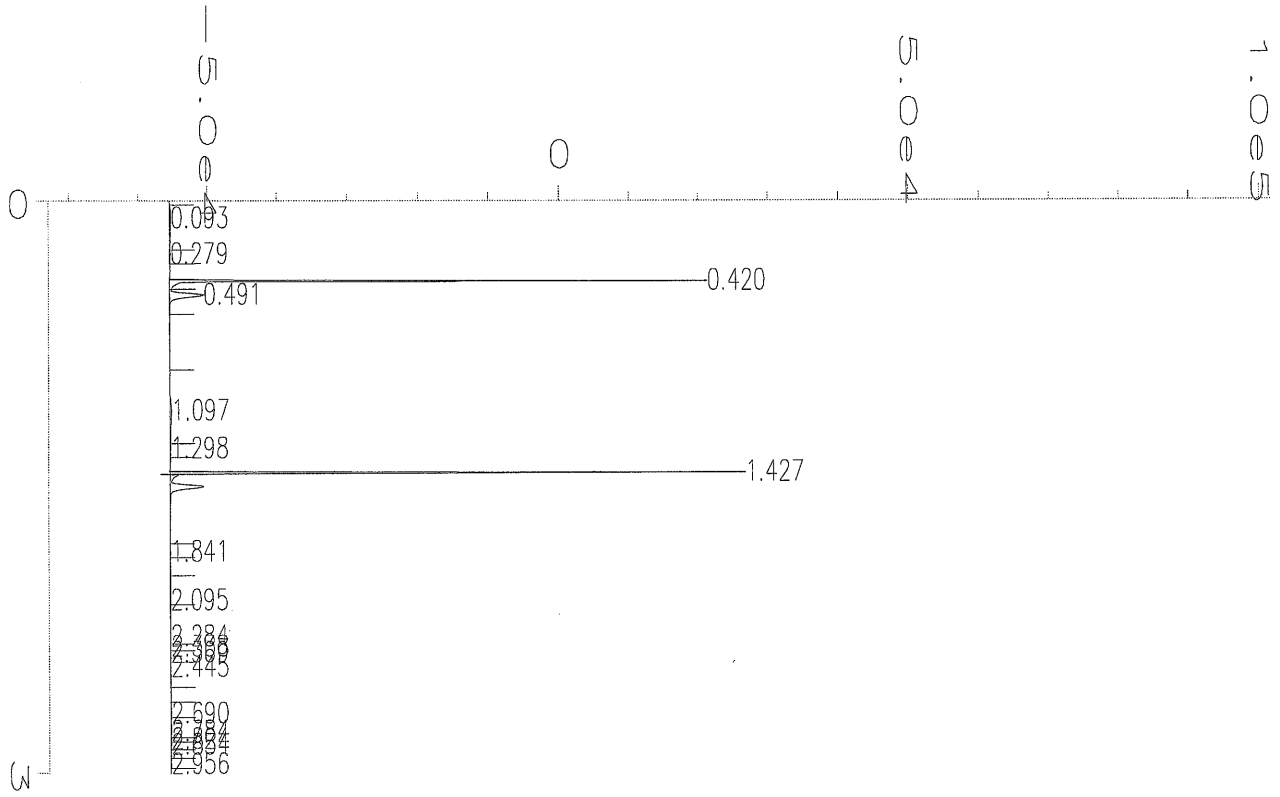
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443519MA.D
Operator : LR
Instrument : GCL
Sample Name : T-419
Run Time Bar Code:
Acquired on : 06 Dec 24 05:02 PM
Report Created on: 06 Dec 24 05:05 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443519MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.093	1732	183	PH	0.123	2.2001
2	0.279	359	102	VV	0.059	0.4565
3	0.420	27653	45968	PV	0.010	35.1217
4	0.491	7967	4926	VV	0.026	10.1182
5	1.097	2078	220	BV	0.118	2.6394
6	1.298	304	84	VV	0.053	0.3858
7	1.427	36886	53785	HBAS	0.035	46.8481
8	1.841	162	63	BV T	0.038	0.2057
9	2.095	250	56	PV T	0.060	0.3180
10	2.284	341	55	VV T	0.114	0.4325
11	2.338	72	53	VV T	0.023	0.0908
12	2.369	98	55	VV T	0.030	0.1243
13	2.445	160	64	PV T	0.042	0.2036

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**19**			Cal Update:	**04/15/24**
File Name:	**2443519A**			SF:	3
Description:	**T-501**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**8:30**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**17:02**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**664**				
Can Factor:	**1.28**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**27653**	3.57	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 19

File Name:	2443519A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.28		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.574	3.574	35,741	35,741	3.574	200	0.026	0.033	0.098	256	768			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 19

File Name: 2443519A
Description: T-501
Can/Tube#: 664
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 12/06/24 **Time:** 17:02

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	3.574	256	768	35,741	

Sample Data Packages

SDG Number **224435**

Lab Id Number **20**

Client ID T-502

Analytical Method ASTM D1945

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Analytical Report
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 20

Client: C.E. Schmidt
Client ID: T-502
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 716
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:37
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

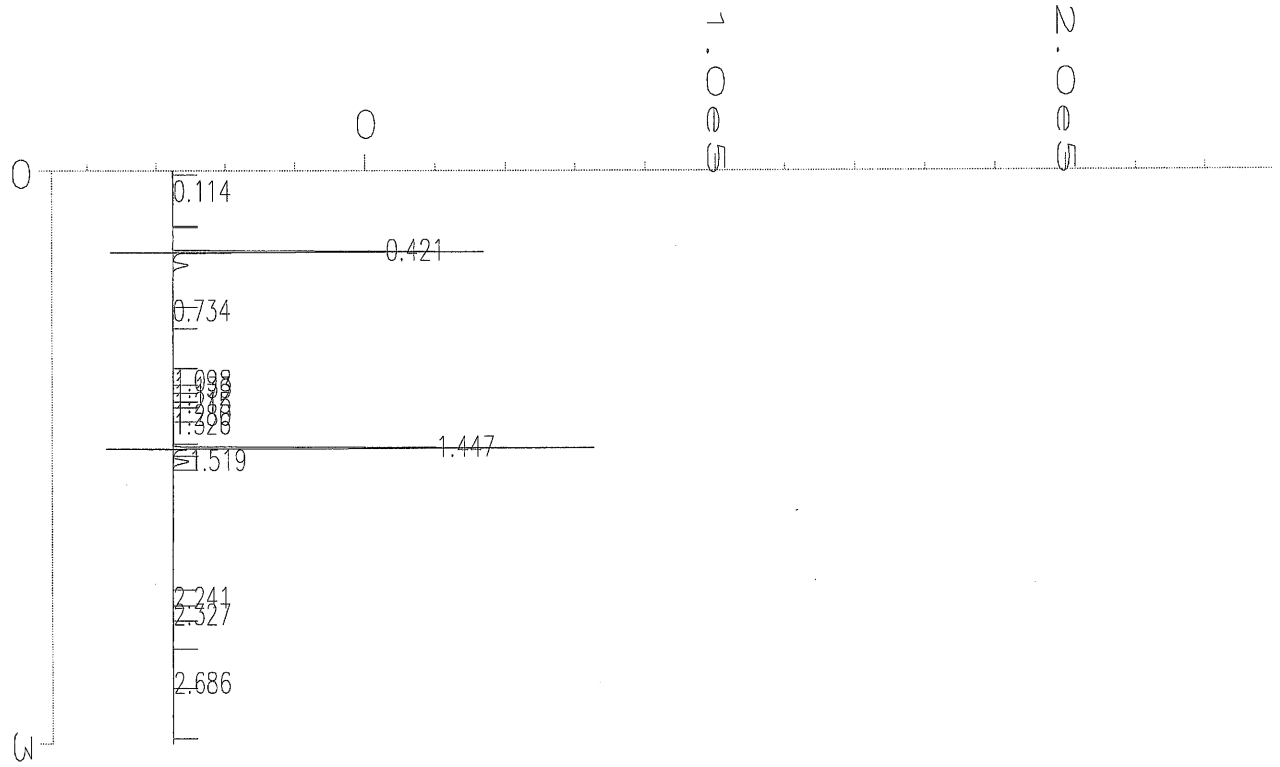
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443520MA.D
Operator : LR
Instrument : GCL
Sample Name : T-502
Run Time Bar Code:
Acquired on : 06 Dec 24 05:13 PM
Report Created on: 06 Dec 24 05:16 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443520MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.114	1569	172	BB	0.132	1.8846
2	0.421	33800	81912	BH S	0.007	40.5902
3	0.734	265	79	PV T	0.067	0.3183
4	1.098	711	238	VV T	0.050	0.8534
5	1.133	497	223	VV T	0.037	0.5971
6	1.172	449	187	VV T	0.040	0.5397
7	1.215	255	152	VV T	0.028	0.3067
8	1.280	609	156	VV T	0.065	0.7314
9	1.326	555	132	VV T	0.070	0.6660
10	1.447	37383	109058	HBAS	0.006	44.8939
11	1.519	6250	4244	BV T	0.025	7.5061
12	2.241	224	86	PV T	0.041	0.2689
13	2.327	344	99	VV T	0.050	0.4130

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	20			Cal Update:	04/15/24
File Name:	2443520A			SF:	3
Description:	T-502			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	8:37	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	17:13	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	716				
Can Factor:	1.33				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	33800	4.54	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 20

File Name:	2443520A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.33		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.33		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	4.539	4.539	45,393	45,393	4.539	200	0.027	0.035	0.106	266	798			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 20

File Name: 2443520A
Description: T-502
Can/Tube#: 716
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 12/06/24 **Time:** 17:13

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.106	4.539	266	798	45,393	

Sample Data Packages

SDG Number **224435**

Lab Id Number **21**

Client ID T-503

Analytical Method ASTM D1945

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Due:

Expires: 12/20/2024

224435 21

Client: C.E. Schmidt
Client ID: T-503
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 751
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:32
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

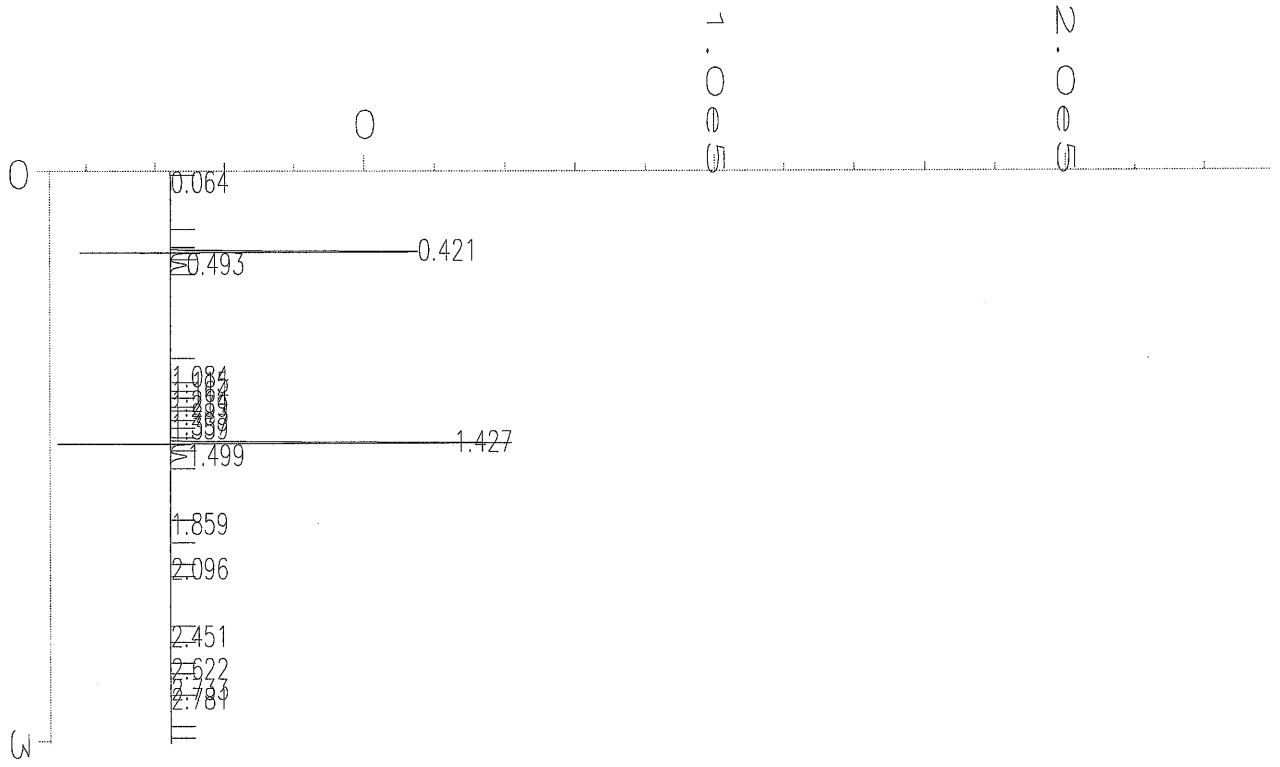
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443521MA.D
Operator : LR
Instrument : GCL
Sample Name : T-503
Run Time Bar Code:
Acquired on : 06 Dec 24 05:18 PM
Report Created on: 06 Dec 24 05:21 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443521MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.064	1550	171	PH	0.118	1.9299
2	0.421	28179	78568	HH S	0.006	35.0896
3	0.493	6699	4444	BV T	0.025	8.3412
4	1.084	857	183	PV T	0.078	1.0674
5	1.115	445	188	VV T	0.039	0.5540
6	1.164	283	164	VV T	0.029	0.3529
7	1.214	270	115	VV T	0.039	0.3356
8	1.239	93	101	VV T	0.015	0.1156
9	1.283	192	80	VV T	0.035	0.2395
10	1.337	97	51	VV T	0.032	0.1205
11	1.359	74	41	VV T	0.030	0.0920
12	1.427	33368	101854	HBAS	0.005	41.5502
13	1.499	6673	4449	BV T	0.025	8.3098

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**21**			Cal Update:	**04/15/24**
File Name:	**2443521A**			SF:	3
Description:	**T-503**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**8:32**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**17:18**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**751**				
Can Factor:	**1.28**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**28179**	3.64	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 21

File Name:	2443521A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.28		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.642	3.642	36,421	36,421	3.642	200	0.026	0.033	0.098	256	768			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 21

File Name: 2443521A
Description: T-503
Can/Tube#: 751
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 12/06/24 **Time:** 17:18

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	3.642	256	768	36,421	

Sample Data Packages

SDG Number 224435

Lab Id Number 22

Client ID T-504

Analytical Method ASTM D1945

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Due:

Expires: 12/20/2024

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Client: C.E. Schmidt
Client ID: T-504
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 644
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:44
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

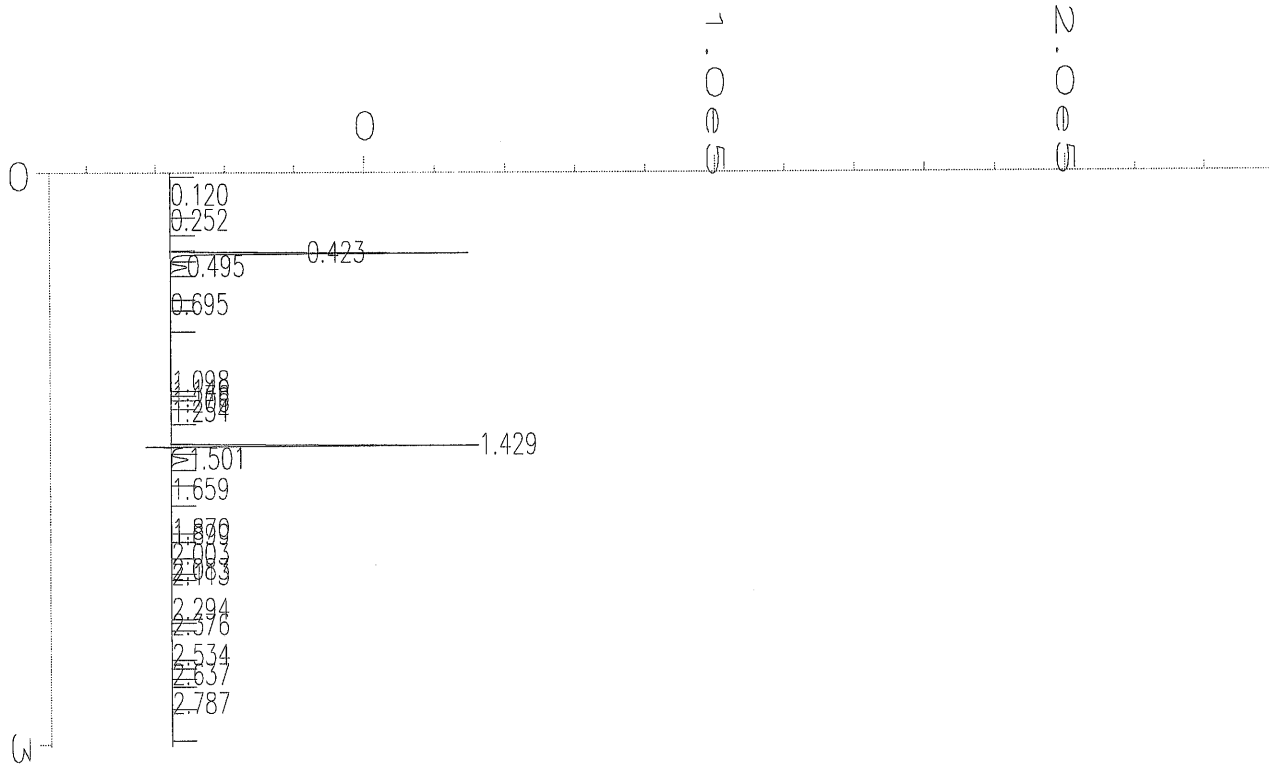
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443522MA.D
Operator : LR
Instrument : GCL
Sample Name : T-504
Run Time Bar Code:
Acquired on : 06 Dec 24 05:23 PM
Report Created on: 06 Dec 24 05:26 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443522MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.120	1738	189	BV	0.125	1.8064
2	0.252	411	111	VV	0.062	0.4272
3	0.423	40309	65385	HH S	0.010	41.8883
4	0.495	6772	4555	BV T	0.025	7.0372
5	0.695	31	29	PV T	0.018	0.0324
6	1.098	1146	246	PV T	0.078	1.1909
7	1.146	266	192	VV T	0.023	0.2764
8	1.176	219	177	VV T	0.021	0.2274
9	1.206	351	167	VV T	0.033	0.3645
10	1.254	356	153	VV T	0.039	0.3699
11	1.429	36260	69050	HBAS	0.009	37.6804
12	1.501	6715	4545	BV T	0.025	6.9779
13	1.659	18	11	PV T	0.027	0.0191

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	22			Cal Update:	04/15/24
File Name:	2443522A			SF:	3
Description:	T-504			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	8:44	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	17:23	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	644				
Can Factor:	1.28				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	40309	5.21	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 22

File Name:	2443522A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.28		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	5.210	5.210	52,099	52,099	5.210	200	0.026	0.033	0.098	256	768			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 22

File Name: 2443522A
Description: T-504
Can/Tube#: 644
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 12/06/24 **Time:** 17:23

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	5.210	256	768	52,099	

Sample Data Packages

SDG Number **224435**

Lab Id Number **23**

Client ID T-505

Analytical Method ASTM D1945

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Due:

Expires: 12/20/2024

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Client: C.E. Schmidt
Client ID: T-505
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 883
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 10:55
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

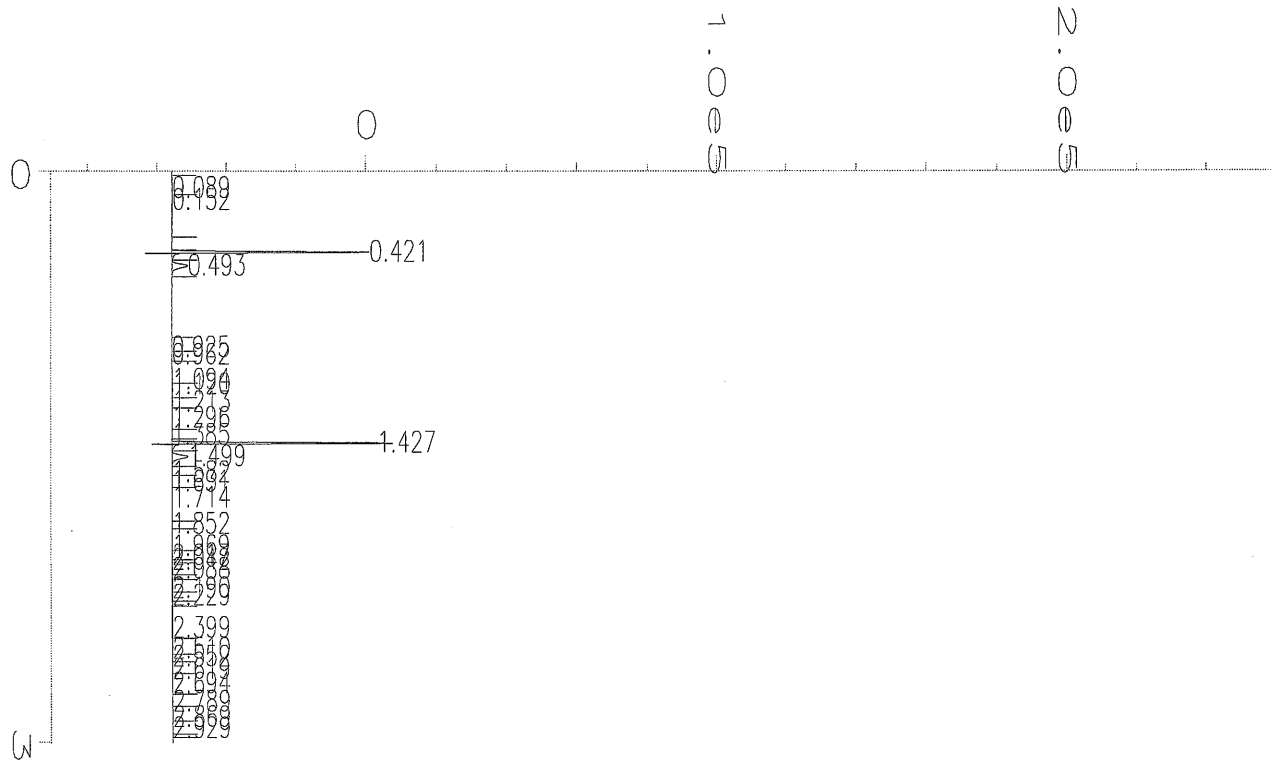
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443523MA.D
Operator : LR
Instrument : GCL
Sample Name : T-505
Run Time Bar Code:
Acquired on : 06 Dec 24 05:27 PM
Report Created on: 06 Dec 24 05:31 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443523MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.089	779	161	BV	0.065	1.0246
2	0.152	1330	208	VV	0.085	1.7486
3	0.421	26557	60183	HH S	0.007	34.9192
4	0.493	6630	4374	BV T	0.025	8.7174
5	0.925	68	44	PV T	0.026	0.0888
6	0.962	53	33	VV T	0.029	0.0696
7	1.094	953	245	PV T	0.058	1.2533
8	1.120	891	229	VV T	0.065	1.1713
9	1.213	515	190	VV T	0.040	0.6777
10	1.296	573	115	VV T	0.076	0.7539
11	1.385	76	62	VV T	0.021	0.0998
12	1.427	28002	67662	HBAS	0.007	36.8184
13	1.499	6632	4356	BV T	0.025	8.7199

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**23**			Cal Update:	**04/15/24**
File Name:	**2443523A**			SF:	3
Description:	**T-505**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**10:55**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**17:27**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**883**				
Can Factor:	**1.35**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**26557**	3.62	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 23

File Name:	2443523A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.35		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.35		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.620	3.620	36,202	36,202	3.620	200	0.027	0.036	0.109	270	810			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435

Analytical Method: D1945

Laboratory Number: 23

File Name: 2443523A
Description: T-505
Can/Tube#: 883
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/06/24 **Time:** 17:27

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.109	3.620	270	810	36,202	

Sample Data Packages

SDG Number **224435**

Lab Id Number **24**

Client ID T-506

Analytical Method ASTM D1945

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Due:

Expires: 12/20/2024

224435 24

Client: C.E. Schmidt
Client ID: T-506
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 784
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:11
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

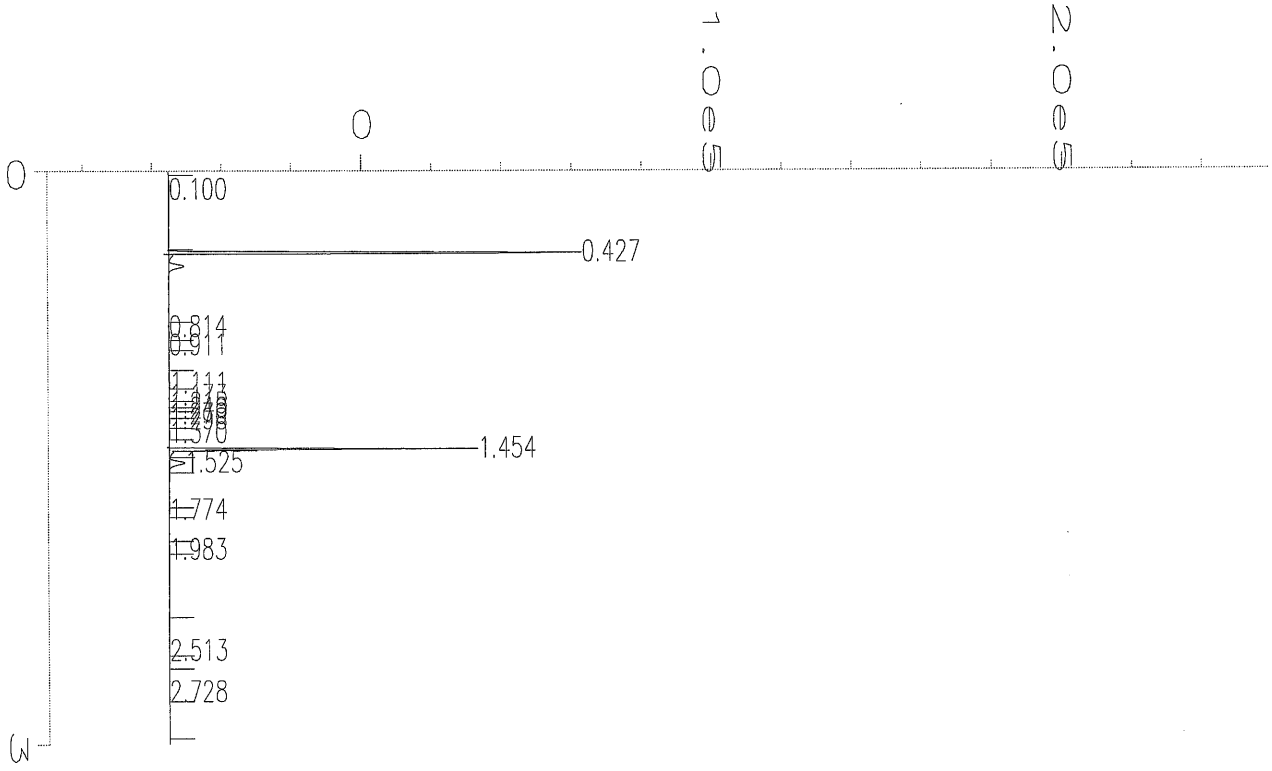
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443524MA.D
Operator : LR
Instrument : GCL
Sample Name : T-506
Run Time Bar Code:
Acquired on : 06 Dec 24 05:46 PM
Report Created on: 06 Dec 24 05:49 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443524MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.100	1794	181	PH	0.126	1.6684
2	0.427	67265	120484	HH S	0.047	62.5535
3	0.814	244	68	PV T	0.064	0.2268
4	0.911	151	79	VV T	0.030	0.1401
5	1.111	866	238	PV T	0.052	0.8054
6	1.173	655	186	VV T	0.051	0.6087
7	1.215	241	125	VV T	0.032	0.2239
8	1.240	133	136	VV T	0.016	0.1240
9	1.270	152	82	VV T	0.031	0.1416
10	1.298	138	53	VV T	0.038	0.1288
11	1.370	70	46	VV T	0.025	0.0655
12	1.454	28761	52477	HBAS	0.009	26.7468
13	1.525	6317	4346	BV T	0.024	5.8744

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	24			Cal Update:	04/15/24
File Name:	2443524A			SF:	3
Description:	T-506			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	10:11	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	17:46	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	784				
Can Factor:	1.36				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	67265	9.24	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 24

File Name:	2443524A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.36		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	9.237	9.237	92,374	92,374	9.237	200	0.027	0.037	0.111	272	816			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 24

File Name: 2443524A
Description: T-506
Can/Tube#: 784
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/06/24 **Time:** 17:46

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	9.237	272	816	92,374	

Sample Data Packages

SDG Number **224435**

Lab Id Number **25**

Client ID T-507

Analytical Method ASTM D1945

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Sample Calculations
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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 25

Client: C.E. Schmidt
Client ID: T-507
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 712
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:56
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions | Sample Type:

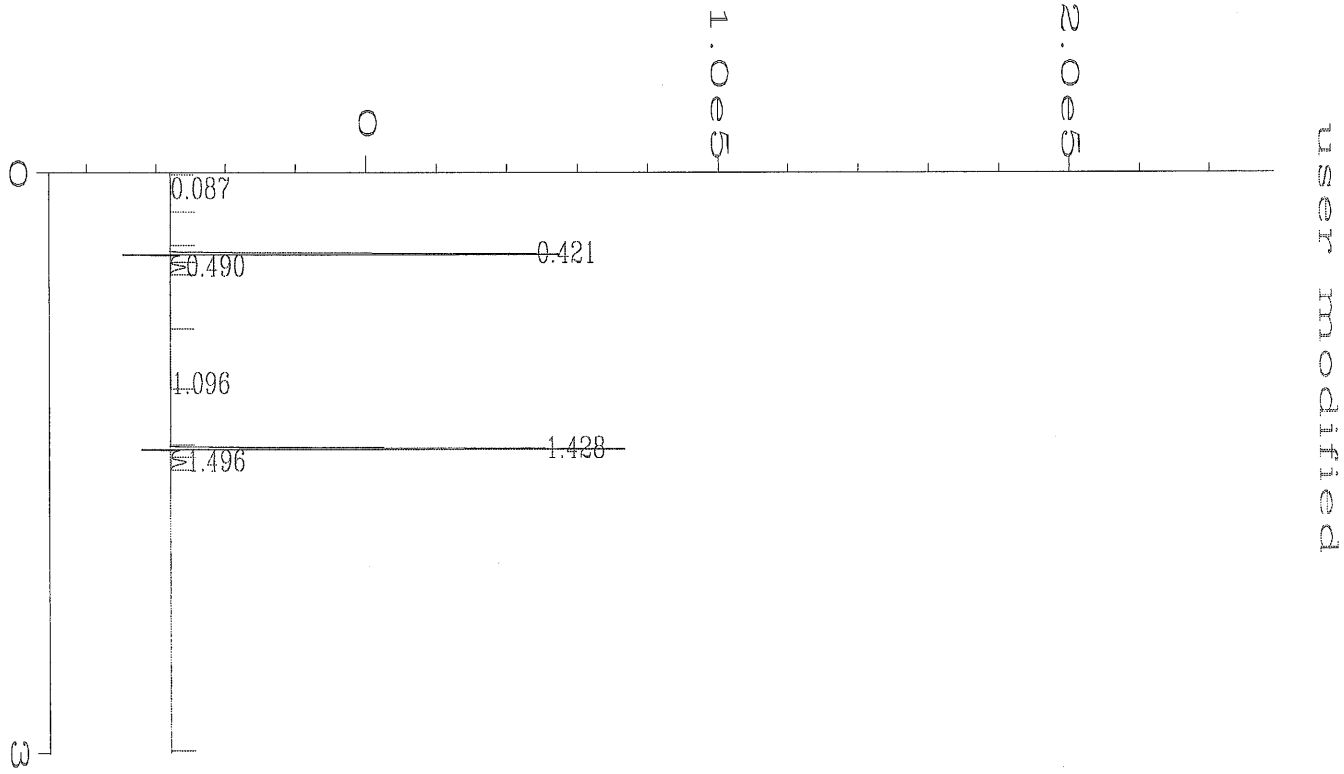
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\GCO\12064GCO\443525MA.D
Operator : LR
Instrument : GCL
Sample Name : T-507
Run Time Bar Code:
Acquired on : 06 Dec 24 05:55 PM
Report Created on: 17 Dec 24 07:47 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCO\12064GCO\443525MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.087	1111	179	BV	0.074	0.7981
2	0.421	57188	113113	BH R	0.011	41.0992
3	0.490	6126	4230	BV T	0.023	4.4027
4	1.096	1057	200	PF T	0.088	0.7597
5	1.428	67522	119248	HBAR	0.009	48.5259
6	1.496	6142	4242	BF T	0.023	4.4143

Total area = 139147

User Modified

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**25**			Cal Update:	**04/15/24**
File Name:	**2443525A**			SF:	3
Description:	**T-507**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**10:56**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**17:55**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**712**				
Can Factor:	**1.38**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**61240**	8.53	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 25

File Name:	2443525A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.38		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	8.534	8.534	85,336	85,336	8.534	200	0.028	0.038	0.114	276	828			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 25

File Name: 2443525A
Description: T-507
Can/Tube#: 712
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/06/24 **Time:** 17:55

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	8.534	276	828	85,336	

Sample Data Packages

SDG Number 224435

Lab Id Number 26

Client ID T-508

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 26

Client: C.E. Schmidt
Client ID: T-508
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 549
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 10:40
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

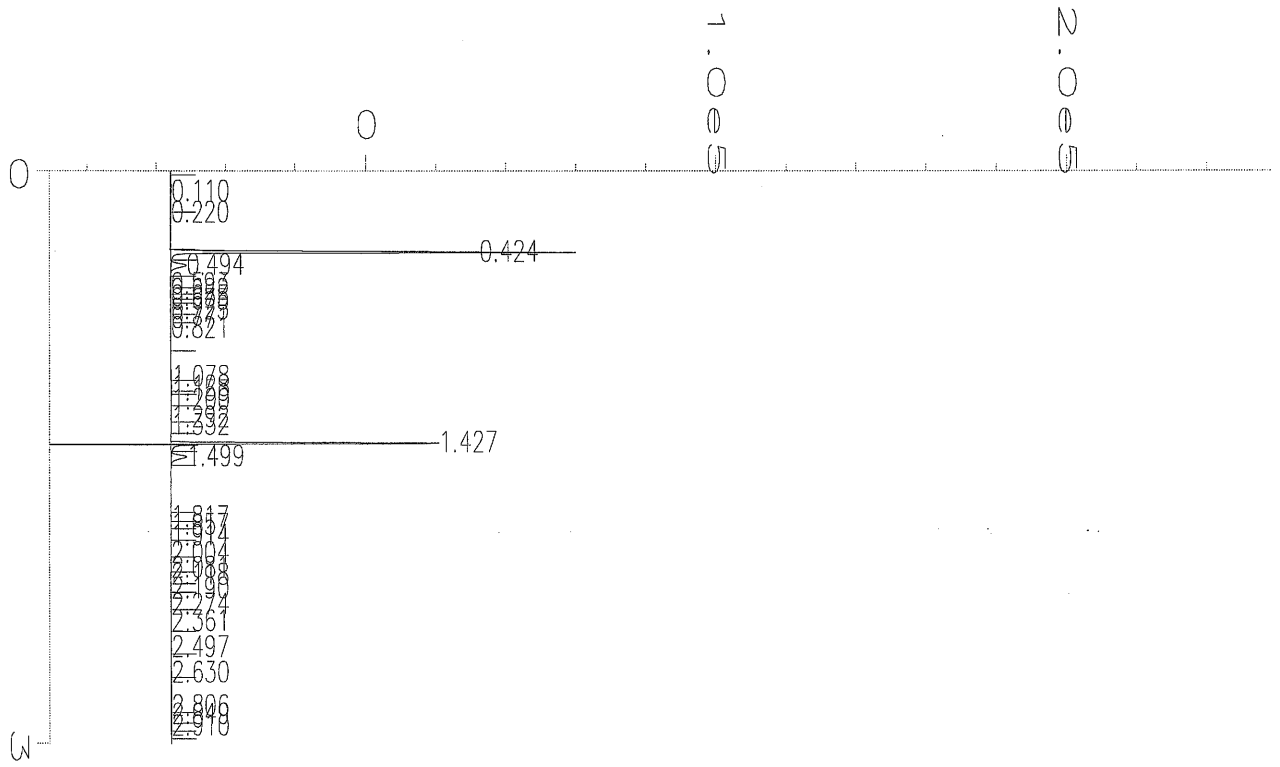
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443526MA.D
Operator : LR
Instrument : GCL
Sample Name : T-508
Run Time Bar Code:
Acquired on : 06 Dec 24 06:01 PM
Report Created on: 06 Dec 24 06:04 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443526MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.110	1752	217	BV	0.121	1.5725
2	0.220	1935	200	VV	0.161	1.7367
3	0.424	60061	82660	HH S	0.012	53.9178
4	0.494	6167	4144	BV T	0.025	5.5365
5	0.593	7	14	PV T	0.008	0.0066
6	0.622	43	32	PV T	0.023	0.0385
7	0.655	29	22	VV T	0.022	0.0259
8	0.675	18	33	PV T	0.009	0.0161
9	0.725	57	27	PV T	0.035	0.0508
10	0.771	59	45	PV T	0.022	0.0528
11	0.821	132	29	VV T	0.076	0.1186
12	1.078	745	232	PV T	0.045	0.6688
13	1.128	627	210	VV T	0.050	0.5628

14	1.153	174	166	VV T	0.017	0.1559
15	1.200	497	144	VV T	0.048	0.4458
16	1.292	376	85	VV T	0.074	0.3376
17	1.332	159	76	VV T	0.035	0.1429
18	1.427	30727	86515	HBAS	0.006	27.5843
19	1.499	6178	4081	BV T	0.025	5.5459
20	1.817	32	18	PV T	0.027	0.0284
21	1.857	41	26	VV T	0.026	0.0372
22	1.914	75	38	VV T	0.033	0.0670
23	2.004	70	29	VV T	0.040	0.0627
24	2.081	91	46	VV T	0.033	0.0815
25	2.118	57	30	VV T	0.031	0.0511
26	2.190	81	47	PV T	0.029	0.0726
27	2.274	225	70	VV T	0.053	0.2024
28	2.361	151	63	VV T	0.059	0.1359
29	2.497	101	32	PV T	0.052	0.0907
30	2.630	230	52	VV T	0.061	0.2063
31	2.806	385	74	PV T	0.069	0.3458
32	2.849	78	39	VV T	0.033	0.0699
33	2.910	35	27	VV T	0.022	0.0317

Total area = 111394

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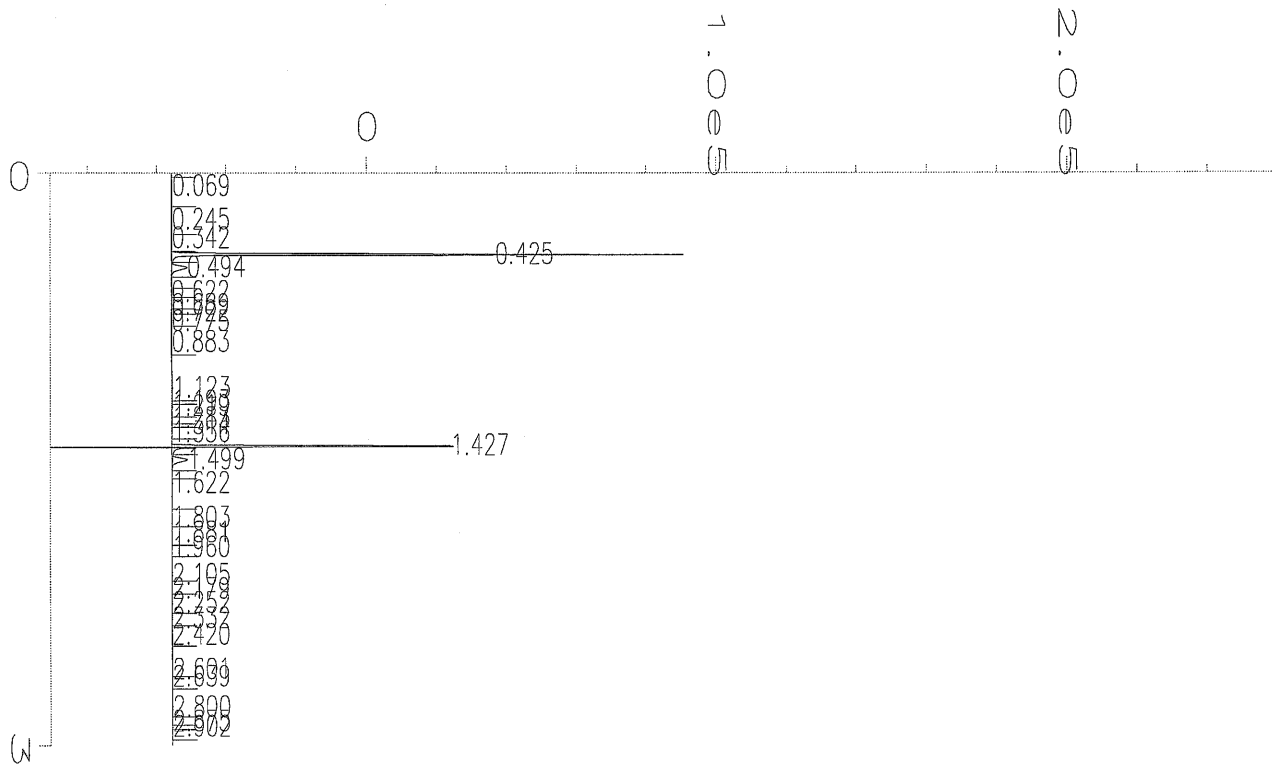

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443526MB.D
Operator : LR
Instrument : GCL
Sample Name : T-508
Run Time Bar Code:
Acquired on : 06 Dec 24 06:08 PM
Report Created on: 06 Dec 24 06:11 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443526MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.069	1270	188	BV	0.097	1.0179
2	0.245	1521	196	VV	0.102	1.2189
3	0.342	979	220	VV	0.074	0.7846
4	0.425	66708	92601	HH S	0.012	53.4544
5	0.494	6311	4189	BV T	0.025	5.0572
6	0.622	37	24	VV T	0.026	0.0293
7	0.689	62	44	PV T	0.024	0.0499
8	0.722	7	13	PV T	0.009	0.0058
9	0.775	69	38	PV T	0.031	0.0554
10	0.883	262	47	PV T	0.093	0.2102
11	1.123	2009	263	PV T	0.116	1.6101
12	1.193	193	196	VV T	0.016	0.1544
13	1.219	545	284	VV T	0.038	0.4370

14	1.283	193	119	VV T	0.027	0.1549
15	1.314	97	101	VV T	0.016	0.0778
16	1.356	235	95	VV T	0.041	0.1885
17	1.427	35700	93200	HBAS	0.006	28.6071
18	1.499	6104	4021	BV T	0.025	4.8910
19	1.622	131	22	PV T	0.097	0.1046
20	1.803	129	57	PV T	0.038	0.1032
21	1.881	134	47	VV T	0.053	0.1077
22	1.960	80	29	PV T	0.045	0.0638
23	2.105	269	67	PV T	0.067	0.2152
24	2.179	131	39	VV T	0.057	0.1052
25	2.252	184	68	PV T	0.054	0.1476
26	2.332	129	62	VV T	0.036	0.1033
27	2.420	200	57	VV T	0.057	0.1605
28	2.601	395	61	PV T	0.109	0.3162
29	2.639	125	55	VV T	0.038	0.1004
30	2.800	428	77	VV T	0.081	0.3430
31	2.875	110	52	VV T	0.035	0.0881
32	2.902	46	70	VV T	0.011	0.0370

Total area = 124794

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QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	26			Cal Update:	04/15/24
File Name:	2443526A			SF:	3
Description:	T-508			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	10:40	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	18:01	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	549				
Can Factor:	1.38				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	60061	8.37	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 26

File Name:	2443526A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.38		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	8.369	8.369	83,693	83,693	8.369	200	0.028	0.038	0.114	276	828			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Can/Tube#: 549
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/06/24 **Time:** 18:01

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	8.369	276	828	83,693	

Sample Data Packages

SDG Number 224435

Lab Id Number 27

Client ID T-509

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 27

Client: C.E. Schmidt
Client ID: T-509
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 882
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

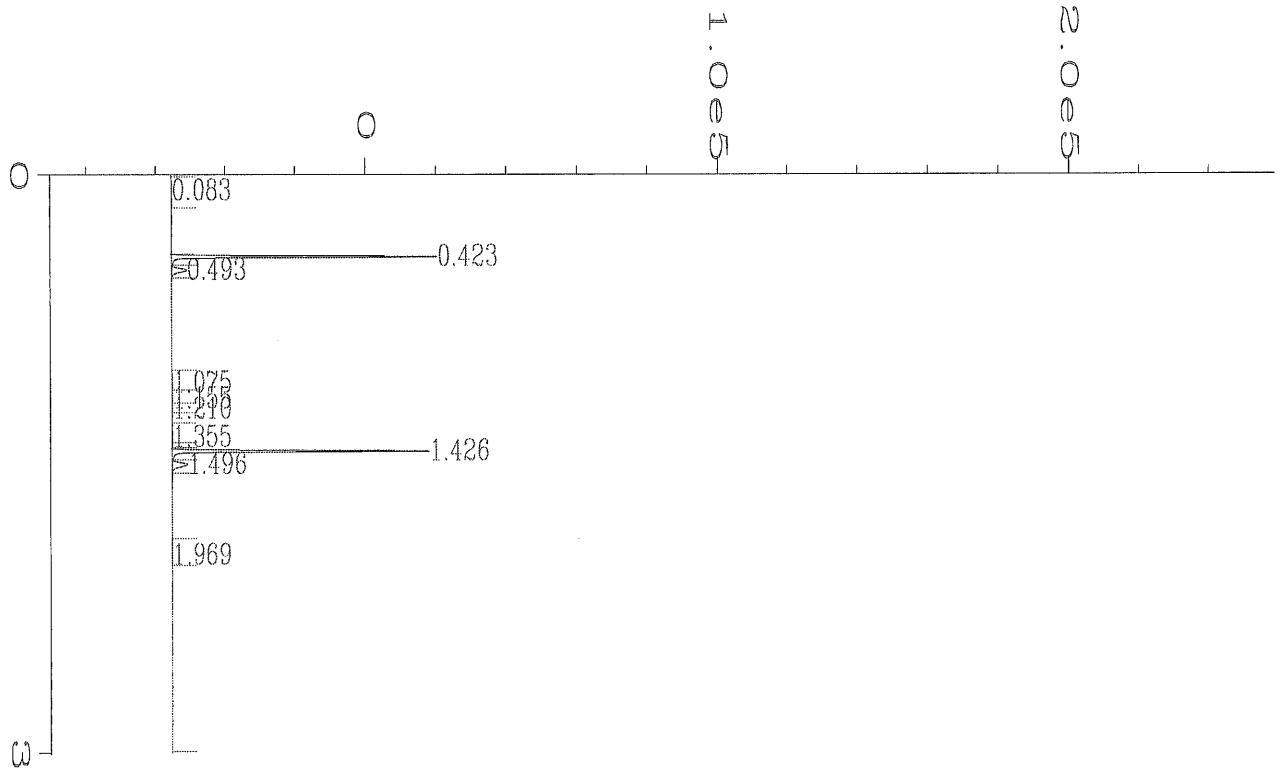
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\GCO\12064GCO\443527MA.D
Operator : LR
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-509
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 06 Dec 24 06:18 PM
Instrument Method: AST1946H.MTH
Report Created on: 12 Dec 24 12:52 PM
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCO\12064GCO\443527MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.083	1291	188	BV	0.115	1.1950
2	0.423	48251	77382	HH S	0.020	44.6729
3	0.493	6071	4172	BV T	0.023	5.6204
4	1.075	1085	270	VV T	0.057	1.0044
5	1.155	816	266	VV T	0.042	0.7552
6	1.210	510	218	VV T	0.039	0.4719
7	1.355	566	151	VV T	0.066	0.5236
8	1.426	42723	77141	HBAS	0.017	39.5551
9	1.496	6135	4213	BV T	0.023	5.6799
10	1.969	563	86	VV T	0.093	0.5215

Total area = 108009

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**27**			Cal Update:	**04/15/24**
File Name:	**2443527A**			SF:	3
Description:	**T-509**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**12:20**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**18:18**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**882**				
Can Factor:	**1.40**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**48251**	6.82	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 27

File Name:	2443527A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.40		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.40		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	6.821	6.821	68,211	68,211	6.821	200	0.028	0.039	0.118	280	840			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 27

File Name: 2443527A
Description: T-509
Can/Tube#: 882
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/06/24 **Time:** 18:18

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.039	0.118	6.821	280	840	68,211	

Sample Data Packages

SDG Number **224435**

Lab Id Number **28**

Client ID T-510

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/20/2024

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Client: C.E. Schmidt
Client ID: T-510
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 860
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

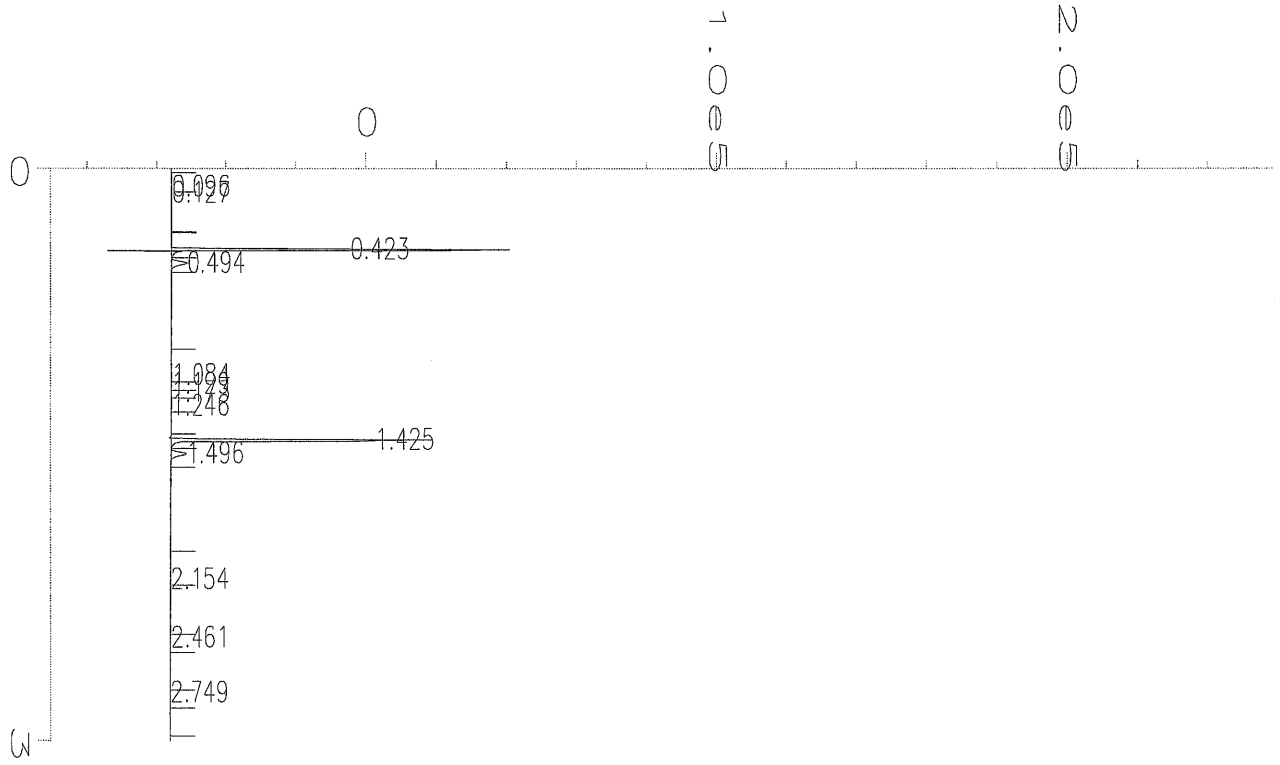
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443528MA.D
Operator : LR
Instrument : GCL
Sample Name : T-510
Run Time Bar Code:
Acquired on : 06 Dec 24 06:22 PM
Report Created on: 06 Dec 24 06:25 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443528MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.096	602	157	PH	0.064	0.6811
2	0.127	607	124	VB	0.081	0.6864
3	0.423	38061	77530	BH S	0.008	43.0296
4	0.494	6278	4232	BV T	0.025	7.0971
5	1.084	1167	247	PV T	0.067	1.3192
6	1.129	441	202	VV T	0.036	0.4987
7	1.173	330	155	VV T	0.033	0.3731
8	1.246	281	88	VV T	0.047	0.3180
9	1.425	34016	64810	HBAS	0.009	38.4563
10	1.496	6140	4237	BV T	0.024	6.9415
11	2.154	243	203	PV T	0.020	0.2744
12	2.461	215	81	PV T	0.044	0.2425
13	2.749	73	76	PV T	0.016	0.0820

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	28			Cal Update:	04/15/24
File Name:	2443528A			SF:	3
Description:	T-510			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	12:18	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	18:22	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	860				
Can Factor:	1.42				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	38061	5.46	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 28

File Name:	2443528A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.42		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.42		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	5.457	5.457	54,574	54,574	5.457	200	0.028	0.040	0.121	284	852			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 28

File Name: 2443528A
Description: T-510
Can/Tube#: 860
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/06/24 **Time:** 18:22

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.040	0.121	5.457	284	852	54,574	

Sample Data Packages

SDG Number **224435**

Lab Id Number **29**

Client ID T-511

Analytical Method ASTM D1945

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 29

Client: C.E. Schmidt
Client ID: T-511
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 627
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:31
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
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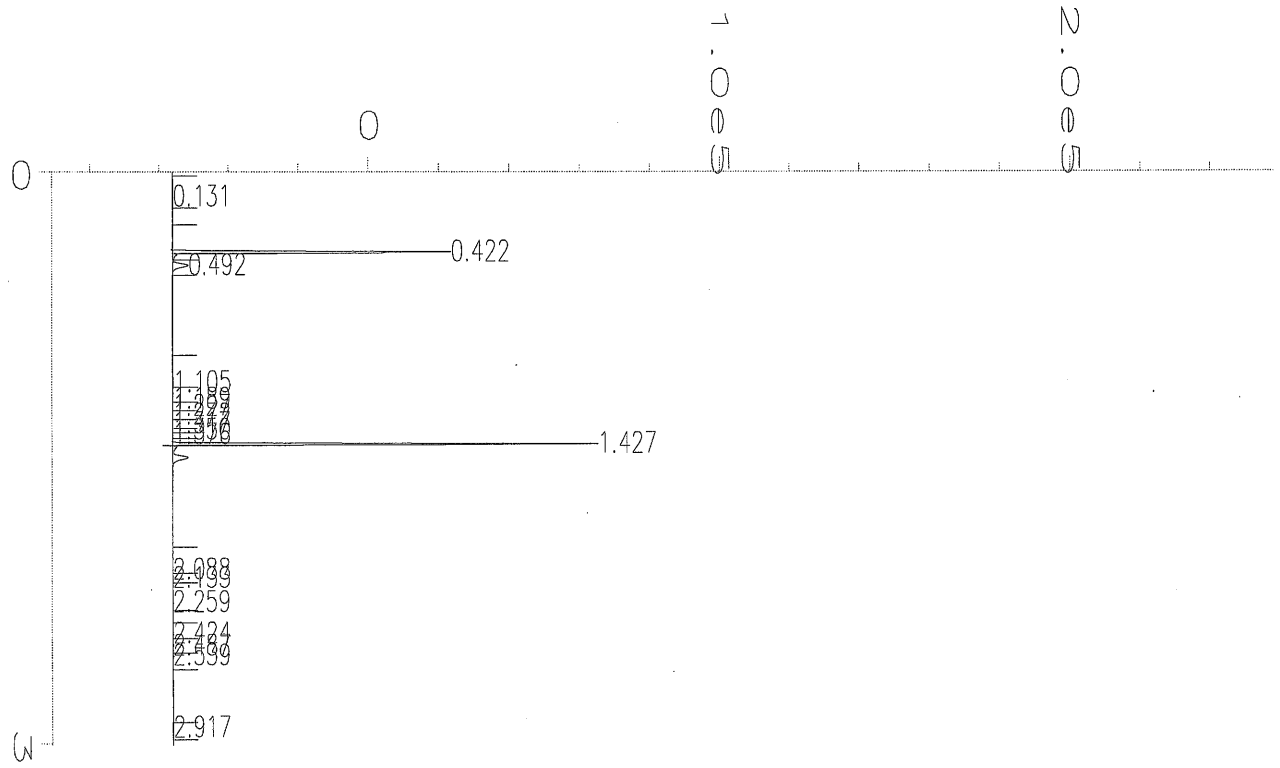
TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443529MA.D
Operator : LR
Instrument : GCL
Sample Name : T-511
Run Time Bar Code:
Acquired on : 06 Dec 24 06:30 PM
Report Created on: 06 Dec 24 06:33 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443529MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.131	977	137	BV	0.119	0.8009
2	0.422	47525	73553	HH S	0.011	38.9623
3	0.492	6225	4187	BV T	0.025	5.1032
4	1.105	1085	207	PV T	0.072	0.8895
5	1.189	610	112	VV T	0.091	0.5004
6	1.227	249	100	VV T	0.041	0.2044
7	1.272	219	76	VV T	0.048	0.1793
8	1.317	135	75	VV T	0.028	0.1108
9	1.350	26	41	PV T	0.010	0.0210
10	1.376	18	12	VV T	0.027	0.0151
11	1.427	63490	112215	HBAS	0.050	52.0511
12	2.088	271	62	PV T	0.077	0.2222
13	2.133	145	82	VV T	0.032	0.1190

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**29**			Cal Update:	**04/15/24**
File Name:	**2443529A**			SF:	3
Description:	**T-511**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**12:31**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**18:30**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**627**				
Can Factor:	**1.37**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**47525**	6.57	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 29

File Name:	2443529A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.37		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.37		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	6.575	6.575	65,745	65,745	6.575	200	0.027	0.038	0.113	274	822			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 29

File Name: 2443529A
Description: T-511
Can/Tube#: 627
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/06/24 **Time:** 18:30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.113	6.575	274	822	65,745	

Sample Data Packages

SDG Number 224435

Lab Id Number 30

Client ID T-512

Analytical Method ASTM D1945

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Quantitation Report
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Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 30

Client: C.E. Schmidt
Client ID: T-512
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 417
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:41
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

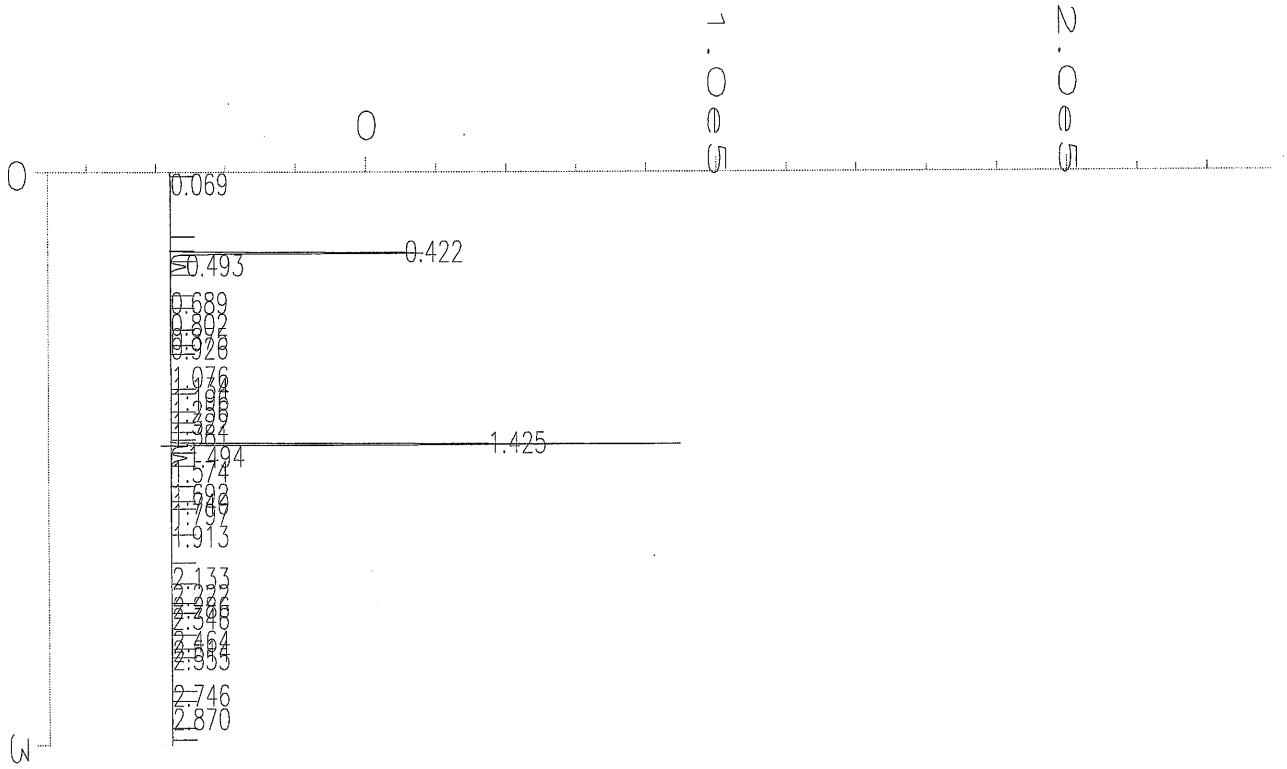
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443530MA.D
Operator : LR
Instrument : GCL
Sample Name : T-512
Run Time Bar Code:
Acquired on : 06 Dec 24 06:34 PM
Report Created on: 06 Dec 24 06:38 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443530MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.069	1538	172	BV	0.129	1.2971
2	0.422	38827	74044	HH S	0.009	32.7428
3	0.493	6302	4214	BV T	0.025	5.3145
4	0.689	74	41	PV T	0.030	0.0627
5	0.802	115	49	VV T	0.039	0.0966
6	0.875	122	54	VV T	0.042	0.1028
7	0.926	48	20	PV T	0.040	0.0407
8	1.076	1140	213	VV T	0.089	0.9615
9	1.134	262	180	VV T	0.024	0.2212
10	1.196	661	136	VV T	0.081	0.5578
11	1.256	286	106	VV T	0.040	0.2410
12	1.322	158	88	VV T	0.031	0.1335
13	1.381	80	56	VV T	0.024	0.0678

14	1.425	59773	81000	HBAS	0.012	50.4068
15	1.494	6400	4319	BV T	0.025	5.3973
16	1.574	43	25	PV T	0.029	0.0359
17	1.692	140	40	PV T	0.049	0.1176
18	1.740	96	57	VV T	0.028	0.0807
19	1.797	389	56	VV T	0.115	0.3281
20	1.913	329	52	VV T	0.105	0.2776
21	2.133	169	62	PV T	0.045	0.1424
22	2.222	252	61	VV T	0.071	0.2129
23	2.286	150	63	VV T	0.035	0.1262
24	2.346	239	78	VV T	0.051	0.2019
25	2.464	211	73	VV T	0.041	0.1782
26	2.514	130	61	VV T	0.036	0.1096
27	2.555	371	62	VV T	0.099	0.3128
28	2.746	115	57	VV T	0.033	0.0966
29	2.870	161	54	VV T	0.050	0.1355

Total area = 118582

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	30			Cal Update:	04/15/24
File Name:	2443530A			SF:	3
Description:	T-512			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	12:41	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	18:34	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	417				
Can Factor:	1.36				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	38827	5.33	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 30

File Name:	2443530A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.36		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	5.332	5.332	53,320	53,320	5.332	200	0.027	0.037	0.111	272	816			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 30

File Name: 2443530A
Description: T-512
Can/Tube#: 417
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/06/24 **Time:** 18:34

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	5.332	272	816	53,320	

Sample Data Packages

SDG Number **224435**

Lab Id Number **31**

Client ID T-513

Analytical Method ASTM D1945

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Analytical Report
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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 31

Client: C.E. Schmidt
Client ID: T-513
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 781
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:28
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
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TO-15 Full List - Process with BAQMD 95 Excel Template
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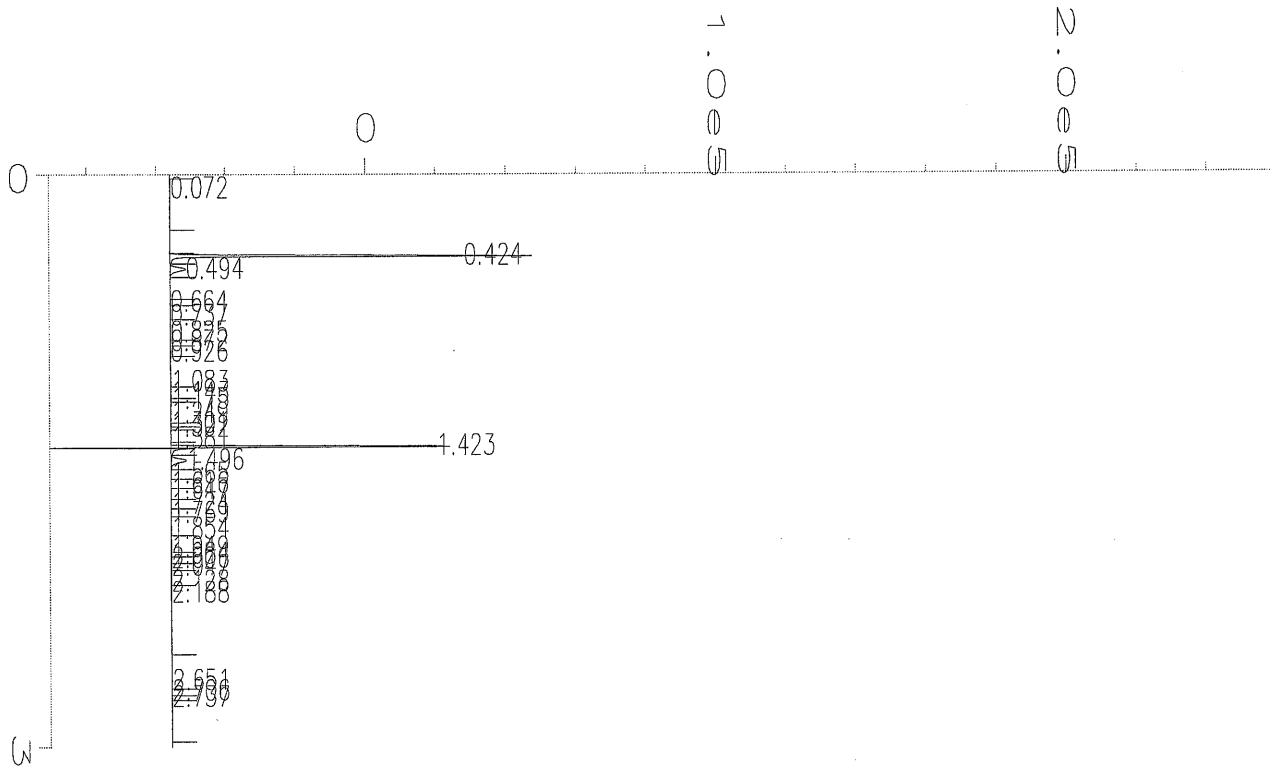
Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443531MA.D
Operator : LR
Instrument : GCL
Sample Name : T-513
Run Time Bar Code:
Acquired on : 06 Dec 24 06:39 PM
Report Created on: 06 Dec 24 06:42 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443531MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.072	2092	208	PH	0.134	1.8829
2	0.424	58109	78035	HH S	0.012	52.3016
3	0.494	6236	4230	BV T	0.025	5.6126
4	0.664	25	25	PV T	0.017	0.0227
5	0.737	62	36	VV T	0.029	0.0561
6	0.825	177	58	PV T	0.051	0.1597
7	0.872	50	22	VV T	0.037	0.0449
8	0.926	101	33	VV T	0.044	0.0913
9	1.083	940	256	VV T	0.061	0.8463
10	1.143	695	215	VV T	0.054	0.6253
11	1.175	206	196	VV T	0.018	0.1856
12	1.249	750	159	VV T	0.078	0.6749
13	1.301	105	99.8	VV T	0.017	0.0942

14	1.322	87	94	VV T	0.015	0.0780
15	1.381	133	97	VV T	0.023	0.1196
16	1.423	32806	56752	HBAS	0.010	29.5272
17	1.496	6309	4272	BV T	0.025	5.6786
18	1.565	38	-34	PV T	0.000	0.0345
19	1.616	121	50	PV T	0.039	0.1089
20	1.647	150	59	VV T	0.042	0.1353
21	1.724	147	71	VV T	0.034	0.1323
22	1.769	157	81	VV T	0.032	0.1415
23	1.854	243	69	VV T	0.062	0.2184
24	1.949	191	71	PV T	0.045	0.1719
25	1.984	30	43	PV T	0.012	0.0273
26	2.006	39	18	PV T	0.032	0.0348
27	2.047	39	31	PV T	0.021	0.0348
28	2.128	190	67	PV T	0.040	0.1711
29	2.188	422	78	VV T	0.166	0.3802
30	2.651	375	64	PV T	0.098	0.3377
31	2.706	60	38	VV T	0.026	0.0536
32	2.737	18	23	VV T	0.013	0.0162

Total area = 111104

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**31**			Cal Update:	**04/15/24**
File Name:	**2443531A**			SF:	3
Description:	**T-513**			Not Detected Flag:	ND
Date Sampled:	**11/20/24**	Time:	**12:28**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**18:39**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**781**				
Can Factor:	**1.36**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**58109**	7.98	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 31

File Name:	2443531A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.36		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	7.980	7.980	79,800	79,800	7.980	200	0.027	0.037	0.111	272	816			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 31

File Name: 2443531A
Description: T-513
Can/Tube#: 781
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/06/24 **Time:** 18:39

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.037	0.111	7.980	272	816	79,800	

Sample Data Packages

SDG Number 224435

Lab Id Number 32

Client ID T-514

Analytical Method ASTM D1945

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Due: | Expires: 12/20/2024 | 224435 | 32

Client: C.E. Schmidt
Client ID: T-514
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 506
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:45
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

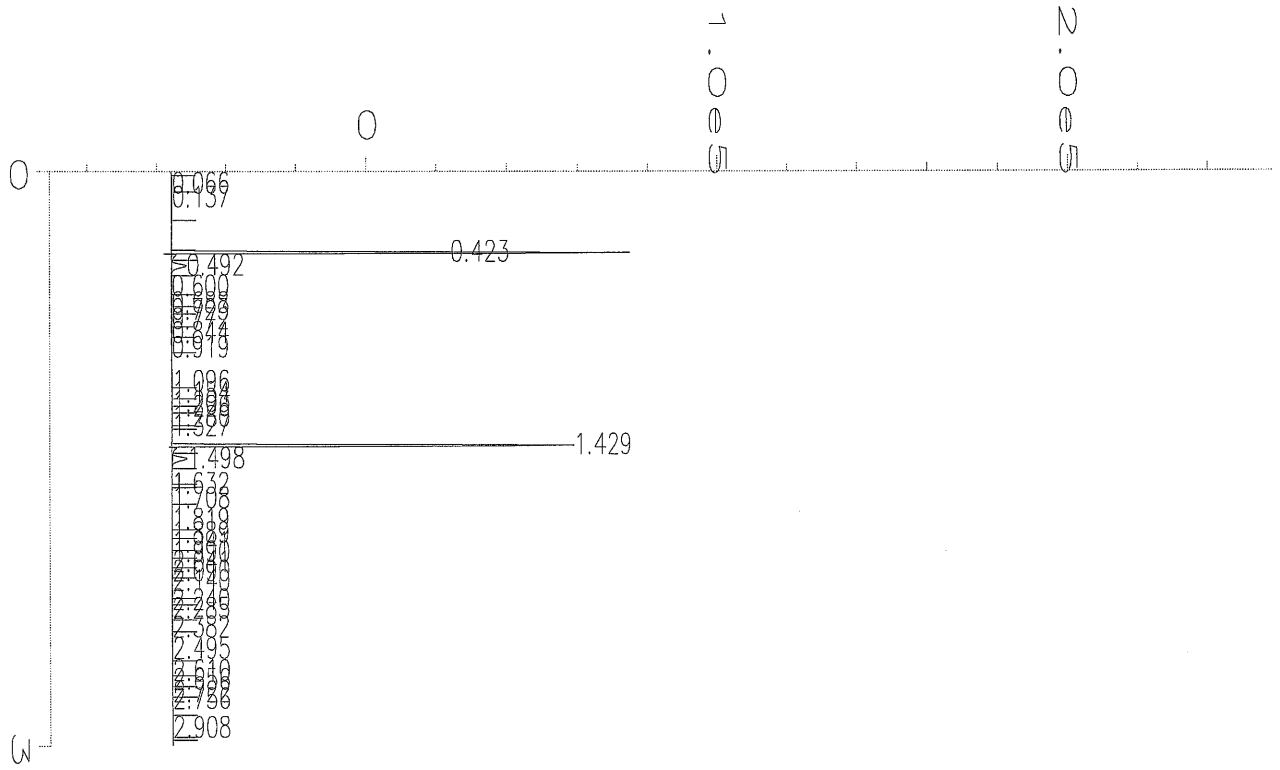
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443532MA.D
Operator : LR
Instrument : GCL
Sample Name : T-514
Run Time Bar Code:
Acquired on : 06 Dec 24 06:43 PM
Report Created on: 06 Dec 24 06:46 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443532MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.066	635	143	BV	0.074	0.3961
2	0.137	997	153	VV	0.109	0.6223
3	0.423	71978	110795	HH S	0.011	44.9216
4	0.492	6033	3983	BV T	0.025	3.7655
5	0.600	4	30	PV T	0.002	0.0027
6	0.688	35	25	PV T	0.024	0.0219
7	0.723	67	47	PV T	0.025	0.0416
8	0.772	80	52	VV T	0.030	0.0500
9	0.844	57	55	PV T	0.017	0.0355
10	0.919	10	16	VV T	0.011	0.0065
11	1.096	1025	216	PV T	0.079	0.6398
12	1.154	587	194	VV T	0.043	0.3666
13	1.203	314	157	VV T	0.033	0.1960

14	1.226	236	151	VV T	0.026	0.1474
15	1.280	354	138	VV T	0.043	0.2209
16	1.327	59	95	VV T	0.010	0.0371
17	1.429	68422	103845	HBAS	0.011	42.7022
18	1.498	6094	3970	BV T	0.026	3.8030
19	1.632	25	33	VV T	0.013	0.0157
20	1.708	115	49	PV T	0.037	0.0716
21	1.819	301	67	PV T	0.075	0.1878
22	1.889	78	46	VV T	0.028	0.0485
23	1.941	127	55	VV T	0.039	0.0794
24	1.990	69	67	VV T	0.017	0.0429
25	2.041	105	47	VV T	0.035	0.0655
26	2.090	171	76	VV T	0.037	0.1066
27	2.140	382	77	VV T	0.083	0.2386
28	2.240	90	47	VV T	0.032	0.0564
29	2.285	142	47	VV T	0.051	0.0887
30	2.382	157	60	VV T	0.044	0.0982
31	2.495	509	110	VV T	0.070	0.3179
32	2.610	129	54	VV T	0.040	0.0804
33	2.656	154	63	VV T	0.039	0.0959
34	2.722	129	65	VV T	0.034	0.0807
35	2.756	215	67	VV T	0.054	0.1343
36	2.908	343	78	VV T	0.080	0.2141

Total area = 160230

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	32			Cal Update:	04/15/24
File Name:	2443532A			SF:	3
Description:	T-514			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	12:45	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	18:43	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	506				
Can Factor:	1.38				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	71978	10.03	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 32

File Name:	2443532A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.38		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	Fixed ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	10.030	10.030	100,300	100,300	10.030	200	0.028	0.038	0.114	276	828			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Can/Tube#: 506
QC_Batch: 120624-GCO

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/06/24 **Time:** 18:43

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	10.030	276	828	100,300	

Sample Data Packages

SDG Number 224435

Lab Id Number 33

Client ID T-601

Analytical Method ASTM D1945

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Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 33

Client: C.E. Schmidt
Client ID: T-601
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 700
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

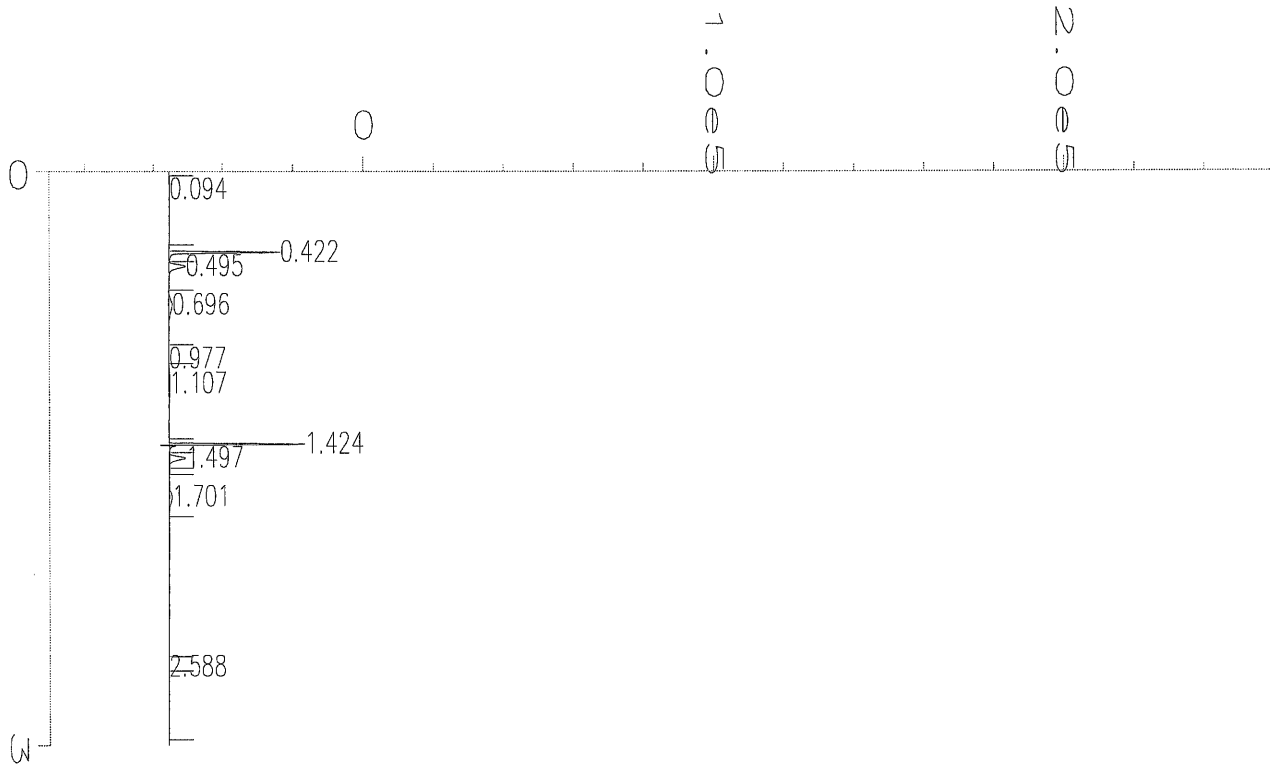
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443533MA.D
Operator : LR
Instrument : GCL
Sample Name : T-601
Run Time Bar Code:
Acquired on : 06 Dec 24 06:55 PM
Report Created on: 06 Dec 24 06:59 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443533MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.094	2513	204	BV	0.159	4.2689
2	0.422	17710	32145	VV	0.009	30.0784
3	0.495	7836	4859	VV	0.041	13.3091
4	0.696	5053	1008	VV	0.074	8.5822
5	0.977	260	70	PV	0.062	0.4411
6	1.107	3449	278	VV	0.158	5.8580
7	1.424	10945	27759	HBAS	0.007	18.5889
8	1.497	6980	4794	BV T	0.024	11.8552
9	1.701	4034	942	PV T	0.065	6.8514
10	2.588	98	58	PV T	0.028	0.1667

Total area = 58878

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**33**			Cal Update:	**04/15/24**
File Name:	**2443533A**			SF:	3
Description:	**T-601**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**8:18**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**18:55**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**700**				
Can Factor:	**1.30**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**17710**	2.32	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 33

File Name:	2443533A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.30		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.30		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.325	2.325	23,248	23,248	2.325	200	0.026	0.034	0.101	260	780			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Can/Tube#: 700
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/06/24 **Time:** 18:55

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.101	2.325	260	780	23,248	

Sample Data Packages

SDG Number 224435

Lab Id Number 34

Client ID T-602

Analytical Method ASTM D1945

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 34

Client: C.E. Schmidt
Client ID: T-602
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 673
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:29
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

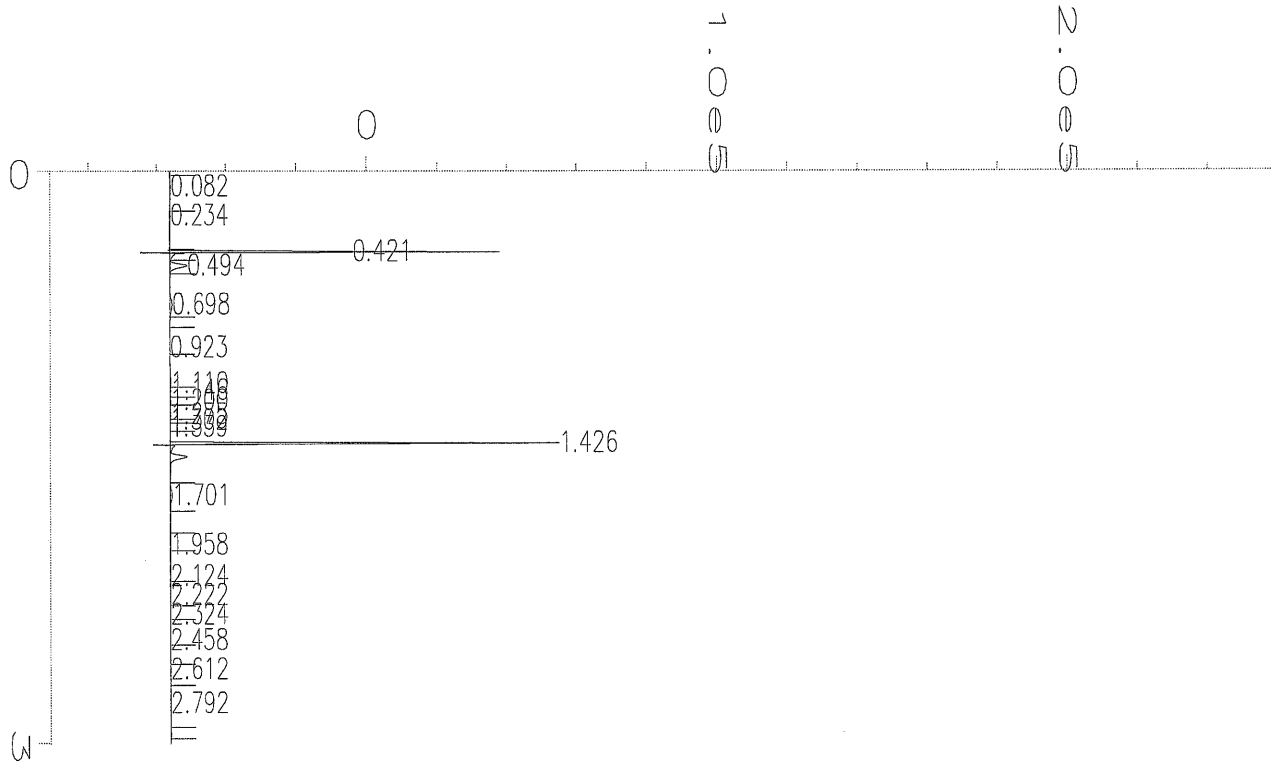
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443534MA.D
Operator : LR
Instrument : GCL
Sample Name : T-602
Run Time Bar Code:
Acquired on : 06 Dec 24 07:00 PM
Report Created on: 06 Dec 24 07:03 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443534MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.082	1465	196	PH	0.096	1.5286
2	0.234	1202	128	VV	0.156	1.2541
3	0.421	31713	80217	HH S	0.007	33.0937
4	0.494	6914	4676	BV T	0.025	7.2148
5	0.698	1976	540	PV T	0.059	2.0622
6	0.923	209	66	PV T	0.053	0.2182
7	1.110	969	191	PV T	0.084	1.0114
8	1.146	468	186	VV T	0.042	0.4888
9	1.200	298	139	VV T	0.033	0.3110
10	1.275	418	126	VV T	0.051	0.4365
11	1.302	58	62	VV T	0.016	0.0607
12	1.339	120	59	VV T	0.031	0.1248
13	1.426	45172	78178	HBAS	0.047	47.1388

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	34			Cal Update:	04/15/24
File Name:	2443534A			SF:	3
Description:	T-602			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	8:29	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	19:00	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	673				
Can Factor:	1.28				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	31713	4.10	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 34

File Name:	2443534A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.28		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	4.099	4.099	40,989	40,989	4.099	200	0.026	0.033	0.098	256	768			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 34

File Name: 2443534A
Description: T-602
Can/Tube#: 673
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:29
Date Analyzed: 12/06/24 **Time:** 19:00

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.033	0.098	4.099	256	768	40,989	

Sample Data Packages

SDG Number **224435**

Lab Id Number **35**

Client ID T-603

Analytical Method ASTM D1945

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Sample Calculations
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Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 35

Client: C.E. Schmidt
Client ID: T-603
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 550
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 8:31
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

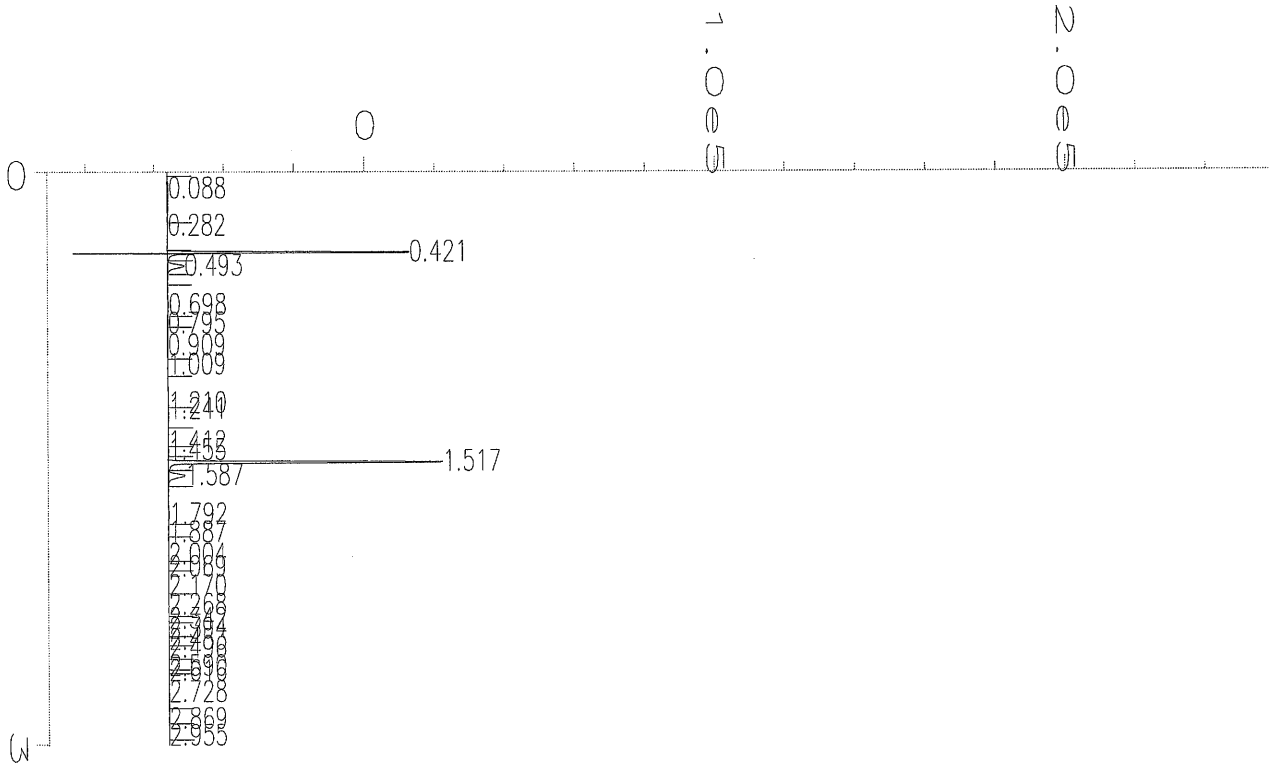
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443535MA.D
Operator : LR
Instrument : GCL
Sample Name : T-603
Run Time Bar Code:
Acquired on : 06 Dec 24 07:05 PM
Report Created on: 06 Dec 24 07:08 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

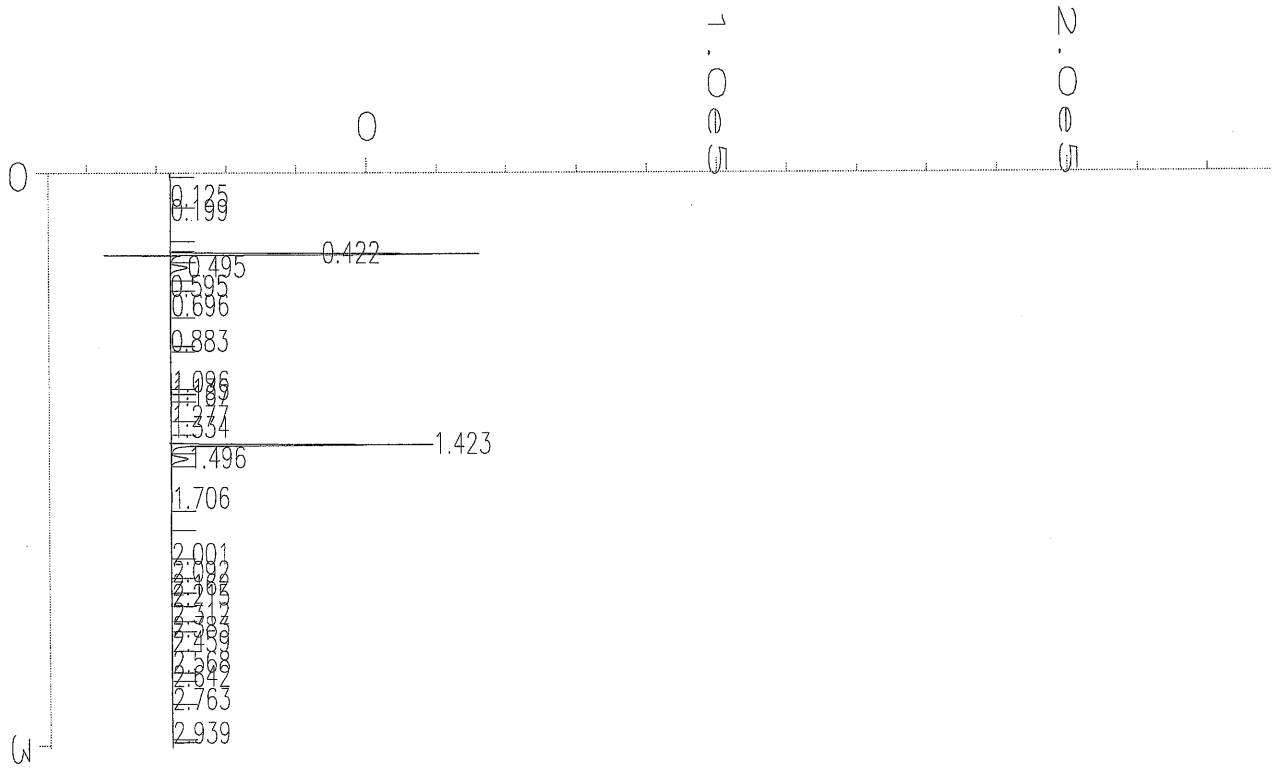
Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443535MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.088	2513	235	BV	0.157	2.4272
2	0.282	1260	172	VV	0.122	1.2165
3	0.421	29989	78068	HH S	0.006	28.9616
4	0.493	6930	4628	BV T	0.025	6.6925
5	0.698	1337	287	PV T	0.066	1.2910
6	0.795	59	31	VV T	0.032	0.0570
7	0.909	323	70	PV T	0.077	0.3119
8	1.009	97	48	PV T	0.034	0.0941
9	1.210	1255	226	VV T	0.092	1.2116
10	1.241	1033	239	VV T	0.072	0.9977
11	1.412	381	85	VV T	0.075	0.3679
12	1.455	121	80	VV T	0.025	0.1166
13	1.517	48793	72347	HBAS	0.011	47.1204

14	1.587	6877	4613	BV T	0.025	6.6415
15	1.792	1004	241	PV T	0.064	0.9700
16	1.887	120	39	VV T	0.052	0.1163
17	2.004	184	65	PV T	0.045	0.1775
18	2.069	127	56	VV T	0.038	0.1222
19	2.170	211	51	VV T	0.078	0.2041
20	2.268	214	62	VV T	0.057	0.2063
21	2.342	64	40	VV T	0.027	0.0620
22	2.394	81	47	PV T	0.032	0.0787
23	2.453	80	49	PV T	0.027	0.0772
24	2.496	103	44	VV T	0.039	0.0997
25	2.590	82	42	VV T	0.033	0.0792
26	2.616	17	19	VV T	0.015	0.0163
27	2.728	181	57	PV T	0.053	0.1751
28	2.869	76	26	VV T	0.048	0.0731
29	2.955	36	29	PBAT	0.021	0.0350

Total area = 103549

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443535MB.D
Operator : LR
Instrument : GCL
Sample Name : T-603
Run Time Bar Code:
Acquired on : 06 Dec 24 07:09 PM
Report Created on: 06 Dec 24 07:12 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443535MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	1293	191	BV	0.091	1.4108
2	0.199	629	103	VV	0.102	0.6864
3	0.422	38322	69279	HH S	0.009	41.8188
4	0.495	7095	4799	BV T	0.037	7.7423
5	0.595	8	4	PV T	0.034	0.0087
6	0.696	1103	272	PV T	0.060	1.2036
7	0.883	99	33	VV T	0.050	0.1084
8	1.096	1216	252	PV T	0.081	1.3270
9	1.135	312	207	VV T	0.025	0.3406
10	1.167	399	204	VV T	0.033	0.4351
11	1.277	566	92	VV T	0.103	0.6173
12	1.334	163	73	VV T	0.040	0.1776
13	1.423	30628	55408	HBAS	0.009	33.4224

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**35**			Cal Update:	**04/15/24**
File Name:	**2443535A**			SF:	3
Description:	**T-603**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**8:31**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**19:05**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**550**				
Can Factor:	**1.24**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**29989**	3.75	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 35

File Name:	2443535A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.24		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.24		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.755	3.755	37,549	37,549	3.755	200	0.025	0.031	0.092	248	744			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Can/Tube#: 550
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/06/24 **Time:** 19:05

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.031	0.092	3.755	248	744	37,549	

Sample Data Packages

SDG Number **224435**

Lab Id Number **36**

Client ID T-604

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 36

Client: C.E. Schmidt
Client ID: T-604
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 738
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

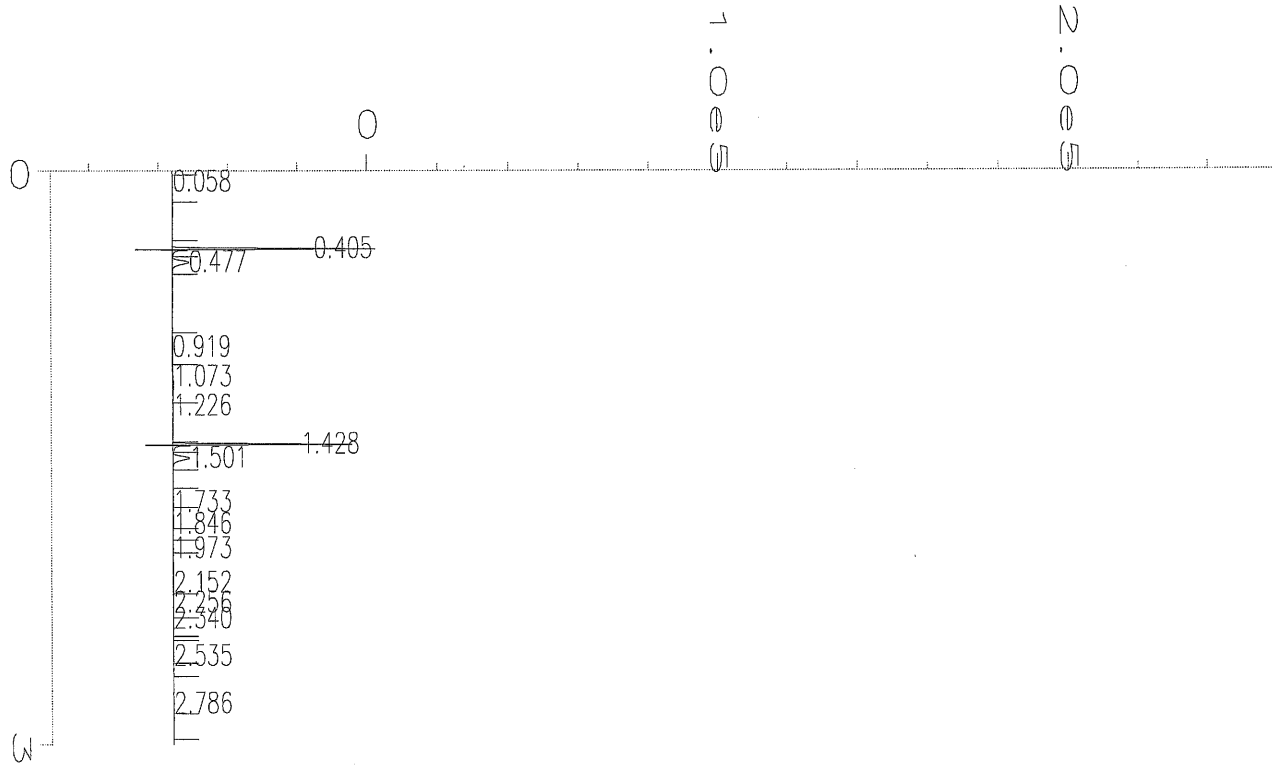
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443536MA.D
Operator : LR
Instrument : GCL
Sample Name : T-604
Run Time Bar Code:
Acquired on : 06 Dec 24 07:16 PM
Report Created on: 06 Dec 24 07:19 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443536MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.058	527	107	BV	0.082	0.8860
2	0.405	21316	26736	BV	0.013	35.8617
3	0.477	7237	4719	VV	0.025	12.1756
4	0.919	624	86	PV	0.095	1.0503
5	1.073	2610	269	VV	0.116	4.3919
6	1.226	1928	227	VV	0.142	3.2438
7	1.428	17045	48210	HBAS	0.006	28.6768
8	1.501	6744	4587	BV T	0.024	11.3464
9	1.733	140	56	PV T	0.041	0.2348
10	1.846	231	60	VV T	0.064	0.3893
11	1.973	75	55	PV T	0.025	0.1256
12	2.152	344	61	PV T	0.093	0.5784
13	2.256	305	65	VV T	0.087	0.5137

14	2.340	101	48	VV T	0.035	0.1694
15	2.535	124	48	PV T	0.048	0.2092
16	2.786	87	67	VV T	0.022	0.1471

Total area = 59439

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	36			Cal Update:	04/15/24
File Name:	2443536A			SF:	3
Description:	T-604			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	8:18	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	19:16	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	738				
Can Factor:	1.33				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	21316	2.86	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 36

File Name:	2443536A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.33		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.33		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.863	2.863	28,627	28,627	2.863	200	0.027	0.035	0.106	266	798			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Can/Tube#: 738
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/06/24 **Time:** 19:16

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.035	0.106	2.863	266	798	28,627	

Sample Data Packages

SDG Number **224435**

Lab Id Number **37**

Client ID T-605

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 37

Client: C.E. Schmidt
Client ID: T-605
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 892
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 9:41
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

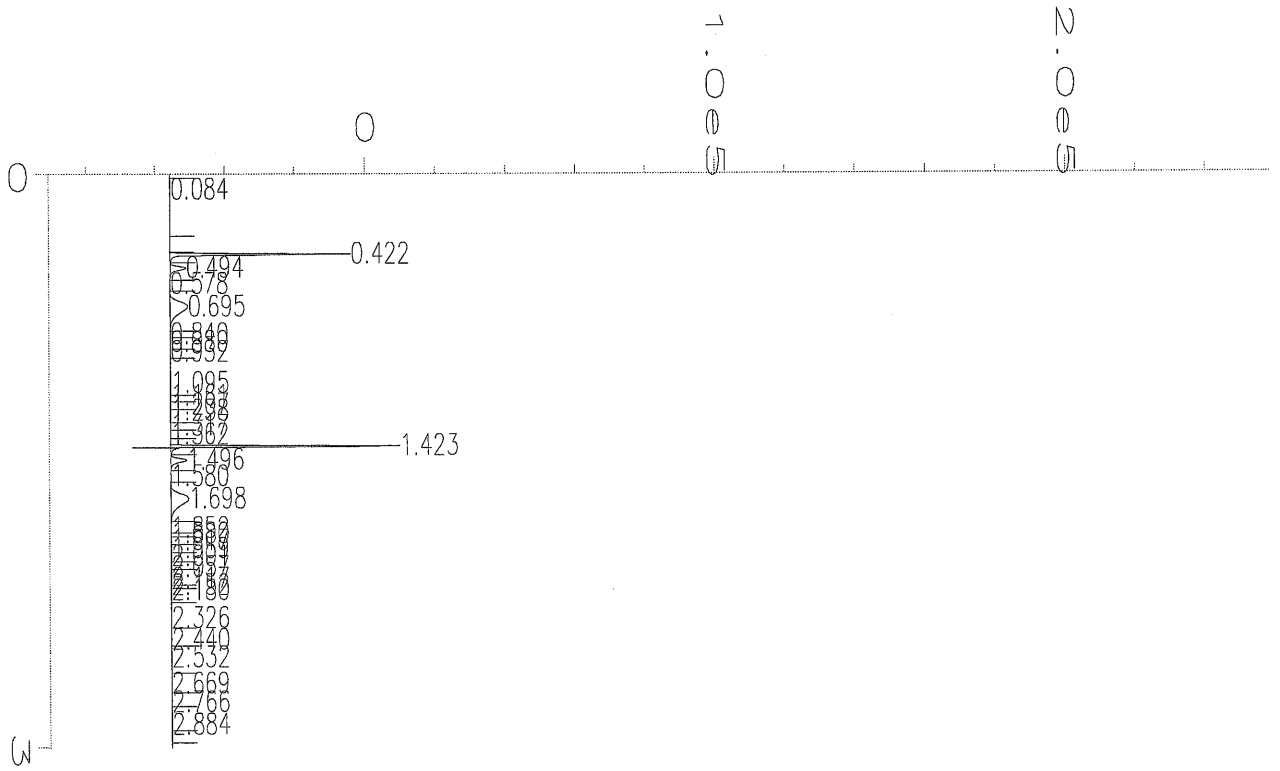
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443537MA.D
Operator : LR
Instrument : GCL
Sample Name : T-605
Run Time Bar Code:
Acquired on : 06 Dec 24 07:22 PM
Report Created on: 06 Dec 24 07:25 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443537MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.084	1458	181	PH	0.106	1.2871
2	0.422	23463	45963	HH S	0.009	20.7172
3	0.494	6395	4340	BV T	0.025	5.6470
4	0.578	40	18	PV T	0.036	0.0349
5	0.695	22454	5004	PV T	0.070	19.8256
6	0.840	98	57	VV T	0.029	0.0870
7	0.880	99.7	56	VV T	0.030	0.0880
8	0.932	71	52	PV T	0.023	0.0627
9	1.095	1517	222	PV T	0.114	1.3391
10	1.161	326	176	VV T	0.031	0.2877
11	1.207	318	144	VV T	0.037	0.2805
12	1.238	347	138	VV T	0.042	0.3063
13	1.317	131	72	VV T	0.028	0.1155

14	1.362	89	55	VV T	0.027	0.0782
15	1.423	25063	48050	HBAS	0.009	22.1300
16	1.496	6599	4412	BV T	0.025	5.8266
17	1.580	35	26	PV T	0.022	0.0306
18	1.698	22357	5019	PV T	0.069	19.7402
19	1.852	244	68	VV T	0.060	0.2159
20	1.880	41	63	VV T	0.011	0.0365
21	1.917	61	53	VV T	0.019	0.0540
22	1.959	74	31	VV T	0.040	0.0650
23	2.001	100	58	VV T	0.030	0.0886
24	2.057	63	40	VV T	0.026	0.0559
25	2.117	186	65	VV T	0.044	0.1640
26	2.152	35	40	VV T	0.014	0.0307
27	2.180	147	34	VV T	0.060	0.1296
28	2.326	242	60	VV T	0.060	0.2139
29	2.440	192	70	PV T	0.039	0.1693
30	2.532	387	80	VV T	0.082	0.3416
31	2.669	174	35	VV T	0.082	0.1533
32	2.766	185	63	VV T	0.049	0.1633
33	2.884	266	62	VV T	0.059	0.2345

Total area = 113256

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QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**37**			Cal Update:	**04/15/24**
File Name:	**2443537A**			SF:	3
Description:	**T-605**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**9:41**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**19:22**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**892**				
Can Factor:	**1.31**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**23463**	3.10	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 37

File Name:	2443537A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.31		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.104	3.104	31,037	31,037	3.104	200	0.026	0.034	0.103	262	786			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 37

File Name: 2443537A
Description: T-605
Can/Tube#: 892
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:41
Date Analyzed: 12/06/24 **Time:** 19:22

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	3.104	262	786	31,037	

Sample Data Packages

SDG Number 224435

Lab Id Number 38

Client ID T-606

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 38

Client: C.E. Schmidt
Client ID: T-606
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 608
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:58
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

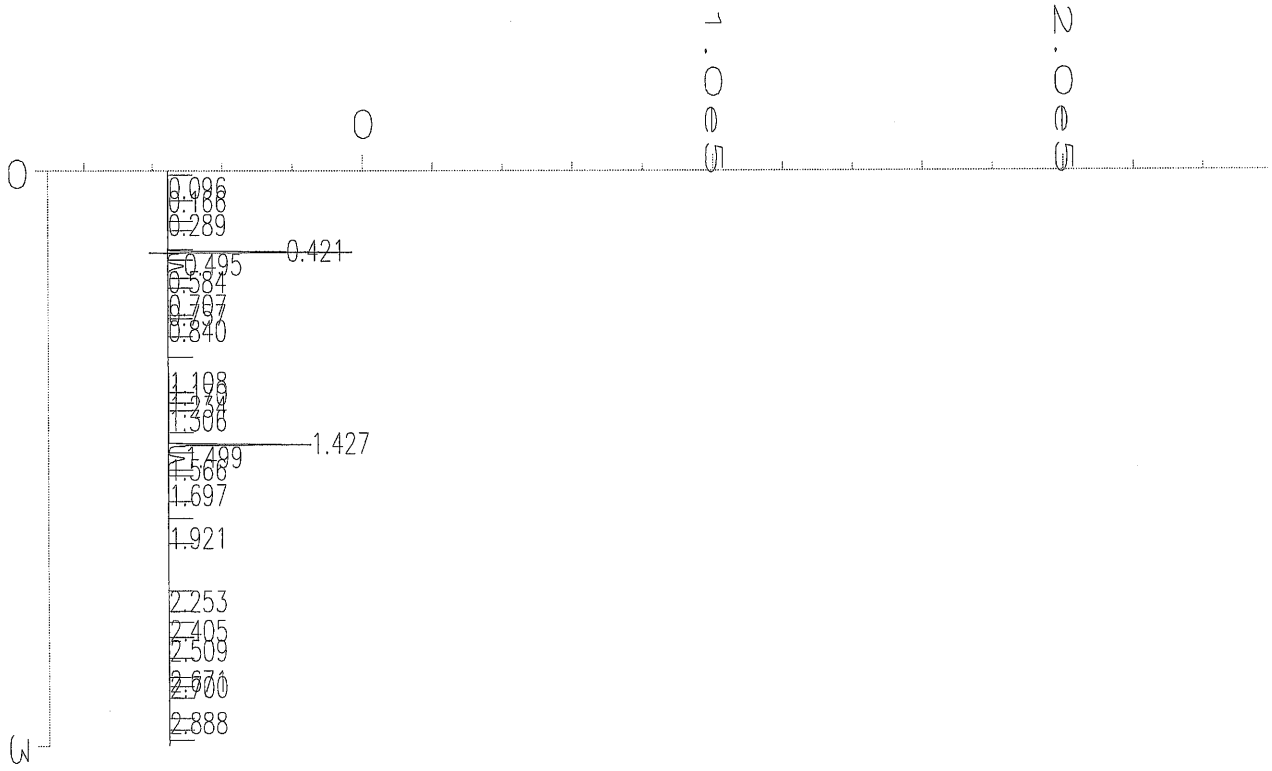
InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443538MA.D
Operator : LR
Instrument : GCL
Sample Name : T-606
Run Time Bar Code:
Acquired on : 06 Dec 24 07:32 PM
Report Created on: 06 Dec 24 07:35 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443538MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.096	1313	216	PH	0.084	2.3653
2	0.166	832	189	VV	0.073	1.4975
3	0.289	286	132	VV	0.036	0.5158
4	0.421	14893	47315	HBAS	0.005	26.8212
5	0.495	6691	4452	BV T	0.025	12.0507
6	0.584	84	38	PV T	0.036	0.1507
7	0.707	503	129	VV T	0.064	0.9067
8	0.757	52	52	VV T	0.017	0.0933
9	0.840	164	53	VV T	0.052	0.2948
10	1.108	1670	246	PV T	0.113	3.0075
11	1.170	740	233	VV T	0.048	1.3329
12	1.234	444	181	VV T	0.041	0.7995
13	1.306	853	151	VV T	0.094	1.5359

14	1.427	17191	25085	VV T	0.011	30.9600
15	1.499	7437	4550	VV T	0.027	13.3943
16	1.566	162	101	VV T	0.027	0.2914
17	1.697	896	189	VV T	0.066	1.6130
18	1.921	301	75	PV T	0.067	0.5425
19	2.253	268	69	VV T	0.065	0.4833
20	2.405	178	71	VV T	0.042	0.3209
21	2.509	249	69	VV T	0.059	0.4480
22	2.671	118	64	VV T	0.031	0.2122
23	2.700	118	65	VV T	0.030	0.2118
24	2.888	84	43	PV T	0.036	0.1509

Total area = 55526

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	38			Cal Update:	04/15/24
File Name:	2443538A			SF:	3
Description:	T-606			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	9:58	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	19:32	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	608				
Can Factor:	1.38				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	14893	2.08	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 38

File Name:	2443538A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.38		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	Fixed ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.075	2.075	20,753	20,753	2.075	200	0.028	0.038	0.114	276	828			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 38

File Name: 2443538A
Description: T-606
Can/Tube#: 608
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:58
Date Analyzed: 12/06/24 **Time:** 19:32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	2.075	276	828	20,753	

Sample Data Packages

SDG Number **224435**

Lab Id Number **39**

Client ID T-607

Analytical Method ASTM D1945

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Due:

Expires: 12/21/2024

224435 39

Client: C.E. Schmidt
Client ID: T-607
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 771
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:52
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

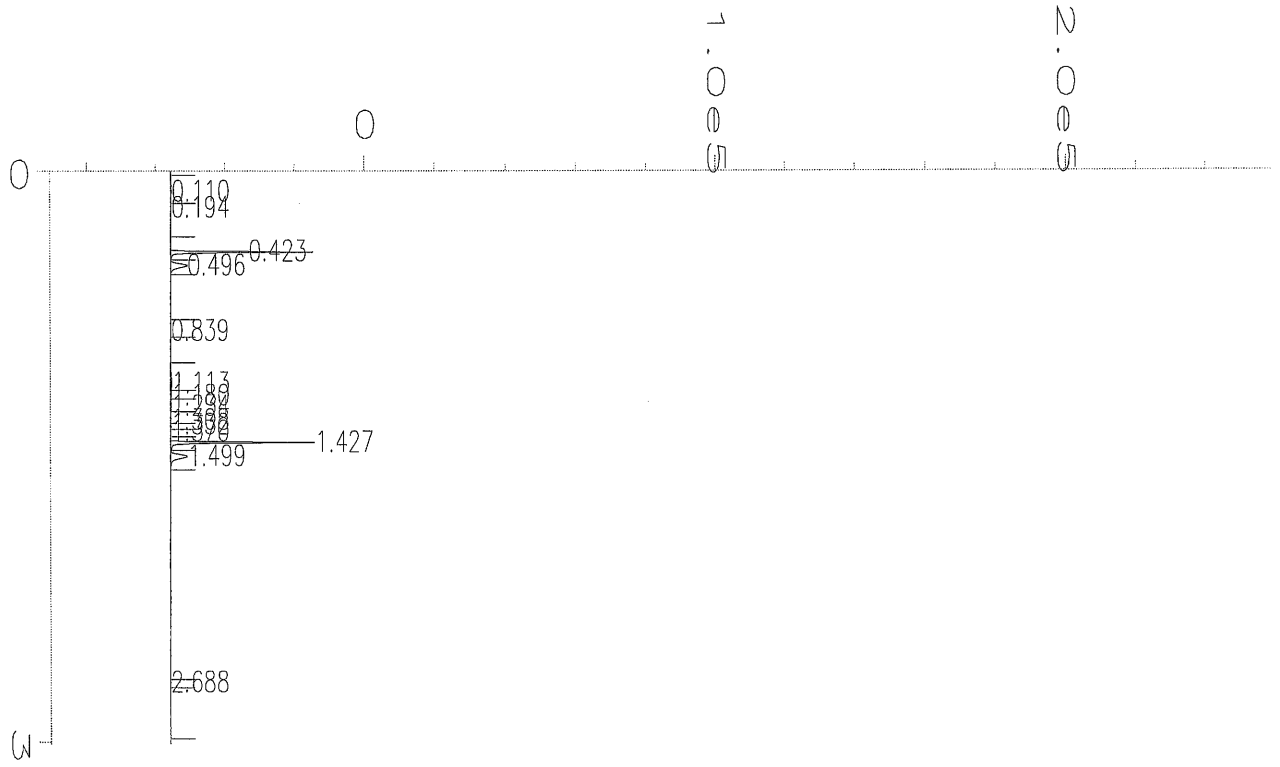
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443539MA.D
Operator : LR
Instrument : GCL
Sample Name : T-607
Run Time Bar Code:
Acquired on : 06 Dec 24 07:38 PM
Report Created on: 06 Dec 24 07:42 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443539MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.110	1232	187	BV	0.085	2.2565
2	0.194	615	115	VV	0.089	1.1257
3	0.423	14205	33343	HBAS	0.007	26.0177
4	0.496	6945	4782	BV T	0.024	12.7201
5	0.839	189	79	PV T	0.038	0.3465
6	1.113	1923	293	PV T	0.093	3.5222
7	1.180	703	257	VV T	0.045	1.2870
8	1.234	877	247	VV T	0.059	1.6070
9	1.308	618	181	VV T	0.057	1.1328
10	1.332	275	138	VV T	0.030	0.5029
11	1.370	318	161	VV T	0.033	0.5817
12	1.427	18503	28741	VV T	0.011	33.8895
13	1.499	8120	4853	VV T	0.039	14.8732

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**39**			Cal Update:	**04/15/24**
File Name:	**2443539A**			SF:	3
Description:	**T-607**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**9:52**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**19:38**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**771**				
Can Factor:	**1.31**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**14205**	1.88	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 39

File Name:	2443539A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.31		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	1.879	1.879	18,790	18,790	1.879	200	0.026	0.034	0.103	262	786			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 39

File Name: 2443539A
Description: T-607
Can/Tube#: 771
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:52
Date Analyzed: 12/06/24 **Time:** 19:38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	1.879	262	786	18,790	

Sample Data Packages

SDG Number **224435**

Lab Id Number **40**

Client ID T-608

Analytical Method ASTM D1945

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Due:

Expires: 12/21/2024

224435 40

Client: C.E. Schmidt
Client ID: T-608
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 531
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:47
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

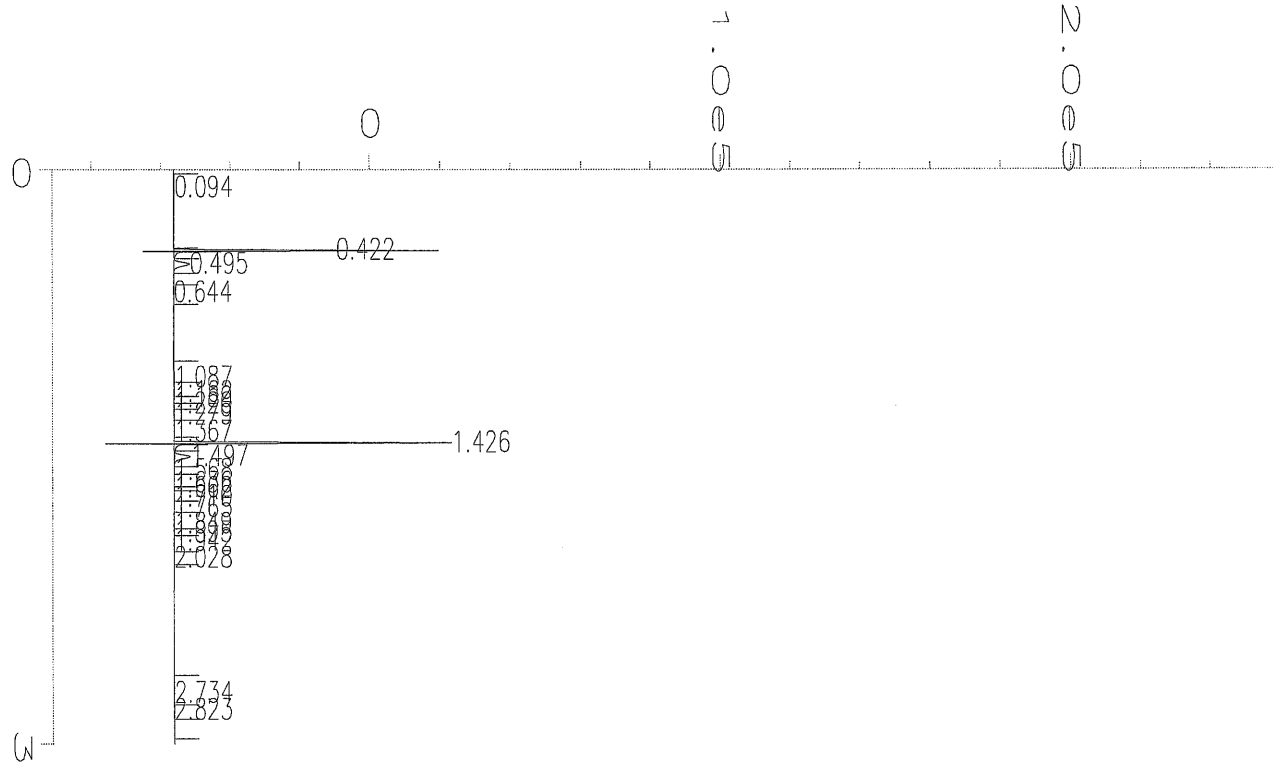
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443540MA.D
Operator : LR
Instrument : GCL
Sample Name : T-608
Run Time Bar Code:
Acquired on : 06 Dec 24 07:43 PM
Report Created on: 06 Dec 24 07:47 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443540MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.094	3003	193	BV	0.205	4.5413
2	0.422	24504	65987	HH S	0.006	37.0597
3	0.495	6556	4452	BV T	0.025	9.9156
4	0.644	39	27	PV T	0.025	0.0595
5	1.087	901	217	PV T	0.069	1.3626
6	1.162	821	190	VV T	0.072	1.2411
7	1.189	298	166	VV T	0.030	0.4506
8	1.220	181	120	VV T	0.025	0.2735
9	1.279	229	89	VV T	0.043	0.3464
10	1.367	159	39	VV T	0.067	0.2401
11	1.426	21930	32575	HBAS	0.011	33.1656
12	1.497	6459	4444	BV T	0.024	9.7680
13	1.568	34	30	PV T	0.019	0.0518

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	40			Cal Update:	04/15/24
File Name:	2443540A			SF:	3
Description:	T-608			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	9:47	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	19:43	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	531				
Can Factor:	1.35				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	24504	3.34	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 40

File Name:	2443540A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.35		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.35		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.340	3.340	33,403	33,403	3.340	200	0.027	0.036	0.109	270	810			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 40

File Name: 2443540A
Description: T-608
Can/Tube#: 531
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 9:47
Date Analyzed: 12/06/24 **Time:** 19:43

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.109	3.340	270	810	33,403	

Sample Data Packages

SDG Number **224435**

Lab Id Number **41**

Client ID T-609

Analytical Method ASTM D1945

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Due: | Expires: 12/21/2024 | 224435 | 41

Client: C.E. Schmidt
Client ID: T-609
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 668
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 11:38
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions

Sample Type:

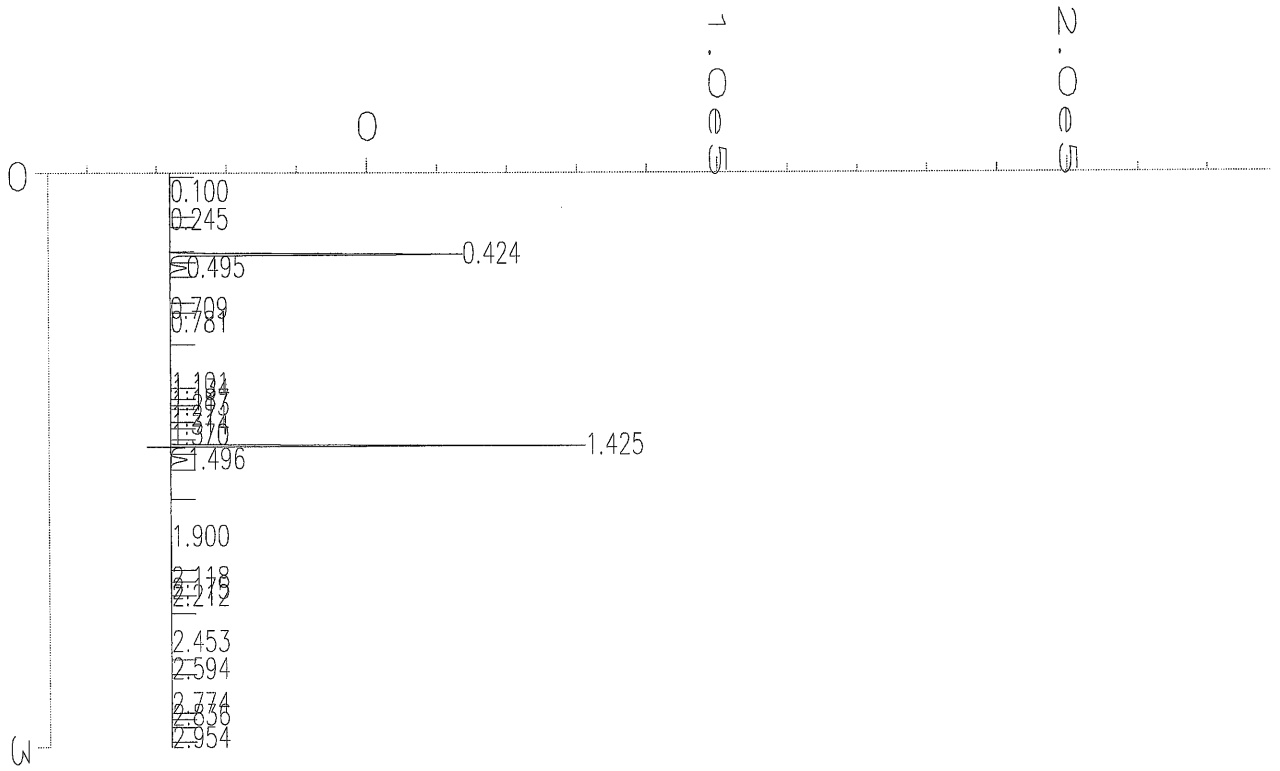
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443541MA.D
Operator : LR
Instrument : GCL
Sample Name : T-609
Run Time Bar Code:
Acquired on : 06 Dec 24 07:48 PM
Report Created on: 06 Dec 24 07:51 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443541MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.100	1549	199	PH	0.102	1.3444
2	0.245	265	103	VV	0.043	0.2303
3	0.424	50096	72244	HH S	0.012	43.4787
4	0.495	6743	4512	BV T	0.025	5.8519
5	0.709	35	31	PV T	0.019	0.0300
6	0.781	351	56	PV T	0.111	0.3048
7	1.101	936	200	VV T	0.078	0.8127
8	1.134	573	209	VV T	0.043	0.4973
9	1.187	235	151	VV T	0.026	0.2040
10	1.213	101	115	VV T	0.015	0.0880
11	1.271	310	97	VV T	0.054	0.2691
12	1.314	108	68	VV T	0.027	0.0941
13	1.370	142	71	VV T	0.033	0.1236

14	1.425	44727	63788	HBAS	0.012	38.8188
15	1.496	6732	4538	BV T	0.025	5.8430
16	1.900	509	69	PV T	0.138	0.4422
17	2.118	155	70	PV T	0.037	0.1345
18	2.175	179	65	VV T	0.046	0.1551
19	2.212	147	54	VV T	0.045	0.1274
20	2.453	476	159	PV T	0.074	0.4130
21	2.594	250	99.9	VV T	0.042	0.2170
22	2.774	426	73	VV T	0.100	0.3698
23	2.836	74	45	PV T	0.027	0.0640
24	2.954	99.7	40	PBAT	0.042	0.0865

Total area = 115221

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**41**			Cal Update:	**04/15/24**
File Name:	**2443541A**			SF:	3
Description:	**T-609**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**11:38**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**19:48**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**668**				
Can Factor:	**1.31**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**50096**	6.63	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 41

File Name:	2443541A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.31		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	6.627	6.627	66,267	66,267	6.627	200	0.026	0.034	0.103	262	786			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 41

File Name: 2443541A
Description: T-609
Can/Tube#: 668
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/06/24 **Time:** 19:48

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.034	0.103	6.627	262	786	66,267	

Sample Data Packages

SDG Number **224435**

Lab Id Number **42**

Client ID T-610

Analytical Method ASTM D1945

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Due:

Expires: 12/21/2024

224435 42

Client: C.E. Schmidt
Client ID: T-610
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 730
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:11
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

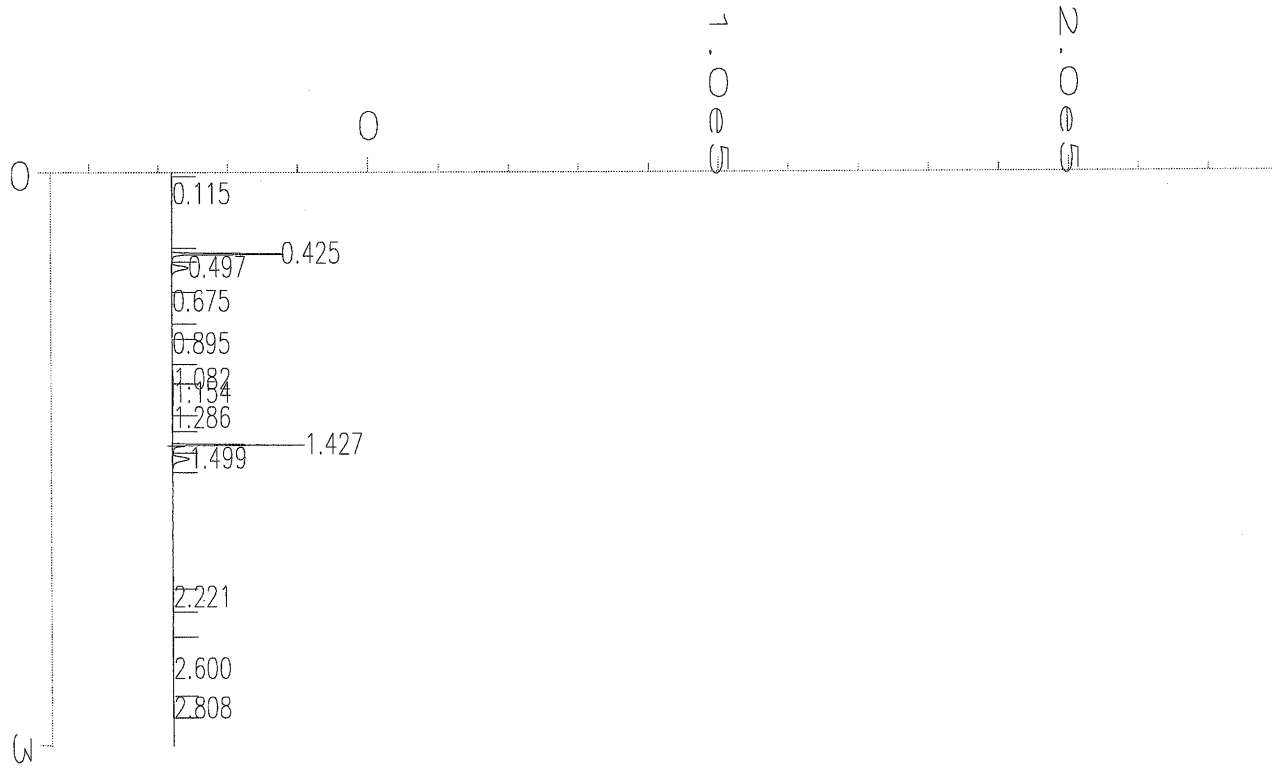
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443542MA.D
Operator : LR
Instrument : GCL
Sample Name : T-610
Run Time Bar Code:
Acquired on : 06 Dec 24 07:54 PM
Report Created on: 06 Dec 24 07:57 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443542MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.115	2485	207	PV	0.158	4.6144
2	0.425	16461	22795	PV	0.012	30.5646
3	0.497	7346	4744	VV	0.039	13.6405
4	0.675	348	69	PV	0.080	0.6466
5	0.895	285	65	PV	0.074	0.5296
6	1.082	1005	280	VV	0.055	1.8663
7	1.154	2180	273	VV	0.102	4.0480
8	1.286	706	174	VV	0.068	1.3107
9	1.427	14336	20075	VV	0.012	26.6188
10	1.499	7681	4660	VV	0.027	14.2619
11	2.221	369	76	VV	0.068	0.6845
12	2.600	497	75	PV	0.096	0.9229
13	2.808	157	45	PV	0.058	0.2914

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	42			Cal Update:	04/15/24
File Name:	2443542A			SF:	3
Description:	T-610			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	11:11	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	19:54	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	730				
Can Factor:	1.37				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	16461	2.28	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 42

File Name:	2443542A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.37		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.37		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	2.277	2.277	22,772	22,772	2.277	200	0.027	0.038	0.113	274	822			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 42

File Name: 2443542A
Description: T-610
Can/Tube#: 730
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/06/24 **Time:** 19:54

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.113	2.277	274	822	22,772	

Sample Data Packages

SDG Number 224435

Lab Id Number 43

Client ID T-611

Analytical Method ASTM D1945

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Due:

Expires: 12/21/2024

224435 43

Client: C.E. Schmidt
Client ID: T-611
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 701
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:28
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

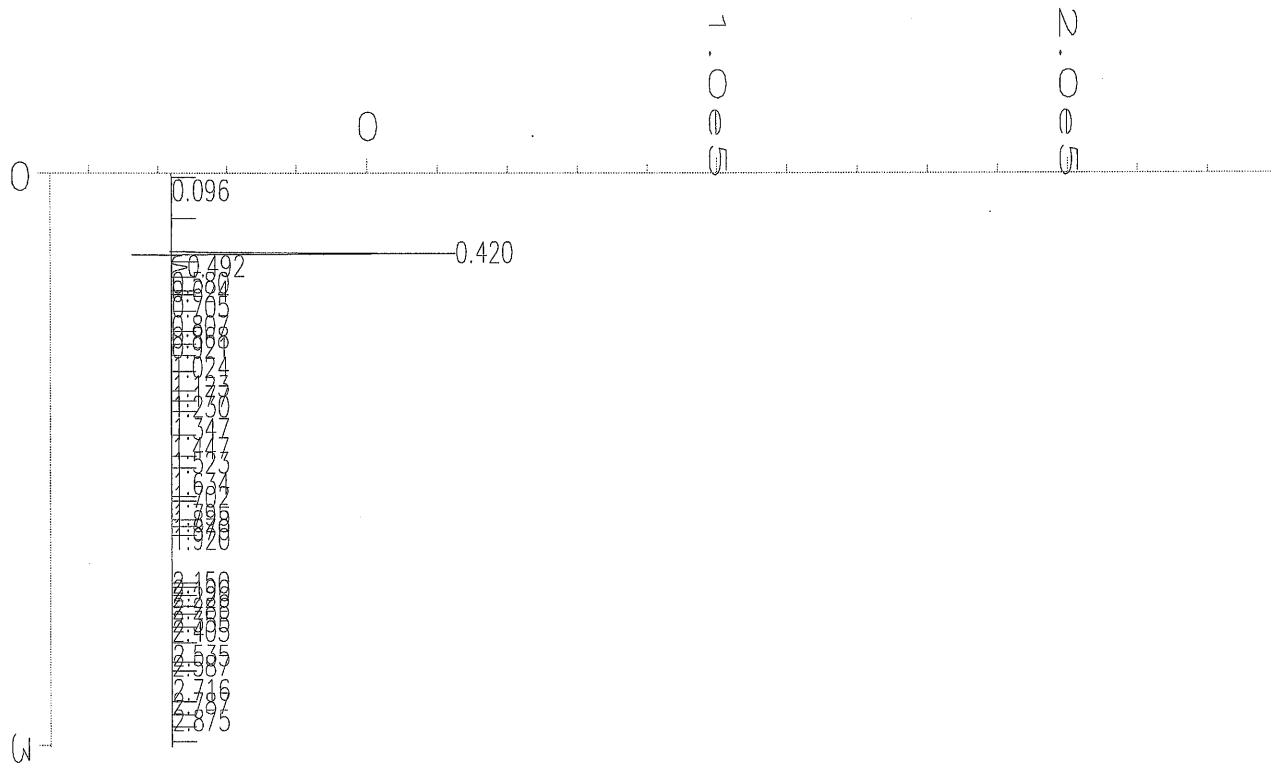
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCO\443543MA.D
Operator : LR
Instrument : GCL
Sample Name : T-611
Run Time Bar Code:
Acquired on : 06 Dec 24 07:59 PM
Report Created on: 06 Dec 24 08:02 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443543MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.096	1558	183	BV	0.118	3.6308
2	0.420	27205	65082	HBAS	0.007	63.3816
3	0.492	6356	4172	BV T	0.025	14.8079
4	0.580	76	42	PV T	0.035	0.1778
5	0.624	28	40	PV T	0.012	0.0651
6	0.705	184	59	PV T	0.046	0.4276
7	0.807	231	62	VV T	0.052	0.5391
8	0.868	134	51	VV T	0.040	0.3111
9	0.921	93	38	PV T	0.039	0.2168
10	1.024	166	64	VV T	0.043	0.3875
11	1.123	343	74	VV T	0.077	0.7986
12	1.177	200	71	VV T	0.047	0.4671
13	1.230	270	106	VV T	0.043	0.6293

14	1.347	559	105	VV T	0.078	1.3018
15	1.447	491	95	VV T	0.086	1.1445
16	1.523	298	122	VV T	0.041	0.6951
17	1.634	814	103	VV T	0.132	1.8953
18	1.702	116	99	VV T	0.020	0.2703
19	1.795	475	129	VV T	0.062	1.1071
20	1.828	169	80	VV T	0.035	0.3941
21	1.870	222	111	VV T	0.030	0.5174
22	1.920	1046	111	VV T	0.157	2.4367
23	2.150	45	36	VV T	0.021	0.1046
24	2.190	132	64	VV T	0.034	0.3078
25	2.226	188	65	VV T	0.048	0.4375
26	2.286	137	65	VV T	0.035	0.3198
27	2.355	209	70	VV T	0.050	0.4872
28	2.405	191	55	VV T	0.058	0.4452
29	2.535	268	64	VV T	0.057	0.6244
30	2.587	118	40	VV T	0.049	0.2756
31	2.716	321	51	VV T	0.089	0.7480
32	2.787	146	52	VV T	0.047	0.3393
33	2.875	132	68	VV T	0.032	0.3081

Total area = 42923

==========

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**43**			Cal Update:	**04/15/24**
File Name:	**2443543A**			SF:	3
Description:	**T-611**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**11:28**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**19:59**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**701**				
Can Factor:	**1.35**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**27205**	3.71	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 43

File Name:	2443543A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.35		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.35		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	3.709	3.709	37,085	37,085	3.709	200	0.027	0.036	0.109	270	810			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 43

File Name: 2443543A
Description: T-611
Can/Tube#: 701
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/06/24 **Time:** 19:59

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.036	0.109	3.709	270	810	37,085	

Sample Data Packages

SDG Number 224435

Lab Id Number 44

Client ID T-612

Analytical Method ASTM D1945

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 44

Client: C.E. Schmidt
Client ID: T-612
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 514
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:
Initial :
Final:
Factor:
Date:

Sampled: 11/21/2024 Time: 11:20
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test: | Sample Location: | Holding Time:

InstrumentMethod:	Item Description:	
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation 30

Analysis Instructions Sample Type:

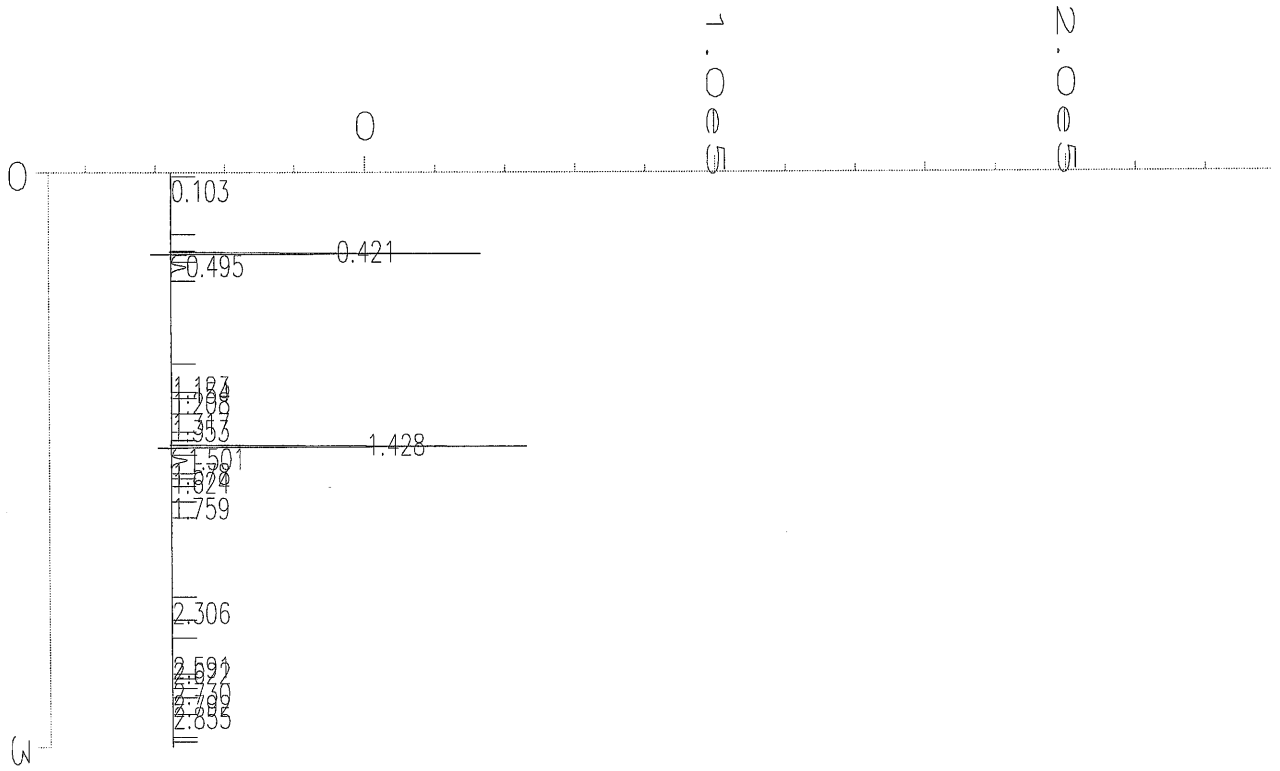
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443544MA.D
Operator : LR
Instrument : GCL
Sample Name : T-612
Run Time Bar Code:
Acquired on : 06 Dec 24 08:35 PM
Report Created on: 06 Dec 24 08:38 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443544MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.103	1520	161	PH	0.124	1.7710
2	0.421	30015	74304	HH S	0.007	34.9663
3	0.495	6287	4263	BV T	0.025	7.3241
4	1.123	1185	206	PV T	0.096	1.3806
5	1.154	367	191	VV T	0.032	0.4280
6	1.208	664	162	VV T	0.068	0.7734
7	1.317	335	49	VV T	0.113	0.3900
8	1.353	45	39	VV T	0.019	0.0529
9	1.428	37640	84867	HBAS	0.007	43.8492
10	1.501	6304	4210	BV T	0.025	7.3442
11	1.578	23	25	VV T	0.015	0.0269
12	1.624	61	52	PV T	0.020	0.0711
13	1.759	187	62	VV T	0.042	0.2177

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	44			Cal Update:	04/15/24
File Name:	2443544A			SF:	3
Description:	T-612			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	11:20	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	20:35	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	514				
Can Factor:	1.39				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	30015	4.21	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 44

File Name:	2443544A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.39		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.39		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	4.213	4.213	42,128	42,128	4.213	200	0.028	0.039	0.116	278	834			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 44

File Name: 2443544A
Description: T-612
Can/Tube#: 514
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/06/24 **Time:** 20:35

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.039	0.116	4.213	278	834	42,128	

Sample Data Packages

SDG Number **224435**

Lab Id Number **45**

Client ID T-613

Analytical Method ASTM D1945

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Analytical Report
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Sample Calculations
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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 45

Client: C.E. Schmidt
Client ID: T-613
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 694
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:25
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

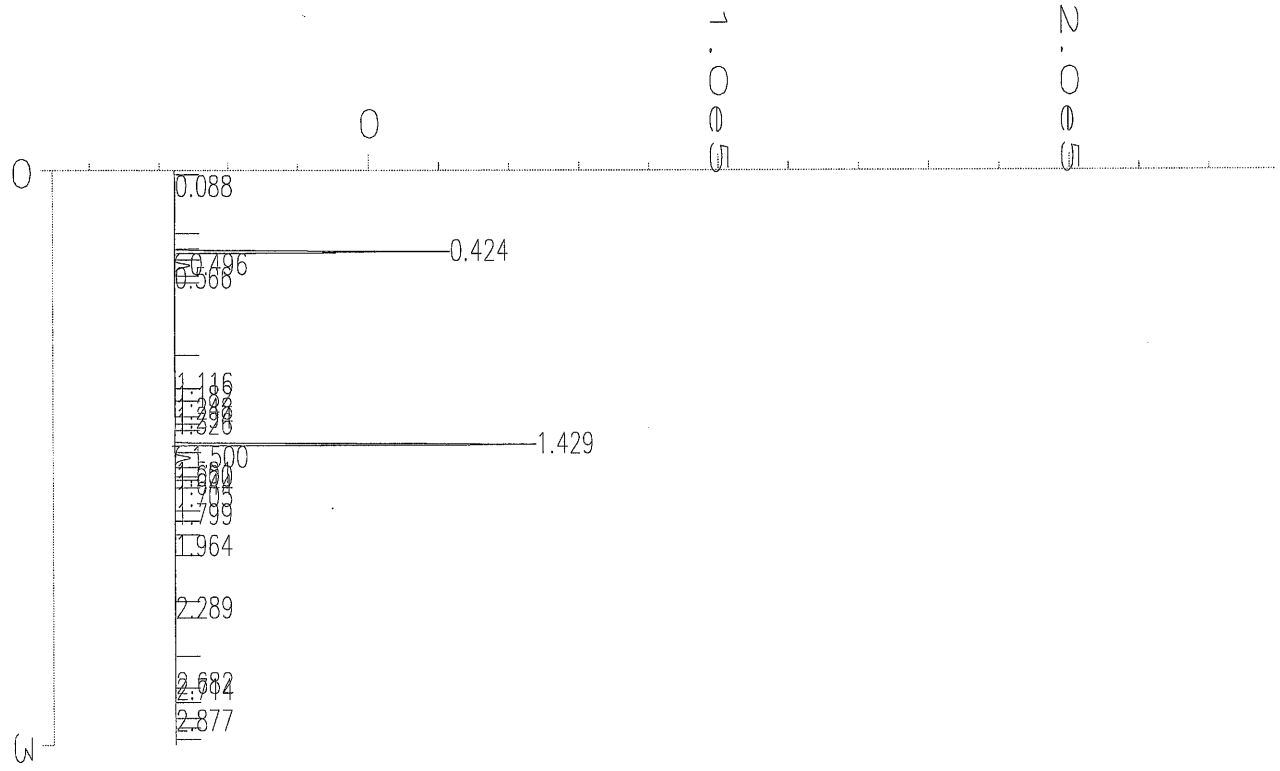
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\443545MA.D
Operator : LR
Instrument : GCL
Sample Name : T-613
Run Time Bar Code:
Acquired on : 06 Dec 24 08:44 PM
Report Created on: 06 Dec 24 08:47 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\443545MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.088	1891	192	BV	0.124	1.5760
2	0.424	43489	63922	HH S	0.011	36.2523
3	0.496	6219	4252	BV T	0.024	5.1844
4	0.566	6	27	PV T	0.003	0.0046
5	1.116	1107	205	PV T	0.090	0.9230
6	1.182	579	142	VV T	0.068	0.4829
7	1.248	493	107	VV T	0.065	0.4113
8	1.294	189	95	VV T	0.032	0.1576
9	1.326	98	87	VV T	0.019	0.0815
10	1.429	58546	92052	HBAS	0.011	48.8042
11	1.500	6123	4047	BV T	0.025	5.1043
12	1.581	14	21	PV T	0.011	0.0119
13	1.600	10	13	PV T	0.014	0.0087

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**224435**			Method:	**D1945**
Lab Id:	**45**			Cal Update:	**04/15/24**
File Name:	**2443545A**			SF:	3
Description:	**T-613**			Not Detected Flag:	ND
Date Sampled:	**11/21/24**	Time:	**11:25**	Matrix:	AA
Date Received:	**11/21/24**	Time:	**13:00**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**20:44**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**694**				
Can Factor:	**1.39**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**SA**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	**10.00**	**99033**	**43489**	6.10	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435

Laboratory Number: 45

File Name:	2443545A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.39		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.39		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	6.104	6.104	61,040	61,040	6.104	200	0.028	0.039	0.116	278	834			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 45

File Name: 2443545A
Description: T-613
Can/Tube#: 694
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/06/24 **Time:** 20:44

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.039	0.116	6.104	278	834	61,040	

Sample Data Packages

SDG Number 224435

Lab Id Number 46

Client ID T-614

Analytical Method ASTM D1945

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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 46

Client: C.E. Schmidt
Client ID: T-614
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 880
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 11:36
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 He Low and Hydrogen Confirmation	30

Analysis Instructions Sample Type:

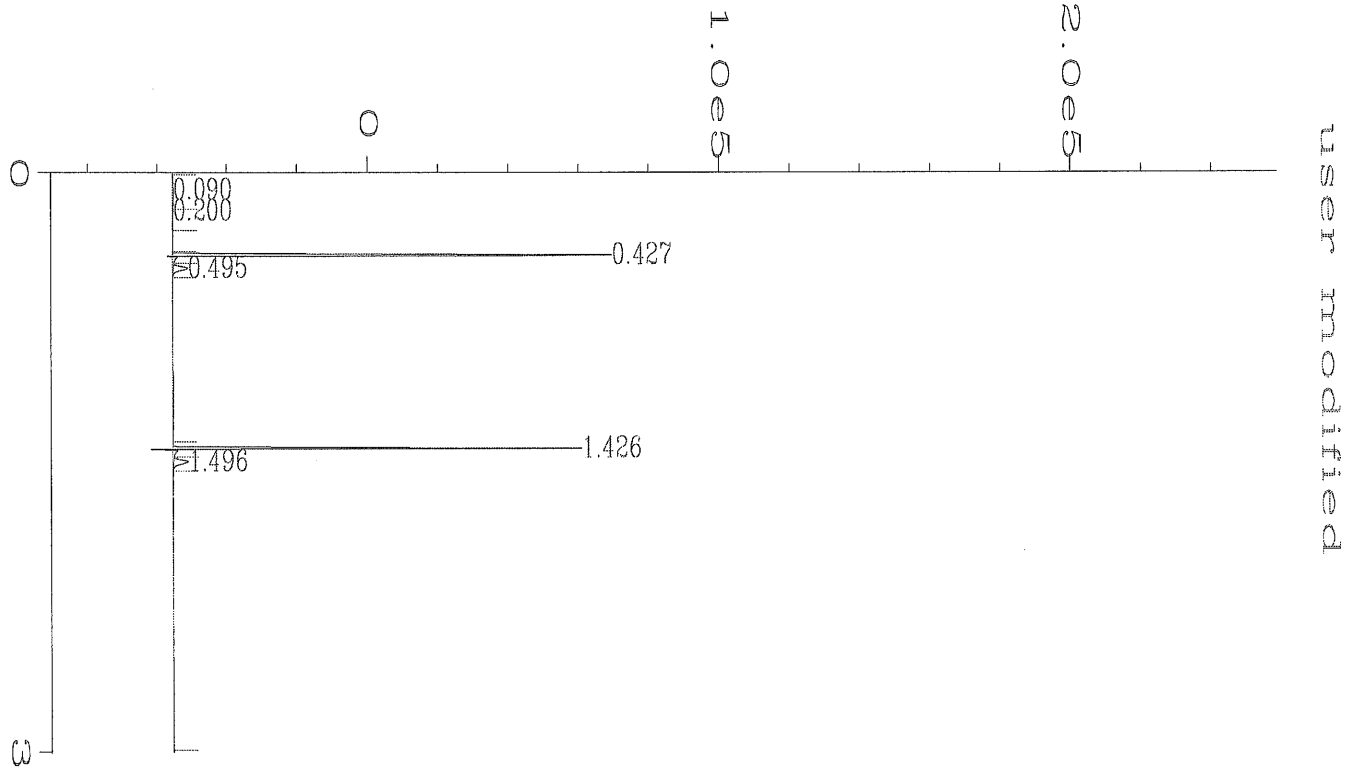
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCO\12064GCO\443546MA.D
Operator : LR
Instrument : GCL
Sample Name : T-614
Run Time Bar Code:
Acquired on : 06 Dec 24 08:50 PM
Report Created on: 17 Dec 24 08:05 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCO\12064GCO\443546MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.090	2033	269	BV	0.094	1.4488
2	0.200	747	194	VV	0.064	0.5325
3	0.427	76145	130483	HH R	0.012	54.2638
4	0.495	6104	4168	BF T	0.023	4.3496
5	1.426	49139	131505	HBAR	0.011	35.0182
6	1.496	6156	4191	BF T	0.023	4.3871

Total area = 140324

User Modified

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	224435			Method:	D1945
Lab Id:	46			Cal Update:	04/15/24
File Name:	2443546A			SF:	3
Description:	T-614			Not Detected Flag:	ND
Date Sampled:	11/21/24	Time:	11:36	Matrix:	AA
Date Received:	11/21/24	Time:	13:00	Type:	TRG
Date Analyzed:	12/06/24	Time:	20:50	Instrument:	GCO
QC_Batch:	120624-GCO				
Can Number:	880				
Can Factor:	1.38				
Volume:	0.5	Match Blank with LCS and LCD			
Type:	SA	LB9		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.42	10.00	99033	76458	10.65	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

CALCULATIONS

ASTM D 1945 GC/TCD

SDG: 224435
Laboratory Number: 46

File Name:	2443546A		Detect Flag:	ND	
QCBatch	120624-GCO		Report Normalized:	No	
Can Factor	1.38		Decimal Places:	3	
Air Volume:	0.5	ml	Temp	25	C
Base Volume	0.5	ml	Atm P	760	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	Fixed ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	10.654	10.654	106,542	106,542	10.654	200	0.028	0.038	0.114	276	828			=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 46

File Name: 2443546A
Description: T-614
Can/Tube#: 880
QC_Batch: 120624-GCO

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/06/24 **Time:** 20:50

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.038	0.114	10.654	276	828	106,542	

Method Blank Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Method Blank QC Batch report for each DAB in this SDG.

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METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD **SDG: LABQC**

Analytical Method: **D1945** **Laboratory Number:** **B12064**

File Name: B12064MA **Date Sampled:** **Time:**
Description: METHOD BLANK **Date Analyzed:** 12/06/24 **Time:** 13:25
Can/Tube#:
QC_Batch: 120624-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
7440-59-7	Helium	0.020	0.060	ND	200	600	ND	

QUANTITATION REPORT

ASTM D 1945 GC/TCD

SDG:	**LABQC**			Method:	**D1945**
Lab Id:	**B12064**			Cal Update:	**04/15/24**
File Name:	**B12064MA**			SF:	3
Description:	**METHOD BLANK**			Not Detected Flag:	ND
Date Sampled:	**NA**	Time:	**NA**	Matrix:	AA
Date Received:	**NA**	Time:	**NA**	Type:	TRG
Date Analyzed:	**12/06/24**	Time:	**13:25**	Instrument:	GCO
QC_Batch:	**120624-GCO**				
Can Number:	**NA**				
Can Factor:	**1.00**				
Volume:	**0.5**	Match Blank with LCS and LCD			
Type:	**MB**	**LB9**		ST63427	C12064B

CAS#	Compound	Num	STD RT	STD % Conc.	Standard Area	Sample Area	Conc. %	Blank Flag
7440-59-7	Helium	01	0.80	**10.00**	**99033**	**0**	0.00	NA

Blank Flag: If the Daily Blank has a detect above the RL place a B in the Blank Flag Field

For Data Package Print: Report, Quant, Calc,

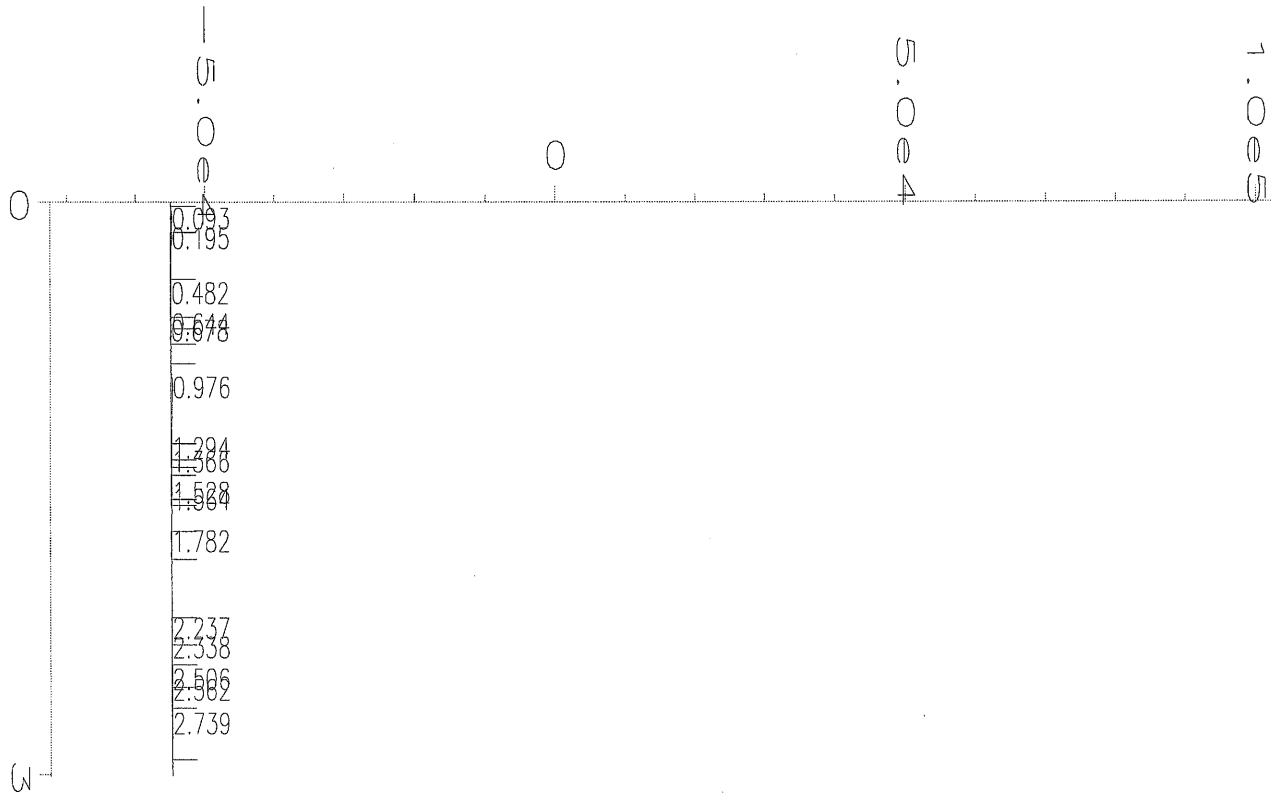
CALCULATIONS

ASTM D 1945 GC/TCD

SDG: LABQC
Laboratory Number: B12064

File Name:	B12064MA	Detect Flag:	ND		
QCBatch	120624-GCO	Report Normalized:	No		
Can Factor	1.00	Decimal Places:	3		
Air Volume:	0.5 ml	Temp	25	C	
Base Volume	0.5 ml	Atm P	760	torr	
Dilution Factor	1.00	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	3		

Compound	MW	Con Cal Calc Result %	Fixed Result PERCENT	Fixed ResultV PPMV	Fixed ResultQ % Norm	ResultG %	MDL ppmv	MDL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual	EPA Qual	Det Qual	Blank Flag	Rpt
Helium	4.0	0.000	ND	ND	0		200	0.020	0.020	0.060	200	600	U		ND		Y



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Area Percent Report

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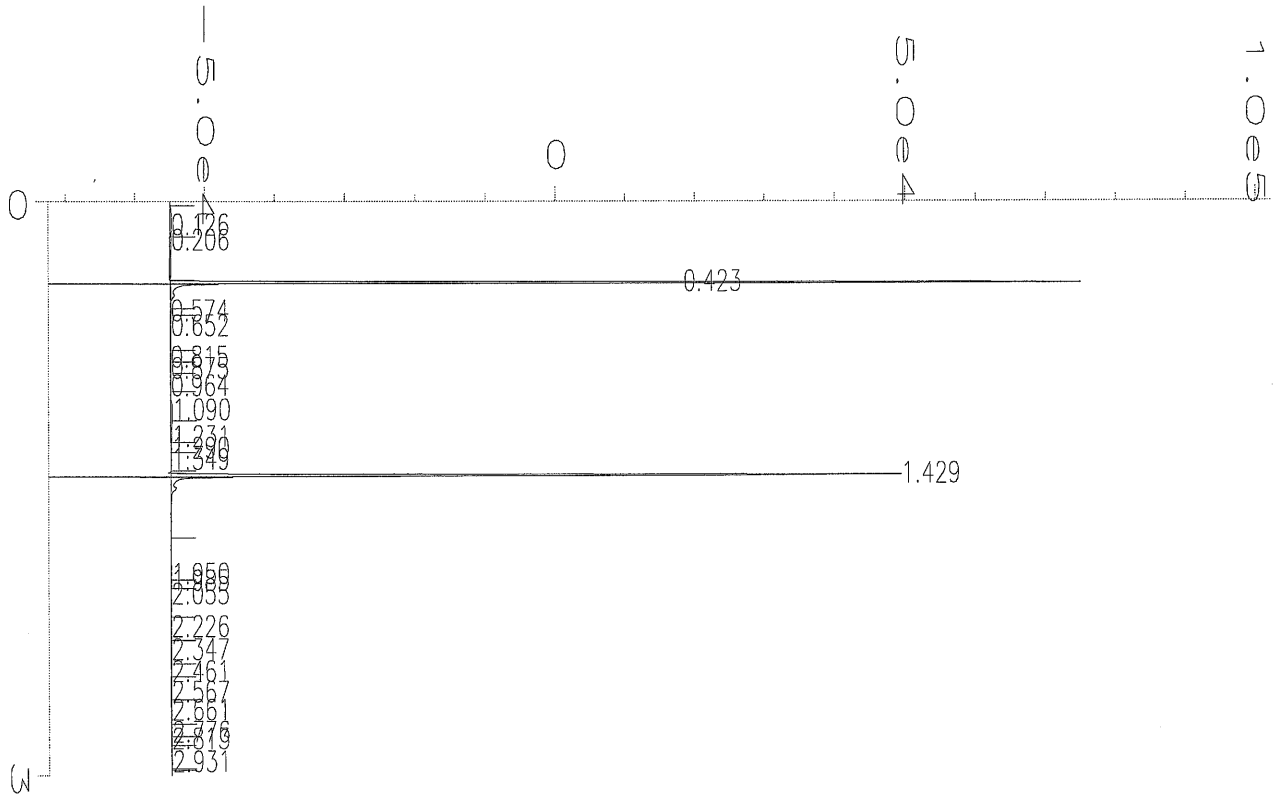
Data File Name : C:\GCCHEM\1\DATA\12064GCO\B12064MA.D
Operator : DA
Instrument : GCL
Sample Name : METHOD BLANK
Run Time Bar Code:
Acquired on : 06 Dec 24 01:25 PM
Report Created on: 06 Dec 24 01:28 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\B12064MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.093	1064	174	BV	0.084	10.1746
2	0.195	1073	156	VV	0.094	10.2587
3	0.482	393	68	PV	0.092	3.7576
4	0.644	165	90	VV	0.030	1.5784
5	0.678	144	86	VV	0.030	1.3807
6	0.976	3534	280	VV	0.163	33.8000
7	1.294	468	127	VV	0.061	4.4744
8	1.366	192	101	VV	0.032	1.8344
9	1.528	673	128	VV	0.088	6.4394
10	1.564	175	121	VV	0.024	1.6714
11	1.782	573	99	VV	0.092	5.4807
12	2.237	535	86	PV	0.082	5.1190
13	2.338	264	78	VV	0.057	2.5211
14	2.506	331	65	VV	0.076	3.1628



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\C12064MD.D
Operator : DA
Instrument : GCL
Sample Name : ST63427
Run Time Bar Code:
Acquired on : 06 Dec 24 01:21 PM
Report Created on: 06 Dec 24 01:24 PM
Sample Info : 10% He

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\C12064MD.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.126	1551	223	BV	0.112	1.3549
2	0.206	1972	191	VV	0.172	1.7223
3	0.423	63999	99839	HH S	0.011	55.9079
4	0.574	45	38	BV T	0.020	0.0392
5	0.652	81	42	PV T	0.032	0.0707
6	0.815	28	24	PV T	0.019	0.0246
7	0.875	51	49	PV T	0.017	0.0447
8	0.964	79	34	PV T	0.051	0.0686
9	1.090	1353	229	VV T	0.087	1.1818
10	1.231	1021	146	VV T	0.096	0.8918
11	1.290	276	98	VV T	0.047	0.2408
12	1.349	224	71	VV T	0.062	0.1961
13	1.429	41221	87501	HBAS	0.008	36.0091

LCS/LCD Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one LCS/LCD report for each QC Batch (DAB) in this SDG.

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QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

ASTM D 1945 GC/TCD
Analytical Method: **D1945**

Date: 12/06/24
QC_Batch: 12064-GCO

		LCS Recovery		LCD Recovery		Spike Limit LCL	Spike Limit UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
7440-59-7	Helium	80		81		70	130	1	25	

QUANTITATION REPORT

ASTM D 1945 GC/TCD

	LCS	LCD				
File Name:	**C12064MC**	**C12064MC**	Method:	**D1945**		
SDG:	**LABQC**	**LABQC**				
Lab Id:	**C12064MC**	**C12064MC**		D1945		
Description:	**ST63404**	**ST63404**		D1946		
Time:	**14:00**	**14:00**		3C		
Date Analyzed:	**12/06/24**		DAB	1206		
QCBatch	**12064-GCO**		DAB.FIX	12064		4
SF:	**2**				-GCO	C
Not Detected Fla	**ND**					
Matrix	**AA**					
Type	**TRG**	CS			1	2
Instrument	**GCO**				MC	MC

CAS#	Compound	Num	STD MIX	Column	STD RT	STD Conc.	Standard Area	LCS Area	LCD Area	Conc. %
7440-59-7	Helium	01	ST63402	MS	0.80	10.00	**99033**	53659	54113	

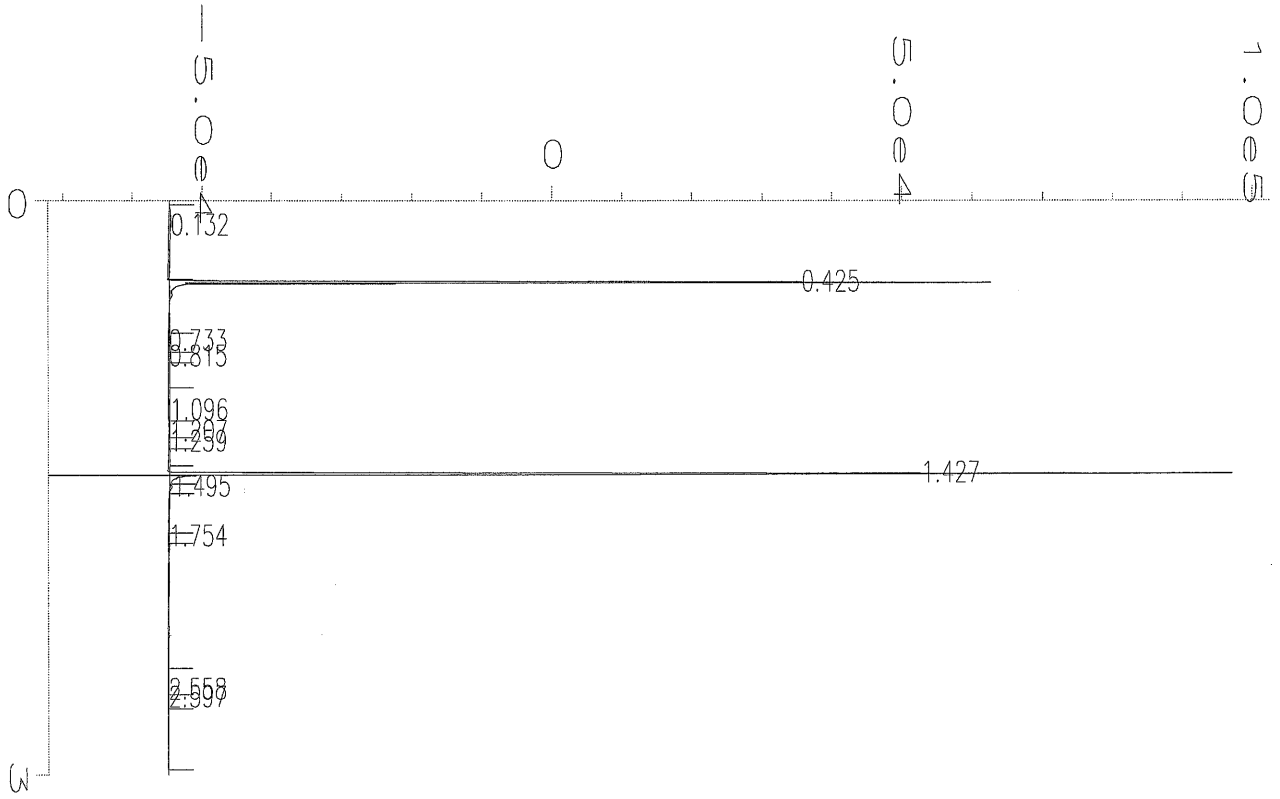
CALCULATIONS

ASTM D 1945 GC/TCD

File Name:	C12064MC				**SDG: LABQC**
QCBatch	12064-GCO				**Laboratory Number: C12064MC**
Can Factor	1.00				
Volume:	0.5				
Air Volume:	0.5			LCS	
Base Volume	0.5				
Dilution Factor	1.00		RL Factor	3	
Gas Constant:	24.4				
Decimal Places:	0	1			

Compound	ResultV %	Spike %	LCS %	LCS % Rec	LCL %	UCL %	FLAG	RPD %	RPD UCL	FLAG
Helium	5.42	6.76	5.42	80	70	130		0.8	25	

Compound	ResultV %	Spike %	LCS %	LCS % Rec	LCL %	UCL %	FLAG
Helium	5.46	6.76	5.46	81	70	130	



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Area Percent Report

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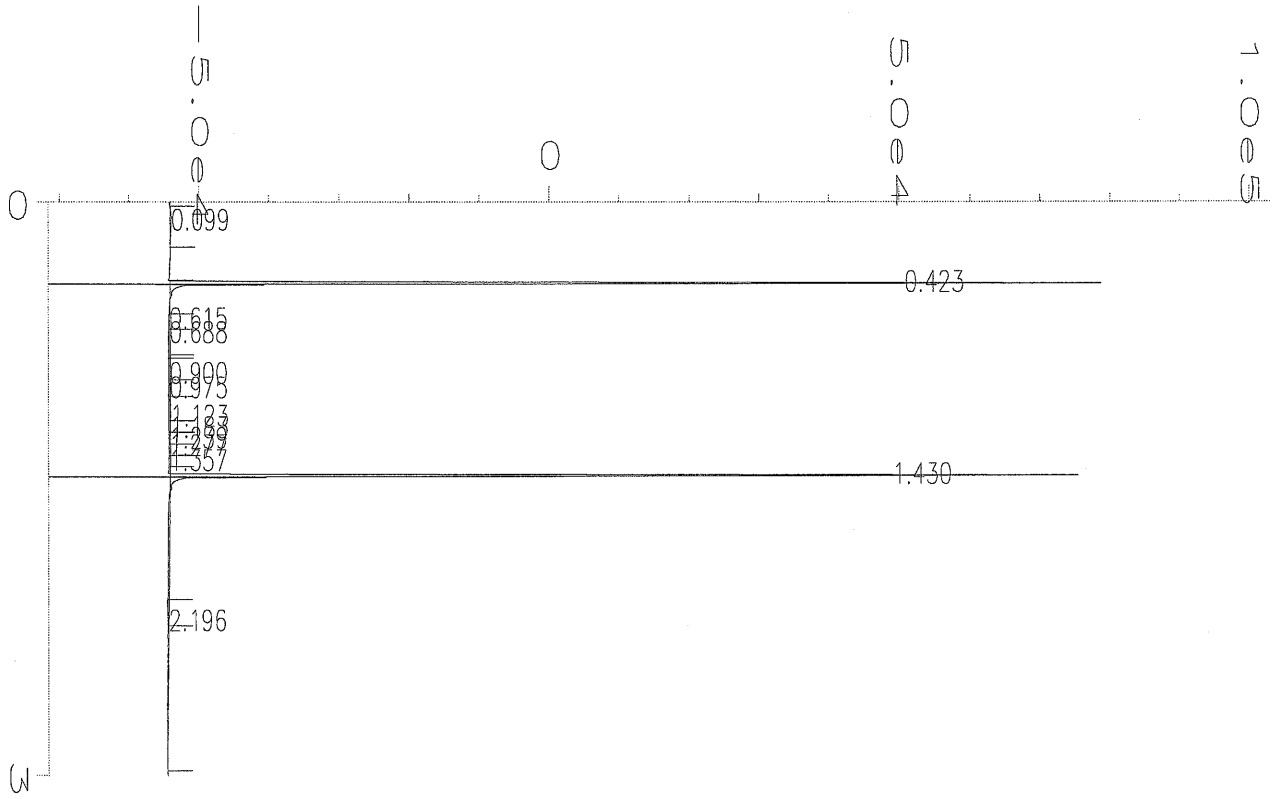
Data File Name : C:\GCCHEM\1\DATA\12064GCO\C12064MC.D
Operator : DA
Instrument : GCL
Sample Name : ST63427
Run Time Bar Code:
Acquired on : 06 Dec 24 01:17 PM
Report Created on: 06 Dec 24 01:20 PM
Sample Info : 10% He

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\C12064MC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.132	4638	259	BV	0.233	4.0319
2	0.425	53659	64428	HH S	0.030	46.6486
3	0.733	117	43	BV T	0.043	0.1013
4	0.815	47	35	PV T	0.024	0.0411
5	1.096	1032	186	PV T	0.072	0.8974
6	1.207	443	107	VV T	0.069	0.3853
7	1.259	139	64	VV T	0.037	0.1210
8	1.427	54113	148035	HBAS	0.025	47.0439
9	1.495	383	301	BV T	0.021	0.3331
10	1.754	80	74	PV T	0.024	0.0695
11	2.558	274	65	PV T	0.057	0.2382
12	2.597	102	54	VV T	0.032	0.0887



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCO\C12064MB.D
Operator : DA
Instrument : GCL
Sample Name : ST63427
Run Time Bar Code:
Acquired on : 06 Dec 24 01:13 PM
Report Created on: 06 Dec 24 01:17 PM
Sample Info : 10% He

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCO\C12064MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.099	1264	188	BV	0.095	1.3389
2	0.423	47654	87100	HH S	0.009	50.4654
3	0.615	153	45	BV T	0.056	0.1623
4	0.688	129	36	PV T	0.059	0.1368
5	0.900	320	71	VV T	0.063	0.3393
6	0.975	348	99	VV T	0.055	0.3688
7	1.123	1511	269	PV T	0.094	1.6002
8	1.183	672	175	VV T	0.064	0.7111
9	1.239	345	102	VV T	0.056	0.3650
10	1.277	176	66	VV T	0.044	0.1863
11	1.357	111	50	VV T	0.042	0.1181
12	1.430	41493	85039	HBAS	0.008	43.9406
13	2.196	252	36	VV T	0.117	0.2672

Continuing Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

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CONTINUING CALIBRATION REPORT

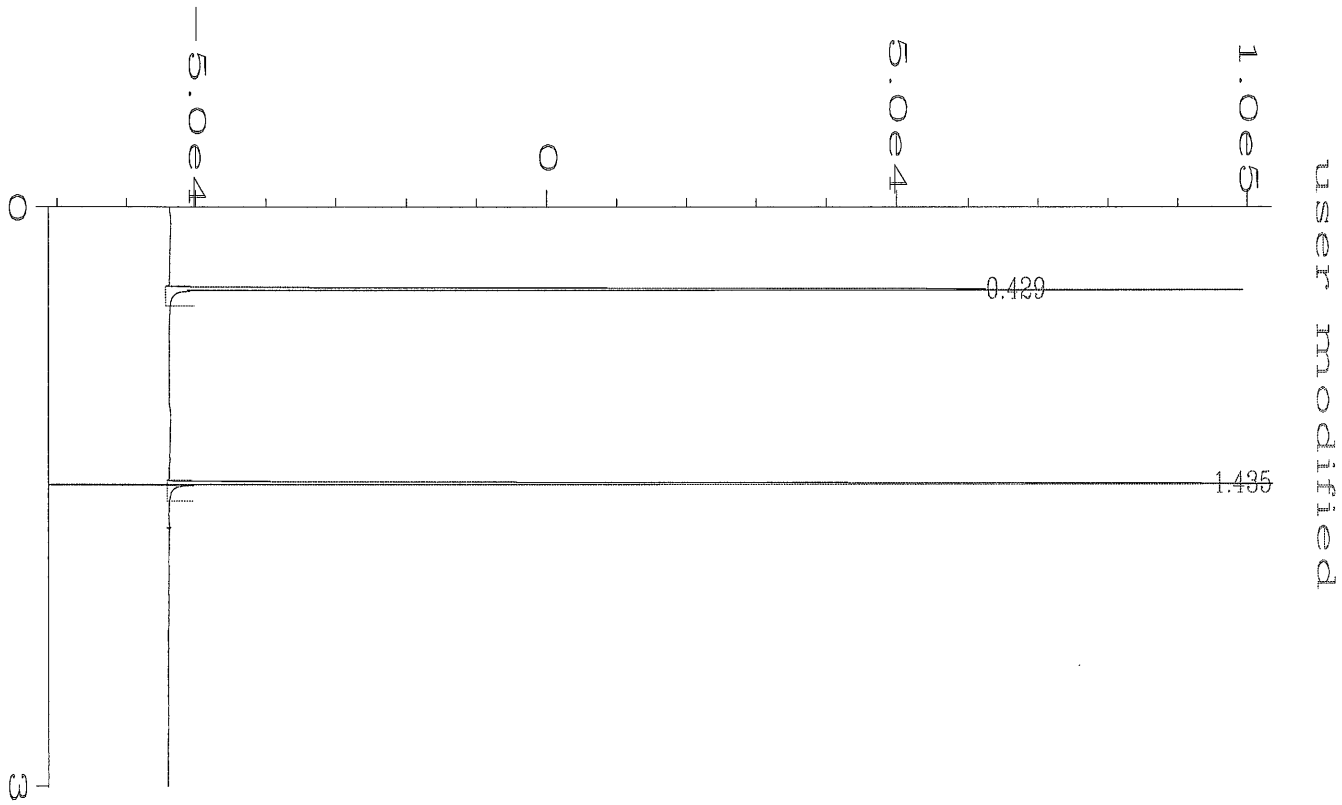
SDG:	LABQC	
QC_Batch:	**120624-GCO**	
Sample Analysis Date:	12/06/24	
Initial Calibration Date:	4/15/2024	
Calibration Level	Level 3	10.00

Sample Calculation:

1) $CCRRF = \left| \frac{(Astdni)}{(Cstdni)} \right|$

2) $Avg\ RFn = Sum \left| \frac{(Astdni)}{(Cstdni)} \right|$

Compound	Area Astdi	Cal Level Cstdi %	CCRRF	RFn	%Dev	%Dev Limit	%Dev Flag
Helium	99033	10.0	9903	13549	-27	20	OUT



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\GCO\12064GCO\C12064MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : ST63427
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 06 Dec 24 01:09 PM
Instrument Method: AST1946H.MTH
Report Created on: 24 Dec 24 11:23 AM
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCO\12064GCO\C12064MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.429	99033	170173	MF	0.010	50.2174
2	1.435	98175	185637	MF	0.009	49.7826

Total area = 197208

User Modified

==========

Initial Calibration Data Packages

Samples were analyzed using the methods listed in Section 3. For each of the methods there is an Initial Calibration Curve that meets the criteria defined in Section 2 on Quality Control for the modified method.

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Response Factors
Instrument Quant Report
Chromatogram

INITIAL CALIBRATION REPORT: Response Factors

Curve Date: 04/15/24
Analysis Date: 12/06/24

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|_i$

Response Factors

Compound	RF1	RF2	RF3	AvgRFn	%RSD
Helium	14249	14144	12255	13549	8.28

INITIAL CALIBRATION REPORT

ASTM D 1945 GC/TCD

Curve Date: 04/15/24
Analysis Date: 12/06/24

	Calibration Amount CA, %							Calibration Response, Area					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level6		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
SYRINGE %	5.0%	10%	20%					C004154A	C004154C	C004154E			
Compound								ST63401	ST63402	ST63403			
Helium	5.00	10.00	20.00					71247	141438	245094			

Daily Analytical Batch

DAB: 041524-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit:	Proc:
041524-GCO	01	GCO	STD			C04154A		ST63401	5% HELIUM	0.5	DA		AST1946H	ALL DBL INJE		
041524-GCO	02	GCO	STD			C04154B		ST63402	10% HELIUM	0.5	DA		AST1946H			
041524-GCO	03	GCO	STD			C04154C		ST63402	10% HELIUM	0.5	DA		AST1946H			
041524-GCO	04	GCO	STD			C04154D		ST63402	10% HELIUM	0.5	DA		AST1946H			
041524-GCO	05	GCO	STD			C04154E		ST63403	20% HELIUM	0.5	DA		AST1946H			
041524-GCO	06	GCO	STD			C04154F		ST63404	10% HELIUM LC	0.5	DA		AST1946H			
041524-GCO	07	GCO	STD			C04154G		ST63404	10% HELIUM LC	0.5	DA		AST1946H			
041524-GCO	08	GCO	BLK			B04154A	307	METHOD BLANK		0.5	DA		AST1946H			
041524-GCO	09	GCO	SA	224109	01	2410901A	688	T-101	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	10	GCO	SA	224109	02	2410902A	695	T-102	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	11	GCO	SA	224109	03	2410903A	644	T-103	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	12	GCO	SA	224109	04	2410904A	634	T-104	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	13	GCO	SA	224109	05	2410905A	182	T-105	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	14	GCO	SA	224109	06	2410906A	529	T-106	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	15	GCO	SA	224109	07	2410907A	690	T-107	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	16	GCO	SA	224109	08	2410908A	526	T-108	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	17	GCO	SA	224109	09	2410909A	737	T-109	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	18	GCO	SA	224109	10	2410910A	659	T-110	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	19	GCO	SA	224109	11	2410911A	710	T-111	SCHMIDT	0.5	DA		AST1946H			

REVIEWED

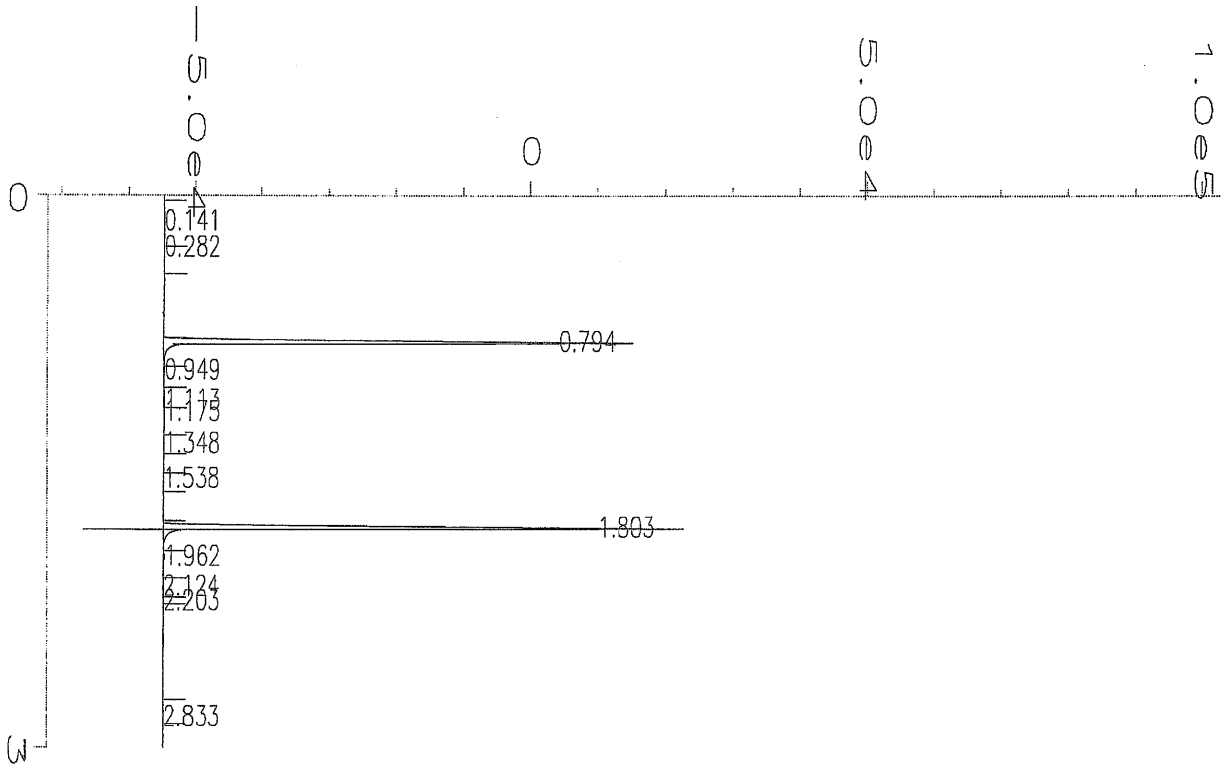
Daily Analytical Batch

DAB: 041524-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit:	Proc:
041524-GCO	20	GCO	SA	224109	12	2410912A	725	T-112	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	21	GCO	SA	224109	13	2410913A	714	T-113	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	22	GCO	SA	224109	14	2410914A	655	T-114	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	23	GCO	SA	224109	15	2410915A	667	T-115	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	24	GCO	SA	224109	16	2410916A	701	T-116	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	25	GCO	SA	224109	17	2410917A	679	T-117	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	26	GCO	SA	224109	18	2410918A	779	T-118	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	27	GCO	SA	224109	19	2410919A	712	T-201	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	28	GCO	SA	224109	20	2410920A	753	T-202	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	29	GCO	SA	224109	21	2410921A	842	T-203	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	30	GCO	SA	224109	22	2410922A	916	T-204	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	31	GCO	SA	224109	23	2410923A	709	T-205	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	32	GCO	SA	224109	24	2410924A	759	T-206	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	33	GCO	SA	224109	25	2410925A	735	T-207	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	34	GCO	SA	224109	26	2410926A	892	T-208	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	35	GCO	SA	224109	27	2410927A	643	T-209	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	36	GCO	SA	224109	28	2410928A	699	T-210	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	37	GCO	SA	224109	29	2410929A	546	T-211	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	38	GCO	SA	224109	30	2410930A	664	T-212	SCHMIDT	0.5	DA		AST1946H			

REVIEWED



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Area Percent Report

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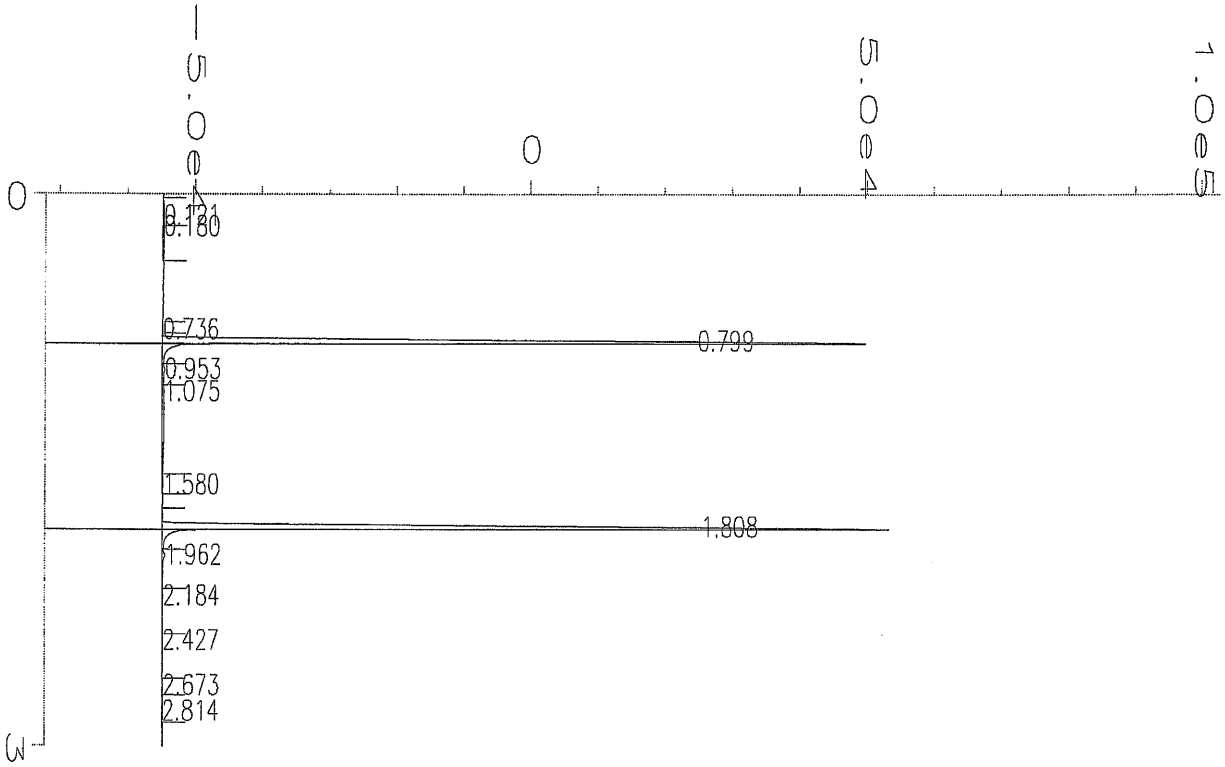
Data File Name : C:\GCCHEM\1\DATA\04154GCO\C04154MA.D
Operator : DA
Instrument : GCL
Sample Name : ST63401
Run Time Bar Code:
Acquired on : 15 Apr 24 01:14 PM
Report Created on: 15 Apr 24 01:17 PM
Sample Info : 5% HELIUM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04154GCO\C04154MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.141	1375	152	BV	0.120	0.9198
2	0.282	737	126	VV	0.098	0.4934
3	0.794	71266	67284	PV	0.041	47.6856
4	0.949	634	191	VV	0.051	0.4245
5	1.113	1001	210	VV	0.067	0.6695
6	1.175	1166	190	VV	0.102	0.7800
7	1.348	631	148	VV	0.071	0.4220
8	1.538	273	87	VV	0.043	0.1825
9	1.803	71247	63999	PV	0.023	47.6733
10	1.962	771	257	VV	0.050	0.5161
11	2.124	185	55	PV	0.052	0.1239
12	2.203	41	41	PV	0.017	0.0272
13	2.833	123	49	PV	0.062	0.0824



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Area Percent Report

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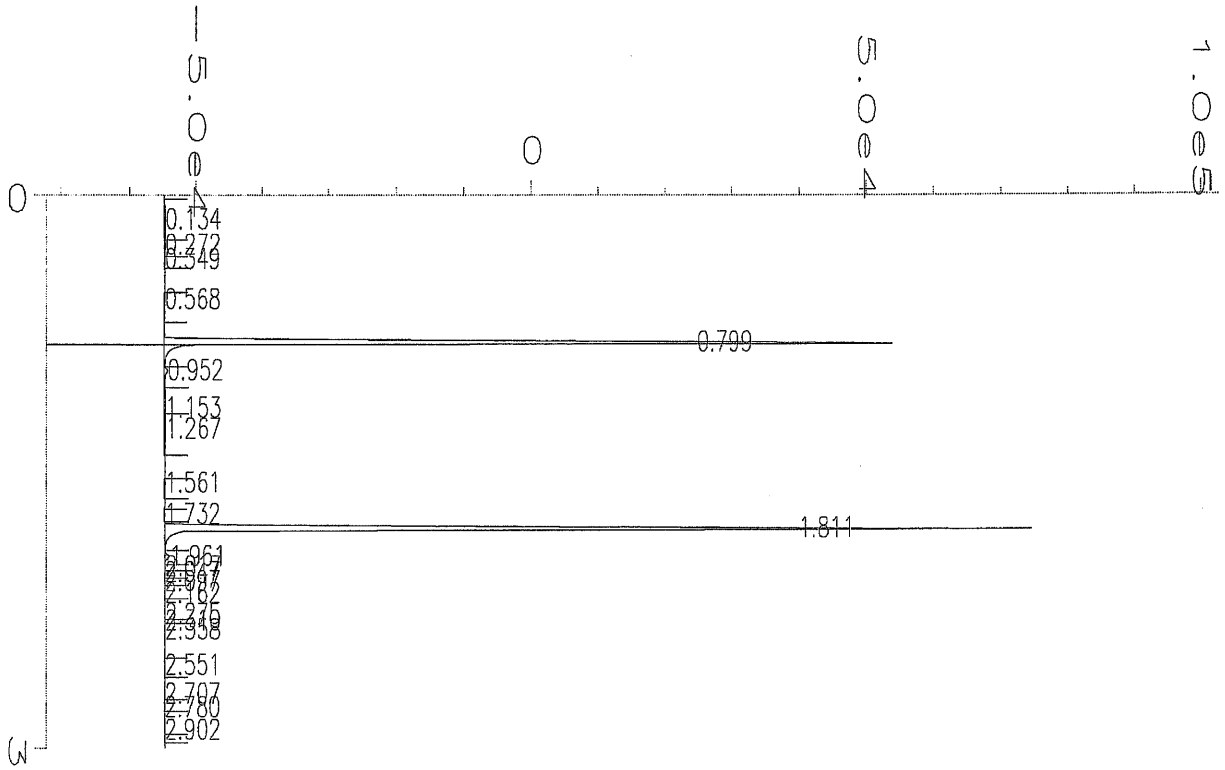
Data File Name : C:\GCCHEM\1\DATA\04154GCO\C04154MB.D
Operator : DA
Instrument : GCL
Sample Name : ST63402
Run Time Bar Code:
Acquired on : 15 Apr 24 01:22 PM
Report Created on: 15 Apr 24 01:25 PM
Sample Info : 10% HELIUM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04154GCO\C04154MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.121	980	172	BV	0.080	0.3763
2	0.180	1575	156	VV	0.168	0.6050
3	0.736	245	110	PV	0.037	0.0942
4	0.799	121768	108346	VV	0.019	46.7671
5	0.953	1629	446	VV	0.060	0.6256
6	1.075	5968	283	VV	0.298	2.2919
7	1.580	797	157	VV	0.069	0.3060
8	1.808	122271	90899	PV	0.062	46.9603
9	1.962	2281	506	VV	0.075	0.8760
10	2.184	1296	163	VV	0.115	0.4978
11	2.427	984	121	VV	0.115	0.3779
12	2.673	244	99	PV	0.045	0.0937
13	2.814	334	60	VV	0.090	0.1282



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04154GCO\C04154MC.D
Operator : DA
Instrument : GCL
Sample Name : ST63402
Run Time Bar Code:
Acquired on : 15 Apr 24 01:27 PM
Report Created on: 15 Apr 24 01:30 PM
Sample Info : 10% HELIUM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04154GCO\C04154MC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.134	1775	183	BV	0.120	0.6386
2	0.272	774	192	VV	0.058	0.2785
3	0.349	440	135	VV	0.054	0.1584
4	0.568	1064	179	VV	0.079	0.3829
5	0.799	122171	107702	PV	0.049	43.9545
6	0.952	1737	585	VV	0.053	0.6248
7	1.153	1911	280	VV	0.093	0.6876
8	1.267	2576	242	VV	0.138	0.9268
9	1.561	935	183	VV	0.069	0.3364
10	1.732	312	107	VV	0.048	0.1122
11	1.811	141438	99683	HBAS	0.024	50.8863
12	1.961	973	663	BV T	0.024	0.3500
13	2.017	41	70	PV T	0.010	0.0146

14	2.047	51	18	VV T	0.042	0.0184
15	2.097	33	21	PV T	0.026	0.0117
16	2.162	165	58	PV T	0.043	0.0594
17	2.275	306	73	VV T	0.070	0.1100
18	2.310	66	62	VV T	0.018	0.0237
19	2.358	443	78	VV T	0.095	0.1595
20	2.551	195	50	PV T	0.073	0.0701
21	2.707	248	63	VV T	0.066	0.0893
22	2.780	59	26	PV T	0.037	0.0214
23	2.902	236	51	VV T	0.077	0.0849

Total area = 277948

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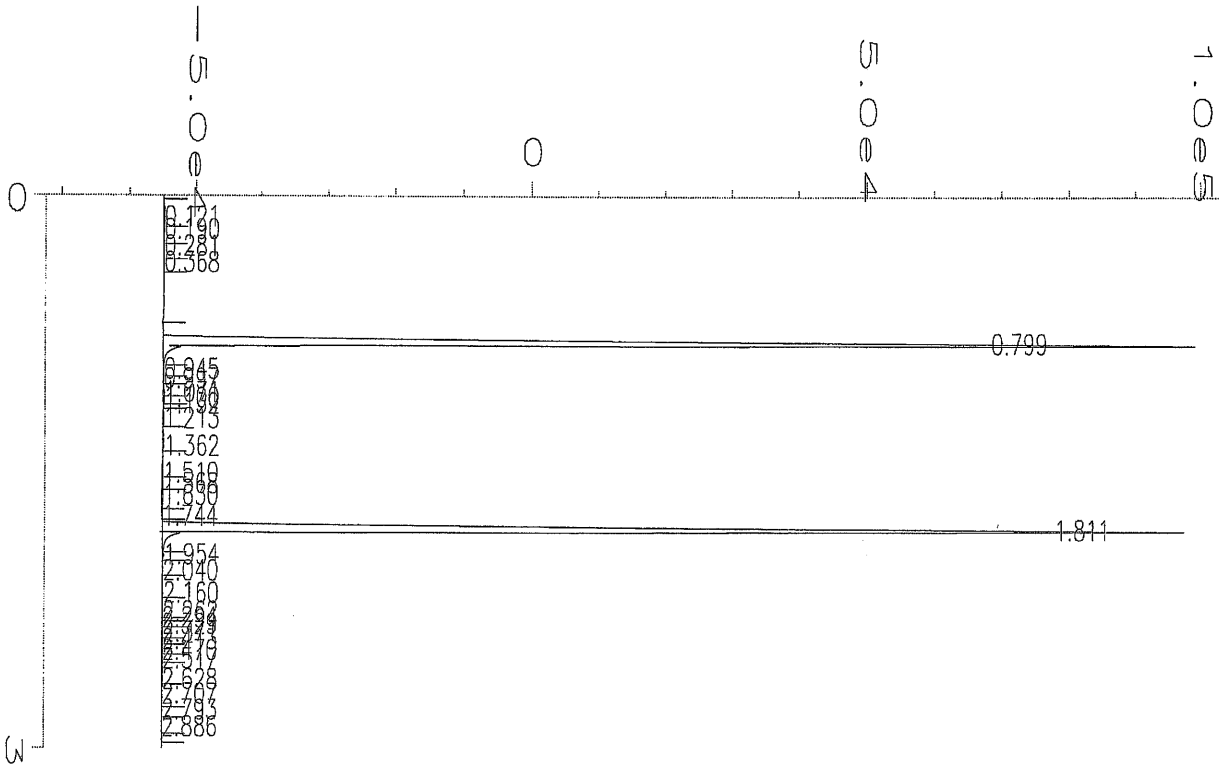

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04154GCO\C04154ME.D
Operator : DA
Instrument : GCL
Sample Name : ST63403
Run Time Bar Code:
Acquired on : 15 Apr 24 01:50 PM
Report Created on: 15 Apr 24 01:53 PM
Sample Info : 20% HELIUM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04154GCO\C04154ME.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.121	1115	187	BV	0.097	0.2280
2	0.190	682	162	VV	0.070	0.1395
3	0.281	537	116	VV	0.063	0.1097
4	0.368	422	136	VV	0.052	0.0864
5	0.799	231910	151326	HH S	0.053	47.4120
6	0.945	149	75	BV T	0.033	0.0304
7	0.997	52	24	PV T	0.032	0.0106
8	1.071	353	141	VV T	0.042	0.0721
9	1.100	353	153	VV T	0.038	0.0721
10	1.132	184	141	VV T	0.022	0.0376
11	1.213	875	168	VV T	0.072	0.1788
12	1.362	1298	206	VV T	0.105	0.2654
13	1.510	1335	113	VV T	0.146	0.2730

14	1.568	741	171	VV T	0.072	0.1515
15	1.630	1092	238	VV T	0.077	0.2232
16	1.744	156	57	PV T	0.046	0.0320
17	1.811	245094	137158	HBAS	0.030	50.1073
18	1.954	167	130	BV T	0.021	0.0342
19	2.040	187	42	PV T	0.073	0.0381
20	2.160	341	153	PV T	0.037	0.0696
21	2.262	381	99	VV T	0.052	0.0779
22	2.294	49	48	VV T	0.017	0.0100
23	2.329	47	58	VV T	0.014	0.0097
24	2.371	205	84	VV T	0.037	0.0419
25	2.413	104	69	VV T	0.024	0.0212
26	2.470	147	71	VV T	0.035	0.0301
27	2.517	147	73	VV T	0.034	0.0300
28	2.628	469	98	VV T	0.080	0.0960
29	2.707	301	62	PV T	0.078	0.0616
30	2.793	127	69	VV T	0.033	0.0260
31	2.886	118	56	PV T	0.034	0.0242

Total area = 489138

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Section 5 Standard Calibration Certificates

This section contains the Standard Calibration Certificates for the Standards and Internal Standards.

Section Contents

Standard Calibration Certificates

5

ST63400 4/8/24

Permanent Gas Standard.
Scotty Mini-Mix Airgas

ST63401	5% He Helium 1:20 syringe dilution ISP He : ISP N_2	4/15/24
ST63402	10% Helium 1:10 Syringe dilution ISP He : ISP N_2	4/15/24
ST63403	20% Helium 1:5 Syringe dilution ISP He : ISP N_2	4/15/24
ST63404	10% Helium LCS / LCO 1:10 Syringe dilution ISP He : ISP N_2	4/15/24
ST63405	5% Hydrogen 1:20 syringe dilution UHP H_2 : ISP N_2	4/15/24
ST63406	10% Hydrogen UHP 99.999% 1:10 syringe dilution ~~ISP~~ UHP H_2 : ISP N_2	4/16/24
ST63407	20% Hydrogen 1:20 syringe dilution UHP H_2 : ISP N_2	4/16/24

ENVIRONMENTAL
Analytical Service, Inc.

Data Deliverable Package

Prepared For:
C.E. Schmidt
19200 Live Oak Road
Red Bluff CA 96080

EAS SDG Number: **224435**
Project Number: 17807
Report Sent:
Sample Event Date: 1/20,11/21/2024

Client Project Manager: Chuck Schmidt
Project Name: Chiquita Canyon
Project Number: Data Package GC Methane Data

This is the Laboratory Data Deliverable Package for the samples in the indicated Sample Delivery Group (SDG).

INDEX TO DATA PACKAGE:

Section 1 **Project Summary**
- Laboratory Work Order
- Sample Data
- Laboratory Case Narrative and Chain of Custody

Section 2 **Quality Control**
- Project QC Criteria
- DAB QC Reports

Section 3 **Analytical Methods**
- Analytical Method Description(s)
- Analytical Reports

Section 4 **Data Package with Quant Report and Chromatogram**
- DAB Run Logs and Preparation Log
- Sample Data Package
- Blank Data Package
- Continuing Calibration Package
- Initial Calibration Package

Section 5 **Standard Certificates**

Section 6 **SDG Documentation, Notes, Correspondence**

173 Cross Street, San Luis Obispo, California, 93401 (805) 781-3585

Section 1 Project Summary

The following pages provide detailed information about the sample receipt, log-in, and sample preparation. The Laboratory Work Order provides a cross reference between the Client ID number and the EAS Lab Number as well as a list of the analytical tests preformed. The items included in this section are listed below.

Section Contents

Laboratory Work Order

Sample Data

Laboratory Case Narrative

Chain of Custody

Laboratory Work Order

SDG Number: 224435
Client: Chuck Schmidt
C.E. Schmidt

Project Number: 17807
Received: 11/21/2024

SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-401	224435 1	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-401	224435 1	ASTM D3416 Low Level Methane	11/19/2024
T-401	224435 1	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-401	224435 1	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-401	224435 1	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-402	224435 2	ASTM D3416 Low Level Methane	11/19/2024
T-402	224435 2	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-402	224435 2	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-403	224435 3	ASTM D3416 Low Level Methane	11/19/2024
T-403	224435 3	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-403	224435 3	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-403	224435 3	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-403	224435 3	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-404	224435 4	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-404	224435 4	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-404	224435 4	ASTM D3416 Low Level Methane	11/19/2024
T-404	224435 4	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-404	224435 4	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-405	224435 5	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-405	224435 5	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-405	224435 5	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-405	224435 5	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-405	224435 5	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-406	224435 6	ASTM D3416 Low Level Methane	11/19/2024
T-406	224435 6	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-406	224435 6	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-406	224435 6	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-406	224435 6	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-407	224435 7	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-407	224435 7	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-407	224435 7	ASTM D3416 Low Level Methane	11/19/2024
T-407	224435 7	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-407	224435 7	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-408	224435 8	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-408	224435 8	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-408	224435 8	ASTM D3416 Low Level Methane	11/19/2024
T-408	224435 8	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-408	224435 8	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-409	224435 9	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D3416 Low Level Methane	11/19/2024
T-409	224435 9	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-409	224435 9	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-410	224435 10	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-410	224435 10	ASTM D3416 Low Level Methane	11/19/2024
T-410	224435 10	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-411	224435 11	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-411	224435 11	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-411	224435 11	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-411	224435 11	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-411	224435 11	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-412	224435 12	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-412	224435 12	ASTM D3416 Low Level Methane	11/19/2024
T-412	224435 12	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-413	224435 13	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-413	224435 13	ASTM D3416 Low Level Methane	11/19/2024
T-413	224435 13	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-414	224435 14	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-414	224435 14	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-414	224435 14	ASTM D3416 Low Level Methane	11/19/2024
T-414	224435 14	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-414	224435 14	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-415	224435 15	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-415	224435 15	ASTM D3416 Low Level Methane	11/19/2024
T-415	224435 15	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-416	224435 16	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-416	224435 16	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-416	224435 16	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-416	224435 16	ASTM D3416 Low Level Methane	11/19/2024
T-416	224435 16	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-417	224435 17	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-417	224435 17	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-417	224435 17	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-418	224435 18	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-418	224435 18	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-418	224435 18	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D3416 Low Level Methane	11/19/2024
T-501	224435 19	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-501	224435 19	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-501	224435 19	ASTM D3416 Low Level Methane	11/20/2024
T-501	224435 19	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-501	224435 19	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-502	224435 20	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-502	224435 20	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-502	224435 20	ASTM D3416 Low Level Methane	11/20/2024
T-502	224435 20	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-502	224435 20	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-503	224435 21	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-503	224435 21	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-503	224435 21	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-504	224435 22	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-504	224435 22	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-504	224435 22	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-505	224435 23	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-505	224435 23	ASTM D3416 Low Level Methane	11/20/2024
T-505	224435 23	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-506	224435 24	ASTM D3416 Low Level Methane	11/20/2024
T-506	224435 24	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-506	224435 24	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-507	224435 25	ASTM D3416 Low Level Methane	11/20/2024
T-507	224435 25	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-507	224435 25	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-508	224435 26	ASTM D3416 Low Level Methane	11/20/2024
T-508	224435 26	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-508	224435 26	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-508	224435 26	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-508	224435 26	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-509	224435 27	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-509	224435 27	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-509	224435 27	ASTM D3416 Low Level Methane	11/20/2024
T-509	224435 27	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-509	224435 27	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-510	224435 28	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-510	224435 28	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-510	224435 28	ASTM D3416 Low Level Methane	11/20/2024
T-510	224435 28	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-510	224435 28	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-511	224435 29	ASTM D3416 Low Level Methane	11/20/2024
T-511	224435 29	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-511	224435 29	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-511	224435 29	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-511	224435 29	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-512	224435 30	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-512	224435 30	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-512	224435 30	ASTM D3416 Low Level Methane	11/20/2024
T-512	224435 30	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-512	224435 30	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-513	224435 31	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-513	224435 31	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-513	224435 31	ASTM D3416 Low Level Methane	11/20/2024
T-513	224435 31	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-513	224435 31	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-514	224435 32	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D3416 Low Level Methane	11/20/2024
T-514	224435 32	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-514	224435 32	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-601	224435 33	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-601	224435 33	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-601	224435 33	ASTM D3416 Low Level Methane	11/21/2024
T-601	224435 33	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-601	224435 33	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-602	224435 34	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-602	224435 34	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-602	224435 34	ASTM D3416 Low Level Methane	11/21/2024
T-602	224435 34	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-602	224435 34	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-603	224435 35	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D3416 Low Level Methane	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-603	224435 35	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-603	224435 35	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-604	224435 36	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-604	224435 36	ASTM D3416 Low Level Methane	11/21/2024
T-604	224435 36	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-605	224435 37	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-605	224435 37	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-605	224435 37	ASTM D3416 Low Level Methane	11/21/2024
T-605	224435 37	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-605	224435 37	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-606	224435 38	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-606	224435 38	ASTM D3416 Low Level Methane	11/21/2024
T-606	224435 38	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-607	224435 39	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-607	224435 39	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-607	224435 39	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-607	224435 39	ASTM D3416 Low Level Methane	11/21/2024
T-607	224435 39	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-608	224435 40	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	ASTM D3416 Low Level Methane	11/21/2024
T-608	224435 40	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-608	224435 40	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-609	224435 41	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-609	224435 41	EPA TO-12 C2 to C12 CRYO	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-609	224435 41	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-610	224435 42	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-610	224435 42	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-610	224435 42	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-611	224435 43	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-611	224435 43	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-611	224435 43	ASTM D3416 Low Level Methane	11/21/2024
T-611	224435 43	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-611	224435 43	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-612	224435 44	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-612	224435 44	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-612	224435 44	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-613	224435 45	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-613	224435 45	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-613	224435 45	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-614	224435 46	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-614	224435 46	ASTM D3416 Low Level Methane	11/21/2024
T-614	224435 46	EPA TO-12 C2 to C12 CRYO	11/21/2024

Project Sample Media

SDG Number: 224435

The following sample media was used for this Sample Delivery Group (SDG). The Sample Media column identifies the type of media. For canisters, the Sample Media Batch gives the canister number followed by the cleaning batch number, which is a unique identification. The initial pressure of the canister when it is received is recorded. If the canister is not pressurized, the final pressure will be the same as the initial pressure. If the canister is pessurized the final pressure will be recorded, and the canister dilution factor is calculated as the ratio of the final to initial pressure. The results are adjusted for the can dilution factor.

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	1	T-401	636		737	921	1.25
224435	2	T-402	703		739	922	1.25
224435	3	T-403	547		727	920	1.27
224435	4	T-404	749		740	920	1.24
224435	5	T-405	837		720	921	1.28
224435	6	T-406	626		735	924	1.26
224435	7	T-407	740		698	922	1.32
224435	8	T-408	805		699	917	1.31
224435	9	T-409	631		675	919	1.36
224435	10	T-410	714		678	921	1.36
224435	11	T-411	551		722	922	1.28
224435	12	T-412	881		704	930	1.32
224435	13	T-413	766		690	924	1.34
224435	14	T-414	725		699	923	1.32
224435	15	T-415	896		704	919	1.31
224435	16	T-416	659		651	922	1.42
224435	17	T-417	899		709	920	1.30
224435	18	T-418	522		739	927	1.25
224435	19	T-501	664		721	923	1.28
224435	20	T-502	716		690	920	1.33
224435	21	T-503	751		717	921	1.28
224435	22	T-504	644		719	920	1.28
224435	23	T-505	883		684	921	1.35
224435	24	T-506	784		679	921	1.36
224435	25	T-507	712		670	924	1.38

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	26	T-508	549		669	920	1.38
224435	27	T-509	882		661	924	1.40
224435	28	T-510	860		649	921	1.42
224435	29	T-511	627		674	921	1.37
224435	30	T-512	417		676	916	1.36
224435	31	T-513	781		681	925	1.36
224435	32	T-514	506		669	926	1.38
224435	33	T-601	700		712	929	1.30
224435	34	T-602	673		714	913	1.28
224435	35	T-603	550		736	916	1.24
224435	36	T-604	738		691	922	1.33
224435	37	T-605	892		703	920	1.31
224435	38	T-606	608		666	922	1.38
224435	39	T-607	771		703	920	1.31
224435	40	T-608	531		685	925	1.35
224435	41	T-609	668		707	926	1.31
224435	42	T-610	730		674	921	1.37
224435	43	T-611	701		680	920	1.35
224435	44	T-612	514		666	927	1.39
224435	45	T-613	694		663	924	1.39
224435	46	T-614	880		668	925	1.38

Laboratory Case Narrative

EAS SDG Number: 224435 **Project Number:** 17807

Client: C.E. Schmidt

The Laboratory Case Narrative for the SDG is below. The Chain of Custody form(s) follow the Laboratory Case Narrative.

Sample Control Narrative

The samples were all received in good condition and with proper preservation.

Analytical Methods

The methods used for sample analysis are listed on the Analytyical Report header, and have been modified as described in the EAS Quality Manual..

Case Narrative

QC Narrative

All analyses met EAS method criteria as defined in the Quality Manual, except as noted in the report or QC reports with data qualifiers.

Subcontract Narrative

No sample analysis was subcontracted for this project

Laboratory Certification

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition(s) noted above. The Laboratory Report is property of EAS and its client. The entire report has been reviewed and approved.

Date Approved:

Steven D. Hoyt, Ph.D.
Environmental Analytical Service
Laboratory Director

Section 2 Quality Control

This section contains the QC Reports for each Daily Analytical Batch (DAB) which make up the Sample Delivery Group (SDG). It also contains either the EAS or Project QC criteria that was used for the DAB. The methods used for this project have been modified from the original method. The modifications include modifications to the QC for the method. This is either because the method did not specify certain aspects of the QC, the method was originally designed for a different matrix, or additional compounds were added to the target list of the method which required modified QC. The QC modifications used by EAS follows those used by other air testing laboratories.

The Daily Analytical Batch data was checked against the QC criteria for the method. Any deviations from the QC criteria are listed on the QC Reports for each DAB, which are summarized in this section and are given in more detail in Section 4 which has the Quantitation Reports and Calculations for the Samples, Method Blank, Lab Control Spikes, as well as the Initial Calibration and Continuing Calibration. This section contains the following:

Section Contents

Project QC Critera

DAB Quality Control Reports

- Method Blank
- Laboratory Control Spike
- Laboratory Control Duplicate
- Continuing Calibration

Quality Control Report

EAS SDG Number: 224435

Project Number: 17807

QC Narrative

Samples were anlayzed in a daily analytical batch (DAB) designated by a QC batch number, and were analyzed using EAS standard laboratory QC specified in the EAS Quality Manual which may be different then the referrenced agency method. Any deviations from the EAS QC criteria are flagged in the Laboratory Control Reports or in the sample Analytical Reports.

Standard Laboratory QC Report

Unless project specific QC was requested, this Section containing the standard laboratory QC (Level 2) supplied with the Analytical Reports. Each sample is analyzed in a Daily Analytical Batch (DAB) which includes the method blank, a laboratory control spike (LCS) and a laboratory control duplicate (LCD). A Daily Analytical Batch QC report is supplied for each method requested.

Method Blank

The method blank is a laboratory generated sample which assesses the degree to which laboratory operations cause a false positive. The target analytes in the analytical reports for a daily analytical batch are "B" flagged if their concentrations are present in the Method Blank above the RL, unless the result is greater then ten times the blank value..

Laboratory Control Spike

A laboratory control spike is a well characterized matrix similar to the sample which is spiked and run in duplicate with each Daily Analytical Batch. The laboratory control spike results are reported as a percent recovery. The QC Criteria for the control spike is listed in the Laboratory Control Report. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report. The control spike contains an abbreviated list of compounds in the method, and may contain compounds not on the target list for the specified report.

Laboratory Control Duplicate

The laboratory control duplicate is a duplicate analysis of the laboratory control spike, a standard, or a sample depending on the method. The results are reported as a relative percent difference (RPD). The criteria for the duplicate is in the Laboratory Control Report for the Daily Analytical Batch. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: LABQC
Laboratory Number: B12064

File Name: B12064A
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 120624-GCL

Date Sampled: **Time:**
Date Analyzed: 12/06/24 **Time:** 15:04
Dilution Factor: 1.00

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.50	1.50	ND	0.33	0.98	ND	

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: LABQC
Laboratory Number: B12094

File Name:	B12094A	**Date Sampled:**		**Time:**	
Description:	METHOD BLANK	**Date Analyzed:**	12/09/24	**Time:**	11:24
Can/Tube#:		**Dilution Factor:**	1.00		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.50	1.50	ND	0.33	0.98	ND	

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

ASTM D3416 Methane by GC/FID
Analytical Method: **ASTM D3416**

Date: 12/06/24
QC_Batch: 120624-GCL

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate Duplicate %	Duplicate Limit %	Flag
74-82-8	Methane	78		85		70	130	7	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

Section 3 Analytical Methods

This section has information on the analytial methods and a copy of the analytical reports for the Sample Delivery Group (SDG) listed below. The reports are organized in order of the EAS Laboratory Number.

Section Contents

Analytical Method Description(s)

Analytical Reports

Analytical Reports

EAS SDG Number: 224435

Project Number: 17807

The following pages contain the certified Analytical Reports for the samples submitted in the Sample Delivery Group (SDG) and are in order of the EAS Lab ID number. All of the analytical methods used are modifications of the published methods. Procedural method modifications, QC modifications, QC Criteria modifications, target lists, definitions of detection limits, and flags are all explained in detail in the EAS Quality Manual. The Analytical Report has columns for the method detection limit (MDL), the reporting limit (RL), and the Amount. The Amount is the concentration of the compound in the sample. The report usually has the results reported with two commonly used units. The MDL, RL, and Amount are adjusted for the canister dilution factor and any dilution caused by sample matrix effects.

NELAC CERTIFICATION

EAS is accredited by the National Environmental Laboratory Accreditation (NELAC) with the Florida Department of Health, one of the NELAC certifying states. EAS is certified for the EPA TO-15, EPA TO-11 and EPA TO-4 methods. A list of accredited compounds is available on request.

DETECTION LIMITS

MDL: The MDL is lowest concentration that can be measured to be statistically above the noise level and is determined using the EPA 2016 method which uses the standard deviation of replicate measurements made over time. The method also incorporates systematic instrumentation blank levels. See Quality Manual for detailed explanation.

RL: The reporting limit (RL) is the lowest concentration that can be reliably reported for each compound that meets the QC Criteria for the method, background levels, or project specific considerations. The QC criteria level for the method blank is to be less then the RL See Quality Manual for more information.

DATA FLAGS

In the standard report, if a compound is not detected above the method detection limit, a "ND" is in the Amount column. The flag column is used for both the not detect flag and for any data flags.

B - This compound was detected in the batch method blank above the reporting limit and is greater then one tenth the amount in the sample.

E - This compound exceeds the calibration range for this sample volume.

J - The amount reported is estimated because it was below the RL and could be below the lowest calibration point, have higher uncertainty, or could be the result of system background

SIGNIFICANT FIGURES

Based on the uncertainty in the methods, the numbers on the Analytical Reports should be used with only two significant digits. Additional significant figures are reported for ease of use and to avoid rounding errors when used in further calculations.

UNITS

PPBV or PPMV: Parts-per-billion (or million) by volume is a mole (volume) ratio of the moles of analyte divided by the moles of air (gas). This is the primary unit used to report air or gas concentrations and is independent of temperature and pressure.

UG/M3 OR MG/M3: The reported result was calculated based on 1 atm pressure and a temperature of 25C. The conversion from PPBV is: UG/M3 = PPBV x MW/24.46 where 24.26 is the gas constant and MW is the Compounds Molecular Weight (sometimes called Formula Weight)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **01**

File Name: 2443501A
Description: T-401
Can/Tube#: 636
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 12/06/24 **Time:** 18:34
Dilution Factor: 1.25

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.88	12,100.42	0.41	1.23	7,934.70	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **02**

File Name: 2443502A
Description: T-402
Can/Tube#: 703
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 12/06/24 **Time:** 18:42
Dilution Factor: 1.25

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.88	4.13	0.41	1.23	2.71	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **03**

File Name: 2443503A
Description: T-403
Can/Tube#: 547
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 12/06/24 **Time:** 19:00
Dilution Factor: 1.27

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.91	135.39	0.42	1.25	88.78	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **04**

File Name: 2443504A
Description: T-404
Can/Tube#: 749
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 8:24
Date Analyzed: 12/06/24 **Time:** 19:09
Dilution Factor: 1.24

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.62	1.86	1.17	0.41	1.22	0.77	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **05**

File Name:	2443505A	**Date Sampled:**	11/19/24	**Time:**	10:20
Description:	T-405	**Date Analyzed:**	12/06/24	**Time:**	19:21
Can/Tube#:	837	**Dilution Factor:**	1.28		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	122.05	0.42	1.26	80.03	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **06**

File Name: 2443506A
Description: T-406
Can/Tube#: 626
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 12/06/24 **Time:** 19:36
Dilution Factor: 1.26

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.89	12.17	0.41	1.24	7.98	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **07**

File Name: 2443507A
Description: T-407
Can/Tube#: 740
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 12/06/24 **Time:** 19:42
Dilution Factor: 1.32

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.98	28.36	0.43	1.30	18.59	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Can/Tube#: 805
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 12/06/24 **Time:** 19:47
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	1.92	0.43	1.29	1.26	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Can/Tube#: 631
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/06/24 **Time:** 19:58
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	9.31	0.45	1.34	6.11	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Can/Tube#: 714
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/06/24 **Time:** 20:22
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	3,863.68	0.45	1.34	2,533.56	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **11**

File Name: 2443511A
Description: T-411
Can/Tube#: 551
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 12/06/24 **Time:** 20:48
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	2.89	0.42	1.26	1.89	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **12**

File Name:	2443512A	**Date Sampled:**	11/19/24	**Time:**	12:06
Description:	T-412	**Date Analyzed:**	12/06/24	**Time:**	21:02
Can/Tube#:	881	**Dilution Factor:**	1.32		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.98	5.92	0.43	1.30	3.88	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 13

File Name: 2443513A
Description: T-413
Can/Tube#: 766
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/06/24 **Time:** 21:08
Dilution Factor: 1.34

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.67	2.01	1.01	0.44	1.32	0.66	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Can/Tube#: 725
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/06/24 **Time:** 21:15
Dilution Factor: 1.32

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.98	ND	0.43	1.30	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **15**

File Name: 2443515A
Description: T-415
Can/Tube#: 896
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 12/06/24 **Time:** 21:21
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	ND	0.43	1.29	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Can/Tube#: 659
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/06/24 **Time:** 21:28
Dilution Factor: 1.42

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.71	2.13	1.04	0.47	1.40	0.68	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **17**

File Name: 2443517A
Description: T-417
Can/Tube#: 899
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/06/24 **Time:** 21:39
Dilution Factor: 1.30

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.65	1.95	1.17	0.43	1.28	0.76	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **18**

File Name: 2443518A
Description: T-418
Can/Tube#: 522
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/06/24 **Time:** 22:02
Dilution Factor: 1.25

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.88	ND	0.41	1.23	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **19**

File Name: 2443519A
Description: T-501
Can/Tube#: 664
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 12/09/24 **Time:** 11:45
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	3.42	0.42	1.26	2.24	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 20

File Name: 2443520A
Description: T-502
Can/Tube#: 716
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 12/09/24 **Time:** 11:52
Dilution Factor: 1.33

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.67	2.00	ND	0.44	1.31	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **21**

File Name: 2443521A
Description: T-503
Can/Tube#: 751
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 12/09/24 **Time:** 11:59
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	1.34	0.42	1.26	0.88	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Can/Tube#: 644
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 12/09/24 **Time:** 12:05
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	ND	0.42	1.26	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 23

File Name: 2443523A
Description: T-505
Can/Tube#: 883
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/09/24 **Time:** 12:12
Dilution Factor: 1.35

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.03	1.42	0.44	1.33	0.93	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 24

File Name: 2443524A
Description: T-506
Can/Tube#: 784
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/09/24 **Time:** 12:19
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	ND	0.45	1.34	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **25**

File Name: 2443525A
Description: T-507
Can/Tube#: 712
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/09/24 **Time:** 12:28
Dilution Factor: 1.38

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Can/Tube#: 549
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/09/24 **Time:** 12:34
Dilution Factor: 1.38

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 27

File Name: 2443527A
Description: T-509
Can/Tube#: 882
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/09/24 **Time:** 12:40
Dilution Factor: 1.40

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.70	2.10	ND	0.46	1.38	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 28

File Name: 2443528A
Description: T-510
Can/Tube#: 860
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/09/24 **Time:** 12:46
Dilution Factor: 1.42

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.71	2.13	ND	0.47	1.40	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **29**

File Name: 2443529A
Description: T-511
Can/Tube#: 627
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/09/24 **Time:** 12:52
Dilution Factor: 1.37

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.06	ND	0.45	1.35	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 30

File Name: 2443530A
Description: T-512
Can/Tube#: 417
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/09/24 **Time:** 12:57
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	ND	0.45	1.34	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 31

File Name: 2443531A
Description: T-513
Can/Tube#: 781
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/09/24 **Time:** 13:03
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	ND	0.45	1.34	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Can/Tube#: 506
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/09/24 **Time:** 13:09
Dilution Factor: 1.38

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Can/Tube#: 700
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 13:17
Dilution Factor: 1.30

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.65	1.95	6,000.60	0.43	1.28	3,934.82	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 34

File Name: 2443534A
Description: T-602
Can/Tube#: 673
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:29
Date Analyzed: 12/09/24 **Time:** 13:23
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	1,159.41	0.42	1.26	760.27	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Can/Tube#: 550
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/09/24 **Time:** 13:28
Dilution Factor: 1.24

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.62	1.86	1,669.88	0.41	1.22	1,095.00	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Can/Tube#: 738
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 13:36
Dilution Factor: 1.33

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.67	2.00	10.55	0.44	1.31	6.92	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 37

File Name: 2443537A
Description: T-605
Can/Tube#: 892
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 9:41
Date Analyzed: 12/09/24 **Time:** 13:41
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	28,822.91	0.43	1.29	18,900.27	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 38

File Name: 2443538A
Description: T-606
Can/Tube#: 608
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 9:58
Date Analyzed: 12/09/24 **Time:** 13:50
Dilution Factor: 1.38

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	562.82	0.45	1.36	369.07	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 39

File Name: 2443539A
Description: T-607
Can/Tube#: 771
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 9:52
Date Analyzed: 12/09/24 **Time:** 13:55
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	5.67	0.43	1.29	3.72	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 40

File Name: 2443540A
Description: T-608
Can/Tube#: 531
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 9:47
Date Analyzed: 12/09/24 **Time:** 14:01
Dilution Factor: 1.35

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.03	2.78	0.44	1.33	1.82	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 41

File Name: 2443541A
Description: T-609
Can/Tube#: 668
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/09/24 **Time:** 14:07
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	ND	0.43	1.29	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 42

File Name: 2443542A
Description: T-610
Can/Tube#: 730
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/09/24 **Time:** 14:13
Dilution Factor: 1.37

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.06	8.30	0.45	1.35	5.44	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 43

File Name: 2443543A
Description: T-611
Can/Tube#: 701
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/09/24 **Time:** 14:19
Dilution Factor: 1.35

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.03	ND	0.44	1.33	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 44

File Name: 2443544A
Description: T-612
Can/Tube#: 514
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/09/24 **Time:** 14:27
Dilution Factor: 1.39

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.70	2.09	ND	0.46	1.37	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 45

File Name: 2443545A
Description: T-613
Can/Tube#: 694
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/09/24 **Time:** 14:32
Dilution Factor: 1.39

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.70	2.09	ND	0.46	1.37	ND	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 46

File Name: 2443546A
Description: T-614
Can/Tube#: 880
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/09/24 **Time:** 14:38
Dilution Factor: 1.38

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

CE Schmidt, Ph.D., Environmental Consultant

224435 17807

Chain of Custody Record TO- Day 1

Form Serial Number **CES F1-02106**	For Information Regarding These Samples Please Contact: **Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 E-Mail: SCHMIDTCE@aol.com	Client Address and Phone Number ***3900 Kilroy Airport Way, Suite 100*** ***Long Beach, CA 90806 562-743-7895***
Client Name ***SCS*** ***Chiquita Canyon Landfill***		Laboratory Name ***EAS***
Project Manager ***Pat Sullivan***		Laboratory Address ***173 Cross Street*** ***San Luis Obispo, CA 93401***
Requested Completion Date		Laboratory Phone ***805-781-3585***
		Laboratory Contact ***Dr. Steve Hoyt*** *stevehoyt@easlab.com*

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/19/2024	851		x	T - 401	636	1		x		x	x	x	x		-29	0	01
	11/19/2024	835		x	T - 402	703	1		x		x	x	x	x		-29	0	02
	11/19/2024	812		x	T - 403	547	1		x		x	x	x	x		-29	0	03
	11/19/2024	824		x	T - 404	789	1		x		x	x	x	x		-29	0	04
	11/19/2024	1020		x	T - 405	837	1		x		x	x	x	x		-29	0	05
	11/19/2024	1006		x	T - 406	626	1		x		x	x	x	x		-29	0	06
	11/19/2024	1005		x	T - 407	740	1		x		x	x	x	x		-29	0	07
	11/19/2024	109		x	T - 408	808	1		x		x	x	x	x		-29	0	08
	11/19/2024	1145		x	T - 409	631	1		x		x	x	x	x		-29	0	09
	11/19/2024	1149		x	T - 410	714	1		x		x	x	x	x		-29	0	10
	11/19/2024	1151		x	T - 411	551	1		x		x	x	x	x		-29	0	11
	11/19/2024	1208		x	T - 412	881	1		x		x	x	x	x		-29	6	12
	11/19/2024	1337		x	T - 413	766	1		x		x	x	x	x		-29		13
	11/19/2024	1324		x	T - 414	725	1		x		x	x	x	x		-29		14
	11/19/2024	1338		x	T - 415	896	1		x		x	x	x	x		-29		15
	11/19/2024	1324		x	T - 416	654	1		x		x	x	x	x		-29		16
	11/19/2024	1329		x	T - 417	894	1		x		x	x	x	x		-29		17
	11/19/2024			x	T - 418	552	1		x		x	x	x	x		-29		18

Sampler CESchmidt	Date/Time 11/21/24 1204	Relinquished by CESchmidt	Date/Time 11/21/24 1204	HAZWRAP/NEESA Y N
Recieved by EAS	Date/Time	Relinquished by	Date/Time	QC Level 1 2 3
Recieved by	Date/Time	Relinquished by	Date/Time	COC Ana Req Cust Seal Sample Condition
Recieved by Laboratory 11/21/2024 1345	Date/Time	Sample Shipped Via UPS FEDEX BUS Other		
Remarks	**Do Not Pressurize with Helium**			

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D1

224435 17807

CE Schmidt, Ph.., Environmental Consultant TO Day 2

Chain of Custody Record

Form Serial Number CES F1-02106	For Information Regarding These Samples Please Contact:	Client Address and Phone Number *3900 Kilroy Airport Way, Suite 100* *Long Beach, CA 90806 562-743-7895*
Client Name *SCS* *Chiquita Canyon Landfill*	**Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 E-Mail: SCHMIDTCE@aol.com	Laboratory Name *EAS* Laboratory Address *173 Cross Street* *San Luis Obispo, CA 93401* Laboratory Phone *805-781-3585*
Project Manager *Pat Sullivan*		Laboratory Contact *Dr. Steve Hoyt* *stevehoyt@easlab.com*
Requested Completion Date		

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/20/2024	0830		x	T - 501	604	1		x		x	x	x	x		-29	0	19
	11/20/2024	0837		x	T - 502	746	1		x		x	x	x	x		-29	0	20
	11/20/2024	0852		x	T - 503	751	1		x		x	x	x	x		-29	0	21
	11/20/2024	0911		x	T - 504	644	1		x		x	x	x	x		-29	0	22
	11/20/2024	1055		x	T - 505	823	1		x		x	x	x	x		-29	0	23
	11/20/2024	1071		x	T - 506	764	1		x		x	x	x	x		-29	0	24
	11/20/2024	1056		x	T - 507	712	1		x		x	x	x	x		-29	0	25
	11/20/2024	1040		x	T - 508	529	1		x		x	x	x	x		-29	0	26
	11/20/2024	1220		x	T - 509	882	1		x		x	x	x	x		-29	0	27
	11/20/2024	1218		x	T - 510	860	1		x		x	x	x	x		-29	0	28
	11/20/2024	1231		x	T - 511	627	1		x		x	x	x	x		-29	0	29
	11/20/2024	1241		x	T - 512	470	1		x		x	x	x	x		-29		30
	11/20/2024	1228		x	T - 513	821	1		x		x	x	x	x		-29		31
	11/20/2024	1245		x	T - 514	506	1		x		x	x	x	x		-29	0	32

Sampler CE SCHMIDT	Date/Time 11/21/24 1204	Relinquished by CE SCHMIDT	Date/Time 11/21/24 1204
Recieved by ERS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory	Date/Time 11/21/2024	Sample Shipped Via UPS FEDEX BUS Other	
Remarks 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D2

CE Schmidt, Ph.., Environmental Consultant

Chain of Custody Record

224435

17807

TO Day 3

Form Serial Number	CES F1-02106
Client Name	SCS Chiquita Canyon Landfill
Project Manager	Pat Sullivan
Requested Completion Date	

For Information Regarding These Samples Please Contact:

Dr. Charles E. Schmidt
19200 Live Oak Road, Red Bluff, CA 96080
530-529-4256 Cell: 530-200-2473
E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: 3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895

Laboratory Name: EAS

Laboratory Address: 173 Cross Street, San Luis Obispo, CA 93401

Laboratory Phone: 805-781-3585

Laboratory Contact: Dr. Steve Hoyt, stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container Vial	Sample Container Can	Sample Container Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/21/2024	810		x	T - 601	700	1		x		x	x	x	x		-29	0	33
	11/21/2024	829		x	T - 602	673	1		x		x	x	x	x		-29	0	34
	11/21/2024	831		x	T - 603	550	1		x		x	x	x	x		-29	0	35
	11/21/2024	818		x	T - 604	738	1		x		x	x	x	x		-29	0	36
	11/21/2024	941		x	T - 605	892	1		x		x	x	x	x		-29	0	37
	11/21/2024	938		x	T - 606	608	1		x		x	x	x	x		-29	0	38
	11/21/2024	952		x	T - 607	771	1		x		x	x	x	x		-29	0	39
	11/21/2024	947		x	T - 608	531	1		x		x	x	x	x		-29	0	40
	11/21/2024	1138		x	T - 609	668	1		x		x	x	x	x		-29		41
	11/21/2024	1111		x	T - 610	730	1		x		x	x	x	x		-29		42
1128	11/21/2024	1133		x	T - 611	701	1		x		x	x	x	x		-29		43
	11/21/2024	1120		x	T - 612	514	1		x		x	x	x	x		-29		44
	11/21/2024	1125		x	T - 613	694	1		x		x	x	x	x		-29		45
	11/21/2024	1136		x	T - 614	880	1		x		x	x	x	x		-29		46

Sampler: CE Schmidt	Date/Time: 11/24/24 1204	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1204
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: [signature] 11/21/2024	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	Do Not Pressurize with Helium		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D3

Section 4 Data Package

This section contains the Data Packages for the samples, blanks, and calibration. Each package has the analytical report, quantitation report, calculation sheet, instrument quantation report, and chromatograms.

Items provided in Data Package:

DAB Run Logs and Preparation Logs

Sample Packages

Blank Package for each Daily Analytical Batch

Quality Control Reports, LCS,LCD for each Daily Analytical Batch

Continuing Calibration Package for Each Daily Analytical Batch

Initial Calibration Data

Tune Data (if required)

DAB Run Logs and Preparation Logs

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
This section contains the DAB Log Sheets and Preparation Logs.

Index

DAB Run Logs
Preparation Logs
Other Log Sheets

DAILY ANALYTICAL BATCH FORM

DAB 120624 - GCL

ANALYST REPORT

Method 3410H4 Chemist

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 274435

Lab ID 1-18

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

FORM
DAB.v14

Daily Analytical Batch

DAB: 120624-GCL

GCL

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120624-GCL	01	GCL	STD			C12064A		ST63414	100%	5	DA		3416CH4			
120624-GCL	02	GCL	STD			C12064B		ST63414	100%	5	DA		3416CH4			
120624-GCL	03	GCL	STD			C12064C		ST63414	10%	5	DA		3416CH4			
120624-GCL	04	GCL	STD			C12064D		ST63414	10%	5	DA		3416CH4			
120624-GCL	05	GCL	STD			C12064E		ST63414	5%	5	DA		3416CH4			
120624-GCL	06	GCL	SPK			QC12064A		ABT AIR	OUTDOOR AIR S	5	DA		3416CH4			
120624-GCL	07	GCL	SPK			QC12064B		ABT AIR	OUTDOOR AIR S	5	DA		3416CH4			
120624-GCL	08	GCL	SPK			QC12064C		ABT AIR	OUTDOOR AIR S	5	DA		3416CH4			
120624-GCL	09	GCL	SPK			QC12064D		ABT AIR	OUTDOOR AIR S	5	DA		3416CH4			
120624-GCL	10	GCL	BLK			B12064A		METHOD BLANK		5	DA		3416CH4			
120624-GCL	11	GCL	SA	224430	01	2443001A	750	SENSIT 1023	HWOC	5	DA		3416CH4			
120624-GCL	12	GCL	SA	224430	02	2443002A	859	SENSIT 1021	HWOC	5	LR		3416CH4			
120624-GCL	13	GCL	SA	224430	03	2443003A	856	SENSIT 1022	HWOC	5	LR		3416CH4			
120624-GCL	14	GCL	SA	224430	04	2443004A	888	SENSIT 1020	HWOC	5	LR		3416CH4			
120624-GCL	15	GCL	SA	224430	05	2443005A	773	SENSIT 1019	HWOC	5	LR		3416CH4			
120624-GCL	16	GCL	SA	224452	01	2445201A	605	SENSIT 1019	HWOC	5	LR		3416CH4			
120624-GCL	17	GCL	SA	224452	02	2445202A	895	SENSIT 1020	HWOC	5	LR		3416CH4			
120624-GCL	18	GCL	SA	224452	03	2445203A	509	SENSIT 1022	HWOC	5	LR		3416CH4			
120624-GCL	19	GCL	SA	224452	04	2445204A	505	SENSIT 1023	HWOC	5	LR		3416CH4			

REVIEWED

Daily Analytical Batch

DAB: 120624-GCL

GCL

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120624-GCL	20	GCL	SA	224452	05	2445205A	709	SENSIT 1021	HWOC	5	LR		3416CH4			
120624-GCL	21	GCL	SA	224435	01	2443501A	636	T-401	SCHMIDT	5	LR		3416CH4			
120624-GCL	22	GCL	SA	224435	02	2443502A	703	T-402	SCHMIDT	5	LR		3416CH4			
120624-GCL	23	GCL	SA	224435	03	2443503A	547	T-403	SCHMIDT	5	LR		3416CH4			
120624-GCL	24	GCL	SA	224435	04	2443504A	749	T-404	SCHMIDT	5	LR		3416CH4			
120624-GCL	25	GCL	SA	224435	05	2443505A	837	T-405	SCHMIDT	5	LR		3416CH4			
120624-GCL	26	GCL	SA	224435	06	2443506A	626	T-406	SCHMIDT	5	LR		3416CH4			
120624-GCL	27	GCL	SA	224435	07	2443507A	740	T-407	SCHMIDT	5	LR		3416CH4			
120624-GCL	28	GCL	SA	224435	08	2443508A	805	T-408	SCHMIDT	5	LR		3416CH4			
120624-GCL	29	GCL	SA	224435	09	2443509A	631	T-409	SCHMIDT	5	LR		3416CH4			
120624-GCL	30	GCL	SA	224435	10	2443510A	714	T-410	SCHMIDT	5	LR		3416CH4			
120624-GCL	31	GCL	SA	224435	11	2443511A	551	T-411	SCHMIDT	5	LR		3416CH4			
120624-GCL	32	GCL	SA	224435	12	2443512A	881	T-412	SCHMIDT	5	LR		3416CH4			
120624-GCL	33	GCL	SA	224435	13	2443513A	766	T-413	SCHMIDT	5	LR		3416CH4			
120624-GCL	34	GCL	SA	224435	14	2443514A	725	T-414	SCHMIDT	5	LR		3416CH4			
120624-GCL	35	GCL	SA	224435	15	2443515A	896	T-415	SCHMIDT	5	LR		3416CH4			
120624-GCL	36	GCL	SA	224435	16	2443516A	659	T-416	SCHMIDT	5	LR		3416CH4			
120624-GCL	37	GCL	SA	224435	17	2443517A	899	T-417	SCHMIDT	5	LR		3416CH4			
120624-GCL	38	GCL	SA	224435	18	2443518A	552	T-418	SCHMIDT	5	LR		3416CH4			

REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB R0924 - GCL

ANALYST REPORT

Method 3416CH4 Chemist [signature]

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

[signature]
Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224475

Lab ID 19-46

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

[signature]
Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

FORM
DAB.v14

Daily Analytical Batch

DAB: 120924-GCL

GCL

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120924-GCL	01	GCL	STD			C12094A		ST63414	100%	5	DA		3416CH4			
120924-GCL	02	GCL	STD			C12094B		ST63414	100%	5	DA		3416CH4			
120924-GCL	03	GCL	STD			C12094C		ST63414	10%	5	DA		3416CH4			
120924-GCL	04	GCL	STD			C12094D		ST63414	10%	5	DA		3416CH4			
120924-GCL	05	GCL	STD			C12094E		ST63414	5%	5	DA		3416CH4			
120924-GCL	06	GCL	SPK			QC12094A		ABT AIR	OUTDOOR AIR	5	DA		3416CH4			
120924-GCL	07	GCL	SPK			QC12094B		ABT AIR	OUTDOOR AIR	5	DA		3416CH4			
120924-GCL	08	GCL	SPK			QC12094C		ABT AIR	OUTDOOR AIR	5	DA		3416CH4			
120924-GCL	09	GCL	SPK			QC12094D		ABT AIR	OUTDOOR AIR	5	DA		3416CH4			
120924-GCL	10	GCL	BLK			B12094A	307	METHOD BLANK		5	DA		3416CH4			
120924-GCL	11	GCL	SA	224435	19	2443519A	664	T-501	SCHMIDT	5	DA		3416CH4			
120924-GCL	12	GCL	SA	224435	20	2443520A	716	T-502	SCHMIDT	5	DA		3416CH4			
120924-GCL	13	GCL	SA	224435	21	2443521A	751	T-503	SCHMIDT	5	DA		3416CH4			
120924-GCL	14	GCL	SA	224435	22	2443522A	644	T-504	SCHMIDT	5	DA		3416CH4			
120924-GCL	15	GCL	SA	224435	23	2443523A	883	T-505	SCHMIDT	5	DA		3416CH4			
120924-GCL	16	GCL	SA	224435	24	2443524A	784	T-506	SCHMIDT	5	DA		3416CH4			
120924-GCL	17	GCL	SA	224435	25	2443525A	712	T-507	SCHMIDT	5	DA		3416CH4			
120924-GCL	18	GCL	SA	224435	26	2443526A	549	T-508	SCHMIDT	5	DA		3416CH4			
120924-GCL	19	GCL	SA	224435	27	2443527A	882	T-509	SCHMIDT	5	DA		3416CH4			

REVIEWED

Daily Analytical Batch

DAB: 120924-GCL

GCL

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120924-GCL	20	GCL	SA	224435	28	2443528A	860	T-510	SCHMIDT	5	DA		3416CH4			
120924-GCL	21	GCL	SA	224435	29	2443529A	627	T-511	SCHMIDT	5	DA		3416CH4			
120924-GCL	22	GCL	SA	224435	30	2443530A	417	T-512	SCHMIDT	5	DA		3416CH4			
120924-GCL	23	GCL	SA	224435	31	2443531A	781	T-513	SCHMIDT	5	DA		3416CH4			
120924-GCL	24	GCL	SA	224435	32	2443532A	506	T-514	SCHMIDT	5	DA		3416CH4			
120924-GCL	25	GCL	SA	224435	33	2443533A	700	T-601	SCHMIDT	5	DA		3416CH4			
120924-GCL	26	GCL	SA	224435	34	2443534A	673	T-602	SCHMIDT	5	DA		3416CH4			
120924-GCL	27	GCL	SA	224435	35	2443535A	550	T-603	SCHMIDT	5	DA		3416CH4			
120924-GCL	28	GCL	SA	224435	36	2443536A	738	T-604	SCHMIDT	5	DA		3416CH4			
120924-GCL	29	GCL	SA	224435	37	2443537A	892	T-605	SCHMIDT	5	DA		3416CH4			
120924-GCL	30	GCL	SA	224435	38	2443538A	608	T-606	SCHMIDT	5	DA		3416CH4			
120924-GCL	31	GCL	SA	224435	39	2443539A	771	T-607	SCHMIDT	5	DA		3416CH4			
120924-GCL	32	GCL	SA	224435	40	2443540A	531	T-608	SCHMIDT	5	DA		3416CH4			
120924-GCL	33	GCL	SA	224435	41	2443541A	668	T-609	SCHMIDT	5	DA		3416CH4			
120924-GCL	34	GCL	SA	224435	42	2443542A	730	T-610	SCHMIDT	5	DA		3416CH4			
120924-GCL	35	GCL	SA	224435	43	2443543A	701	T-611	SCHMIDT	5	DA		3416CH4			
120924-GCL	36	GCL	SA	224435	44	2443544A	514	T-612	SCHMIDT	5	DA		3416CH4			
120924-GCL	37	GCL	SA	224435	45	2443545A	694	T-613	SCHMIDT	5	DA		3416CH4			
120924-GCL	38	GCL	SA	224435	46	2443546A	880	T-614	SCHMIDT	5	DA		3416CH4			

REVIEWED

Sample Data Packages

SDG Number 224435
Lab Id Number 1

Client ID T-401

Analytical Method ASTM D3416

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Analytical Report
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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 1

Client: C.E. Schmidt
Client ID: T-401
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 8:51
Received: 11/21/2024 Time: 13:00

Can Number: 636
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions | Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only
EDD Instructions | **EDD Type:**

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435				
Lab Id:	01			**Method:**	ASTM D3416
File Name:	2443501A				
Description:	T-401			**SF:**	2
Date Sampled:	11/19/24	**Time:**	8:51	**Not Detected Flag:**	ND
Date Received:	11/21/24	**Time:**	13:00	**Matrix**	AA
Date Analyzed:	12/06/24	**Time:**	18:34	**Type**	TRG
QCBatch	120624-GCL			**Instrument**	GCL
Type	SA			**Volume:**	5.0
Can Number	636				
Can Factor	1.25				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**7.39E+07**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

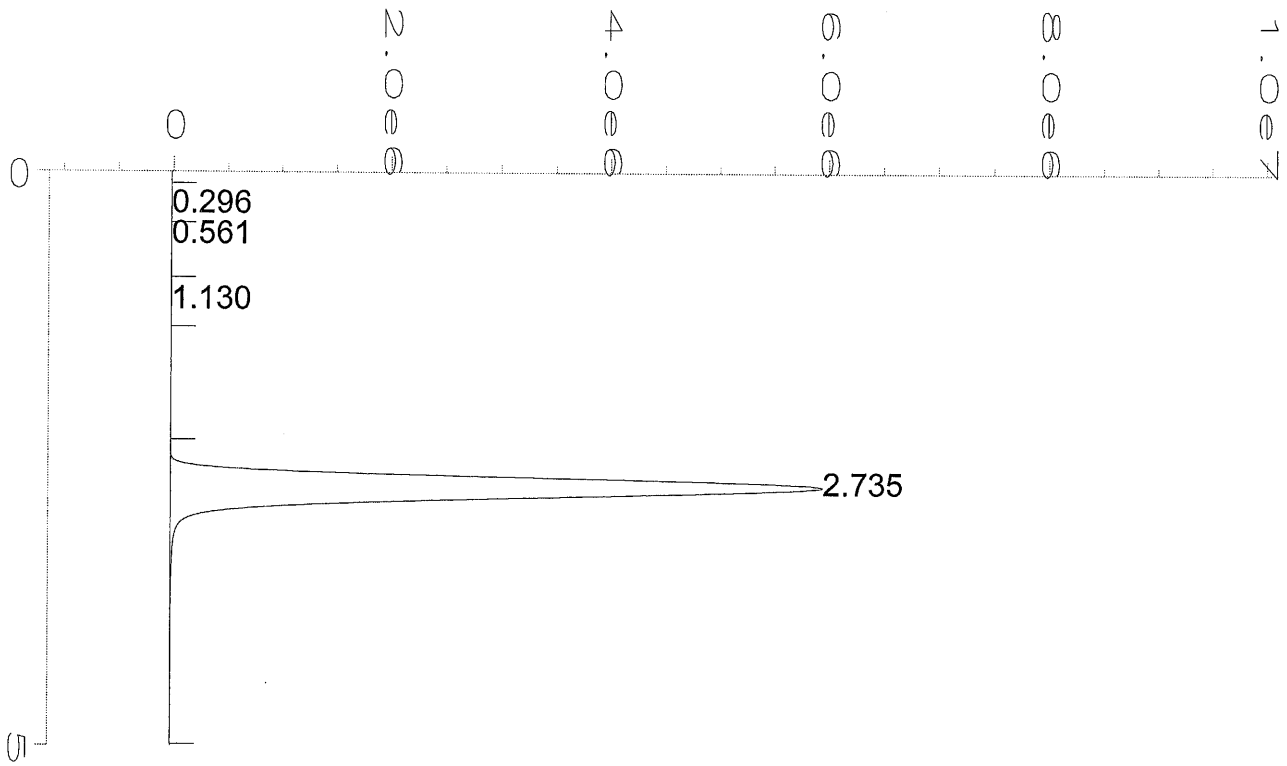
ASTM D3416 Methane by GC/FID

File Name: 2443501A
QCBatch 120624-GCL
Can Factor 1.25
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.25
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	12100.42	12,100.42	7,934.70	7,934.70	7,934.70	0.50	0.63	1.88	0.63	1.88	0.41	1.23	



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443501A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-401
Run Time Bar Code:
Acquired on : 06 Dec 24 06:34 PM
Report Created on: 06 Dec 24 06:39 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443501A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.296	11642	813	BV	0.193	0.0157
2	0.561	13369	1150	VV	0.156	0.0181
3	1.130	10930	1513	VB	0.093	0.0148
4	2.735	7.3921E+007	5968853	BBA	0.192	99.9514

Total area = 7.39569E+007

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 01

File Name:	2443501A	**Date Sampled:**	11/19/24	**Time:**	8:51
Description:	T-401	**Date Analyzed:**	12/06/24	**Time:**	18:34
Can/Tube#:	636	**Dilution Factor:**	1.25		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.88	12,100.42	0.41	1.23	7,934.70	

Sample Data Packages

SDG Number **224435**

Lab Id Number **2**

Client ID T-402

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 2

Client: C.E. Schmidt
Client ID: T-402
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 8:35
Received: 11/21/2024 Time: 13:00

Can Number: 703
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

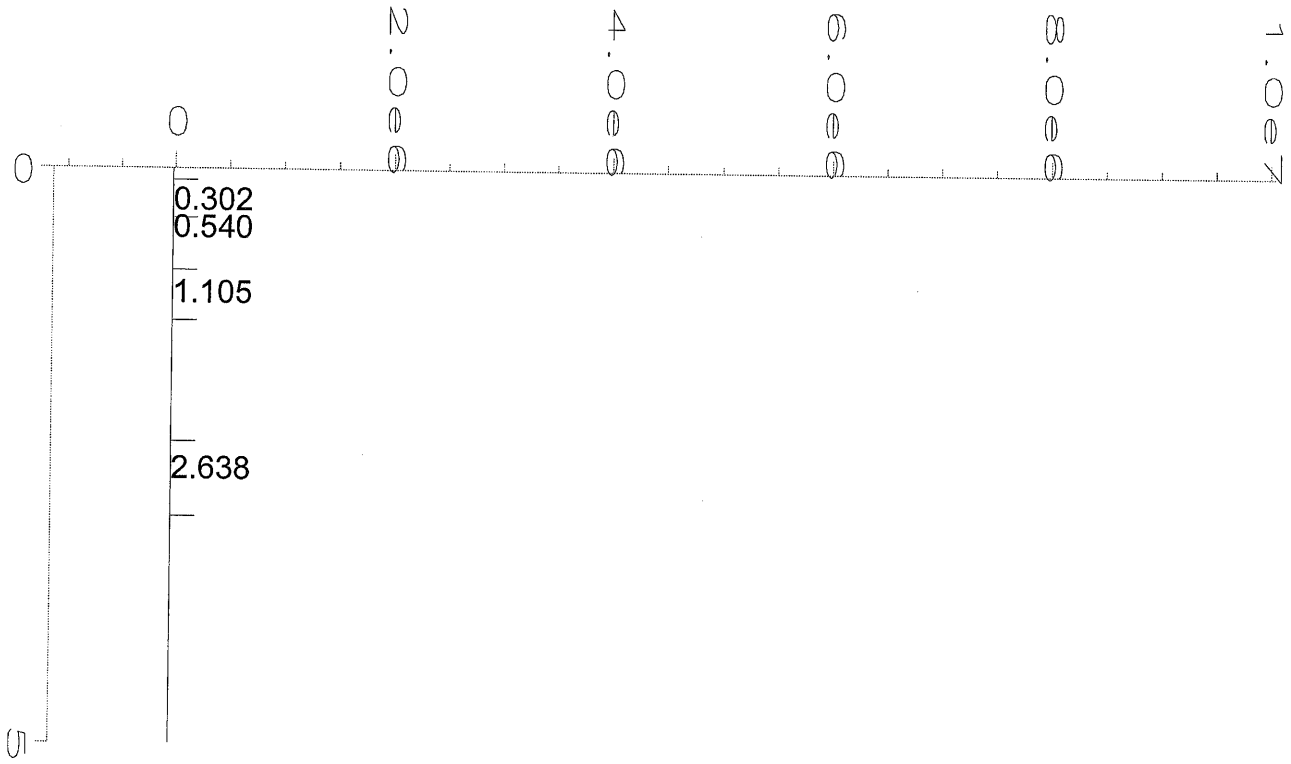
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443502A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-402
Run Time Bar Code:
Acquired on : 06 Dec 24 06:42 PM
Report Created on: 06 Dec 24 06:47 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443502A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.302	12025	836	BV	0.176	19.6852
2	0.540	12045	866	VV	0.171	19.7187
3	1.105	11784	1668	VB	0.090	19.2908
4	2.638	25232	2154	BB	0.168	41.3054

Total area = 61086

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	02				
File Name:	2443502A			**SF:**	2
Description:	T-402			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	8:35	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	18:42	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	703				
Can Factor	1.25				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**2.52E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443502A
QCBatch 120624-GCL
Can Factor 1.25
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.25
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**
Calibration: **L10** => L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	4.13	4.13	2.71	2.71	2.71	0.50	0.63	1.88	0.63	1.88	0.41	1.23	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 02

File Name: 2443502A
Description: T-402
Can/Tube#: 703
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 12/06/24 **Time:** 18:42
Dilution Factor: 1.25

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.88	4.13	0.41	1.23	2.71	

Sample Data Packages

SDG Number 224435
Lab Id Number 3

Client ID T-403

Analytical Method ASTM D3416

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Analytical Report
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 3

Client: C.E. Schmidt
Client ID: T-403
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 8:12
Received: 11/21/2024 Time: 13:00

Can Number: 547
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

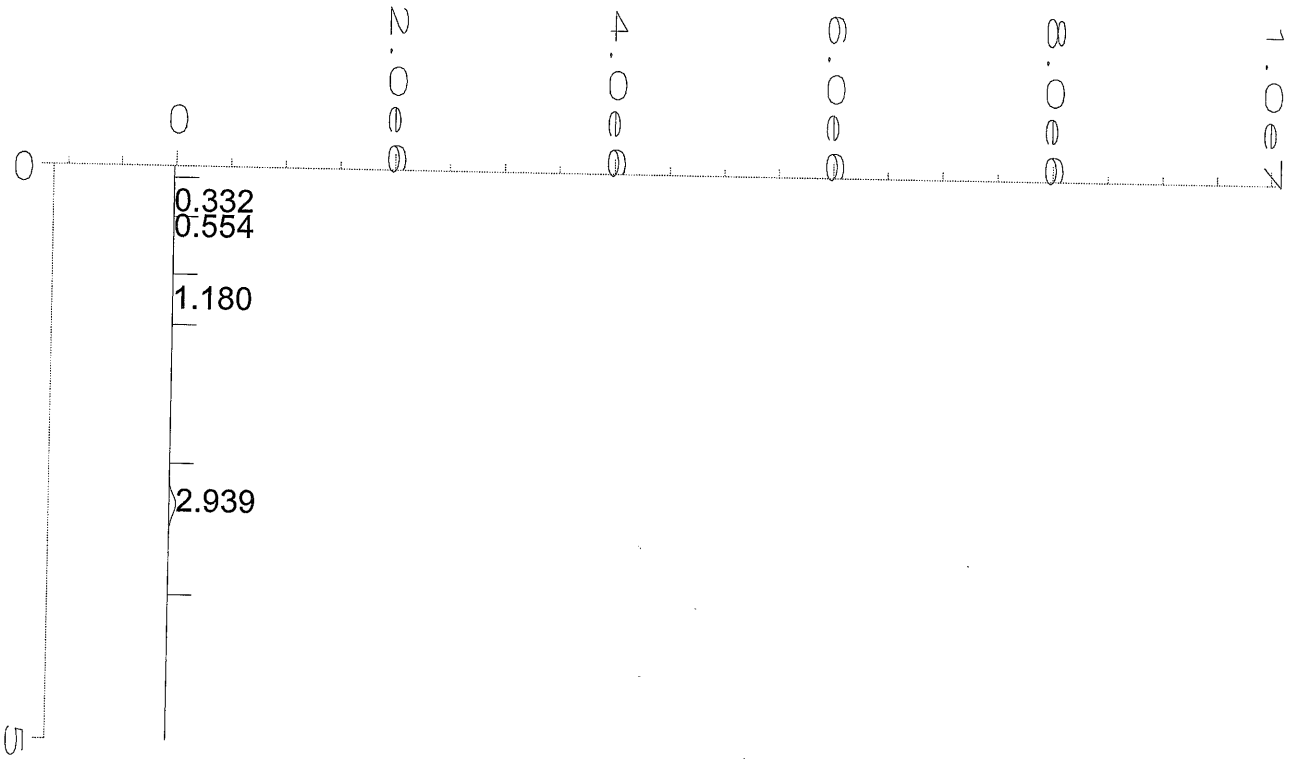
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443503A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-403
Run Time Bar Code:
Acquired on : 06 Dec 24 07:00 PM
Report Created on: 06 Dec 24 07:05 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443503A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.332	12920	845	BV	0.201	1.5107
2	0.554	16090	942	VV	0.213	1.8813
3	1.180	12202	1463	VB	0.105	1.4267
4	2.939	814039	63354	BB	0.199	95.1812

Total area = 855252

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	03				
File Name:	2443503A			**SF:**	2
Description:	T-403			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	8:12	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	19:00	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	547				
Can Factor	1.27				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**8.14E+05**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name:	2443503A		**SDG:**	**224435**			
QCBatch	120624-GCL						
Can Factor	1.27		**Calibration:**	**L10**	=>	L9 = Daily Calibration	RF: 7965
Volume:	5.00	ml	**RL Factor:**	**3**		L10 = Curve	RF: 7636
Base Volume	5.00	ml					CAL: 7636
Dilution Factor	1.27						
Gas Constant:	24.4						
Decimal Places:	2						

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	**Lab Qual**
Methane	16.00	135.39	135.39	88.78	88.78	88.78	0.50	0.64	1.91	0.64	1.91	0.42	1.25	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 03

File Name: 2443503A
Description: T-403
Can/Tube#: 547
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 12/06/24 **Time:** 19:00
Dilution Factor: 1.27

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.91	135.39	0.42	1.25	88.78	

Sample Data Packages

SDG Number 224435
Lab Id Number 4

Client ID T-404

Analytical Method ASTM D3416

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Calculations
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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 4

Client: C.E. Schmidt
Client ID: T-404
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 8:24
Received: 11/21/2024 Time: 13:00

Can Number: 749
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:
Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

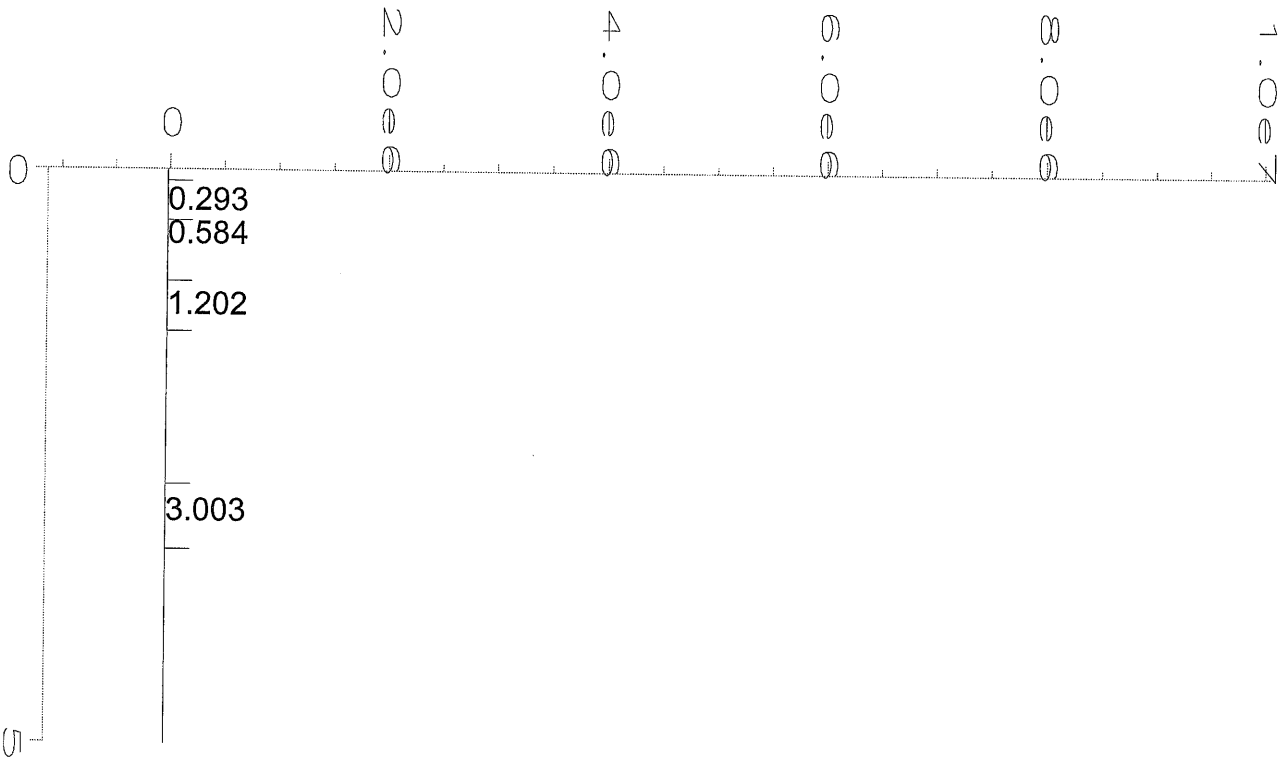
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443504A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-404
Run Time Bar Code:
Acquired on : 06 Dec 24 07:09 PM
Report Created on: 06 Dec 24 07:14 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443504A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.293	11674	810	BV	0.188	25.4676
2	0.584	16556	1313	VV	0.171	36.1161
3	1.202	10419	1322	VB	0.103	22.7291
4	3.003	7191	576	BB	0.186	15.6872

Total area = 45840

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	04				
File Name:	2443504A			**SF:**	2
Description:	T-404			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	8:24	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	19:09	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	749				
Can Factor	1.24				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**7.19E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443504A
QCBatch 120624-GCL
Can Factor 1.24
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.24
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.17	1.17	0.77	0.77	0.77	0.50	0.62	1.86	0.62	1.86	0.41	1.22	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 04

File Name:	2443504A	**Date Sampled:**	11/19/24	**Time:**	8:24
Description:	T-404	**Date Analyzed:**	12/06/24	**Time:**	19:09
Can/Tube#:	749	**Dilution Factor:**	1.24		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.62	1.86	1.17	0.41	1.22	0.77	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **5**

Client ID T-405

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 5

Client: C.E. Schmidt
Client ID: T-405
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 10:20
Received: 11/21/2024 Time: 13:00

Can Number: 837
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

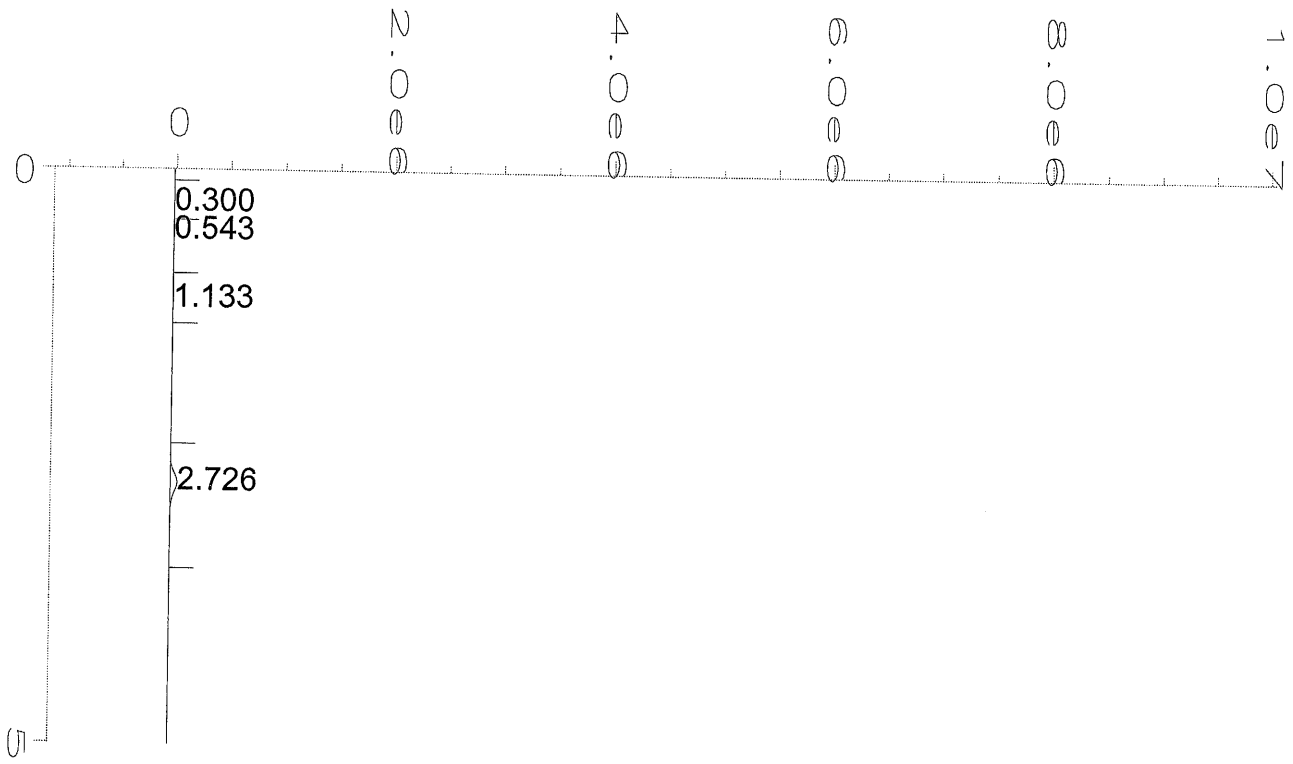
InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443505A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-405
Run Time Bar Code:
Acquired on : 06 Dec 24 07:21 PM
Report Created on: 06 Dec 24 07:26 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443505A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.300	12643	833	BV	0.194	1.6610
2	0.543	10341	691	VV	0.181	1.3585
3	1.133	10077	1488	VB	0.086	1.3238
4	2.726	728131	59829	BB	0.189	95.6567

Total area = 761192

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	05		
File Name:	2443505A		
Description:	T-405		
Date Sampled:	11/19/24	**Time:**	10:20
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	19:21
QCBatch	120624-GCL		
Type	SA		
Can Number	837		
Can Factor	1.28		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**7.28E+05**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443505A
QCBatch 120624-GCL
Can Factor 1.28
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.28
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 7965
RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	122.05	122.05	80.03	80.03	80.03	0.50	0.64	1.92	0.64	1.92	0.42	1.26	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 05

File Name:	2443505A	**Date Sampled:**	11/19/24	**Time:**	10:20
Description:	T-405	**Date Analyzed:**	12/06/24	**Time:**	19:21
Can/Tube#:	837	**Dilution Factor:**	1.28		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	122.05	0.42	1.26	80.03	

Sample Data Packages

SDG Number 224435
Lab Id Number 6

Client ID T-406

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 6

Client: C.E. Schmidt
Client ID: T-406
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 10:06
Received: 11/21/2024 Time: 13:00

Can Number: 626
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

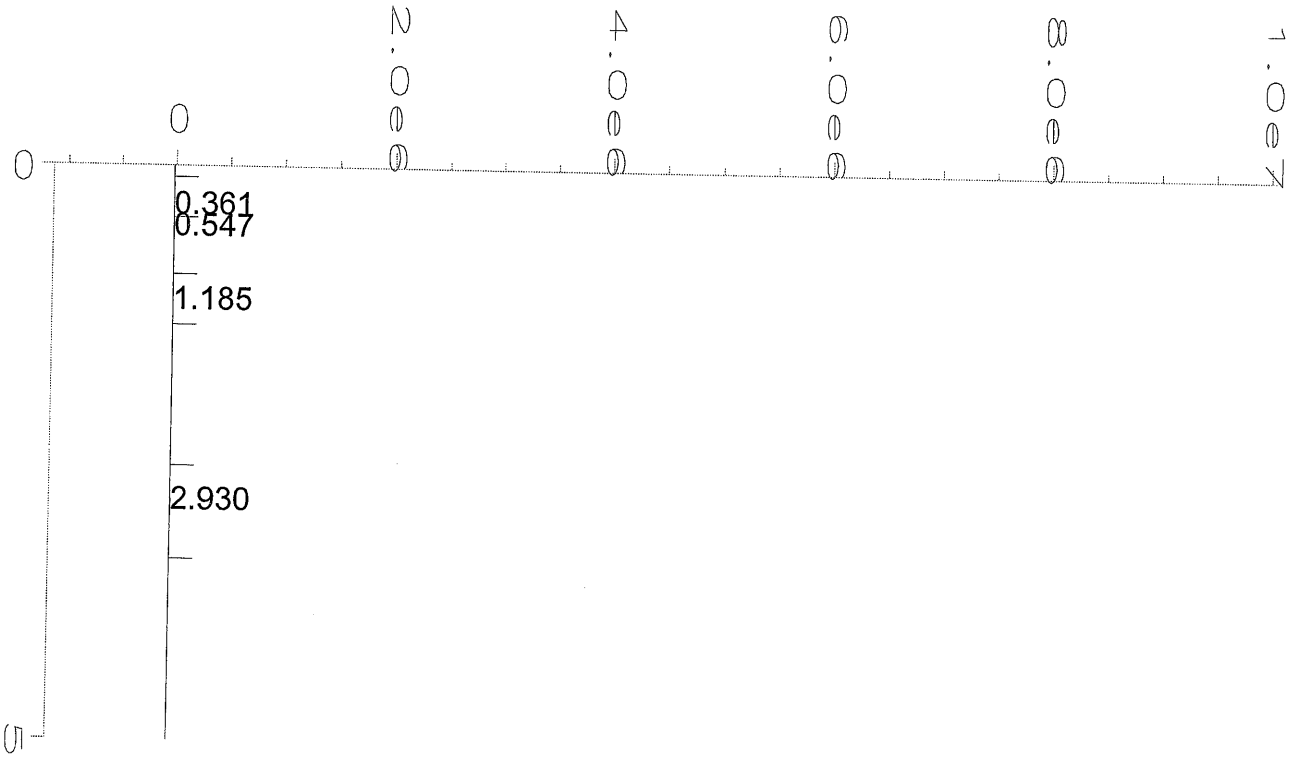
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443506A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-406
Run Time Bar Code:
Acquired on : 06 Dec 24 07:36 PM
Report Created on: 06 Dec 24 07:41 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443506A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.361	14407	908	BV	0.204	12.2902
2	0.547	16740	810	VV	0.257	14.2800
3	1.185	12331	1459	VB	0.107	10.5189
4	2.930	73749	5829	BB	0.196	62.9109

Total area = 117227

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	06				
File Name:	2443506A			**SF:**	2
Description:	T-406			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	10:06	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	19:36	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	626				
Can Factor	1.26				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**7.37E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443506A
QCBatch 120624-GCL
Can Factor 1.26
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.26
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	12.17	12.17	7.98	7.98	7.98	0.50	0.63	1.89	0.63	1.89	0.41	1.24	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 06

File Name: 2443506A
Description: T-406
Can/Tube#: 626
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 12/06/24 **Time:** 19:36
Dilution Factor: 1.26

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.89	12.17	0.41	1.24	7.98	

Sample Data Packages

SDG Number 224435
Lab Id Number 7

Client ID T-407

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 7

Client: C.E. Schmidt
Client ID: T-407
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 740
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:05
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

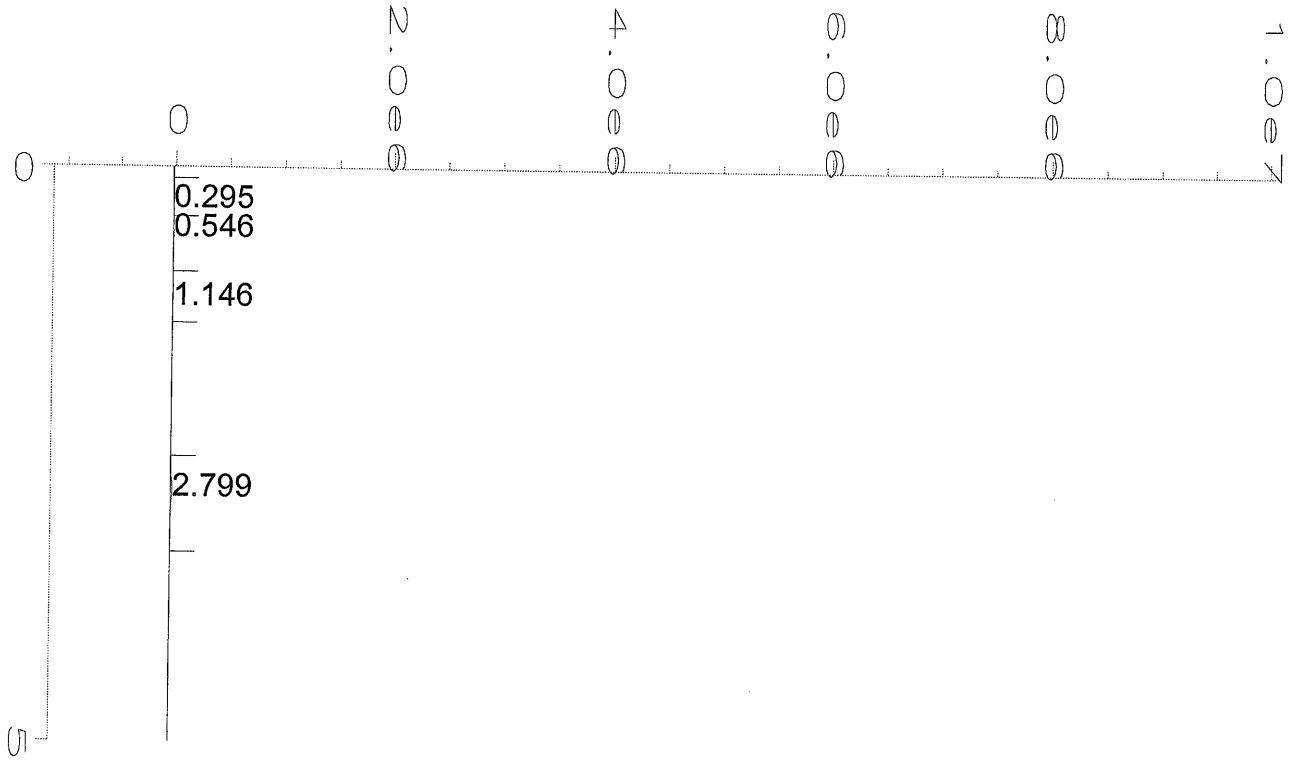
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443507A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-407
Run Time Bar Code:
Acquired on : 06 Dec 24 07:42 PM
Report Created on: 06 Dec 24 07:47 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443507A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.295	11724	799	BV	0.186	5.9793
2	0.546	10445	751	VV	0.171	5.3268
3	1.146	9873	1471	VB	0.085	5.0352
4	2.799	164038	13151	BB	0.193	83.6587

Total area = 196080

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	07				
File Name:	2443507A			**SF:**	2
Description:	T-407			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	10:05	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	19:42	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	740				
Can Factor	1.32				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**1.64E+05**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443507A
QCBatch 120624-GCL
Can Factor 1.32
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.32
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	28.36	28.36	18.59	18.59	18.59	0.50	0.66	1.98	0.66	1.98	0.43	1.30	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 07

File Name:	2443507A	**Date Sampled:**	11/19/24	**Time:**	10:05
Description:	T-407	**Date Analyzed:**	12/06/24	**Time:**	19:42
Can/Tube#:	740	**Dilution Factor:**	1.32		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.98	28.36	0.43	1.30	18.59	

Sample Data Packages

SDG Number 224435
Lab Id Number 8

Client ID T-408

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 8

Client: C.E. Schmidt
Client ID: T-408
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Pressurization:
Sampled: 11/19/2024 Time: 10:19
Received: 11/21/2024 Time: 13:00

Can Number: 805
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:
Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

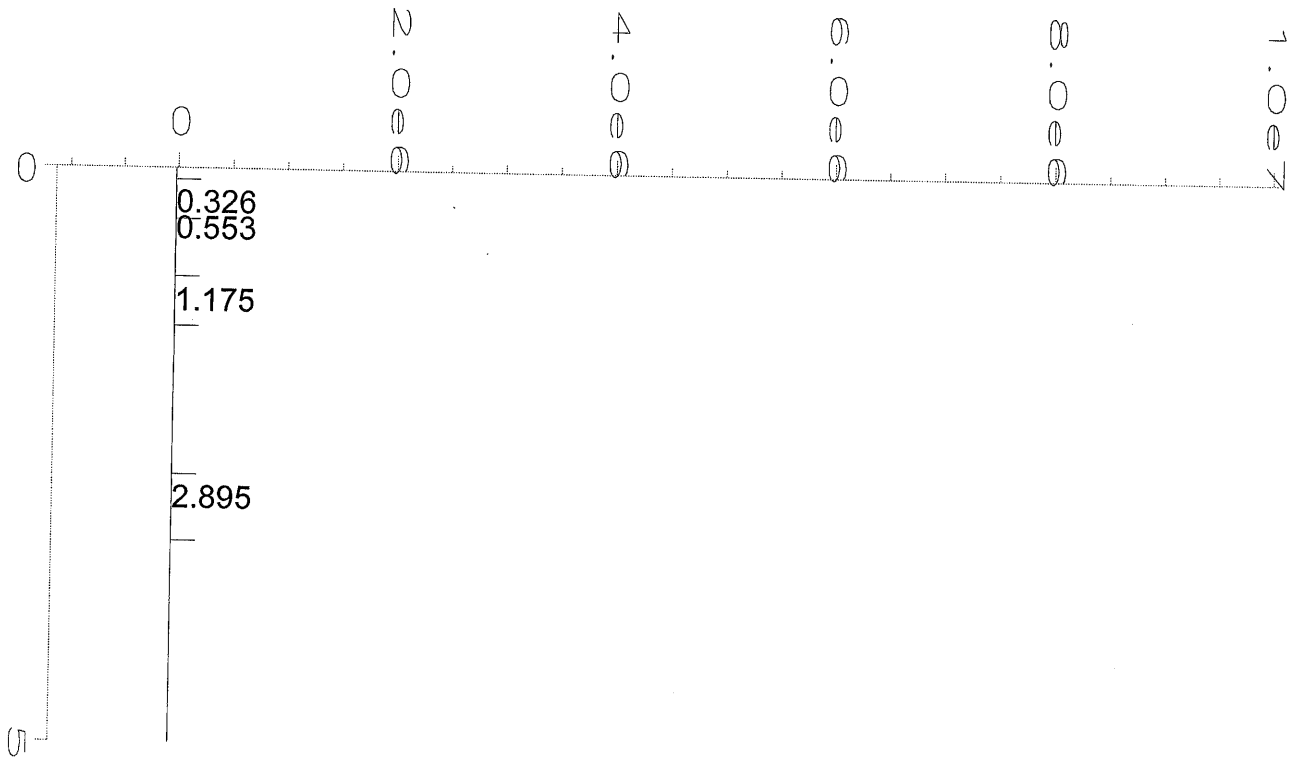
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443508A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-408
Run Time Bar Code:
Acquired on : 06 Dec 24 07:47 PM
Report Created on: 06 Dec 24 07:53 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443508A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.326	12860	846	BV	0.188	25.9134
2	0.553	14322	846	VV	0.206	28.8590
3	1.175	11232	1464	VB	0.095	22.6318
4	2.895	11214	904	BB	0.161	22.5958

Total area = 49629

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	08		
File Name:	2443508A		
Description:	T-408		
Date Sampled:	11/19/24	**Time:**	10:19
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	19:47
QCBatch	120624-GCL		
Type	SA		
Can Number	805		
Can Factor	1.31		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**1.12E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443508A
QCBatch 120624-GCL
Can Factor 1.31
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.31
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 7965
RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.92	1.92	1.26	1.26	1.26	0.50	0.66	1.97	0.66	1.97	0.43	1.29	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 08

File Name:	2443508A	**Date Sampled:**	11/19/24	**Time:**	10:19
Description:	T-408	**Date Analyzed:**	12/06/24	**Time:**	19:47
Can/Tube#:	805	**Dilution Factor:**	1.31		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	1.92	0.43	1.29	1.26	J

Sample Data Packages

SDG Number 224435

Lab Id Number 9

Client ID T-409

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 9

Client: C.E. Schmidt
Client ID: T-409
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 631
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:45
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416 ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

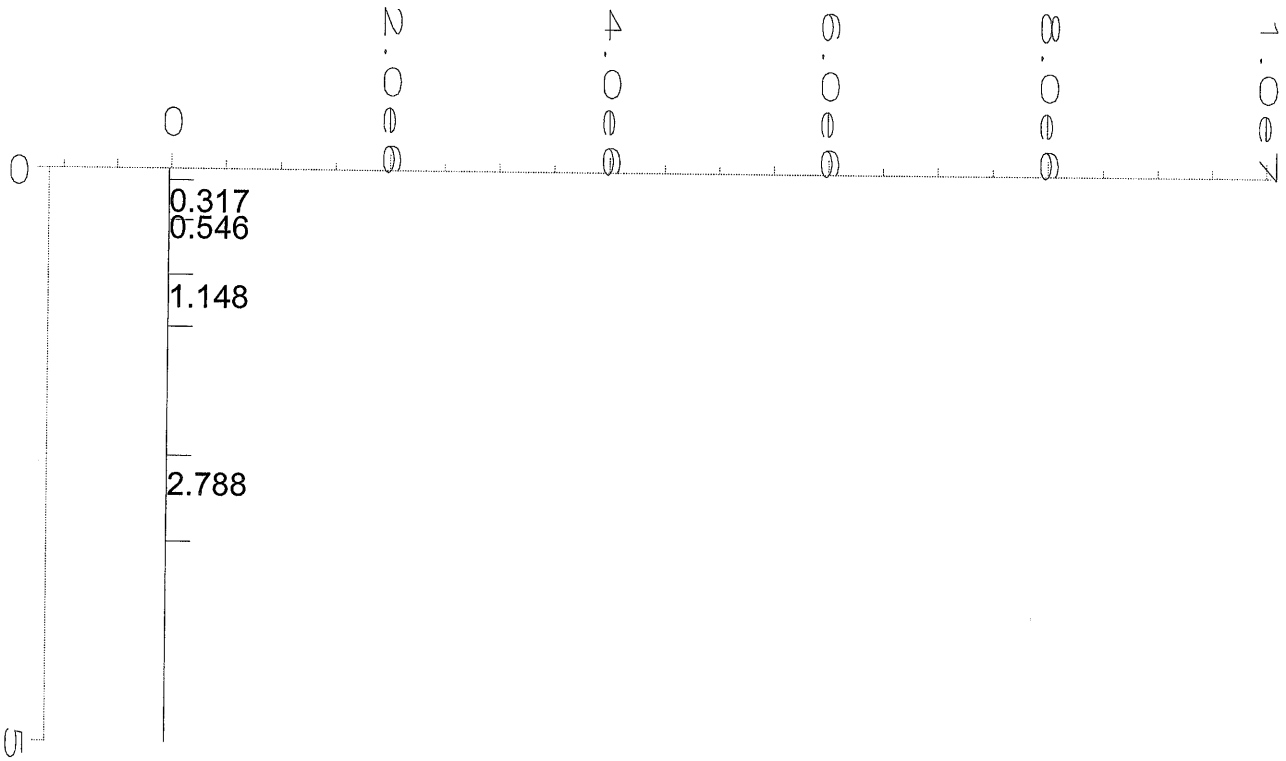
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443509A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-409
Run Time Bar Code:
Acquired on : 06 Dec 24 07:58 PM
Report Created on: 06 Dec 24 08:03 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443509A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.317	13614	877	BV	0.203	15.3651
2	0.546	12152	712	VV	0.214	13.7140
3	1.148	10550	1456	VB	0.095	11.9064
4	2.788	52291	4255	BB	0.190	59.0145

Total area = 88607

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	09		
File Name:	2443509A		
Description:	T-409		
Date Sampled:	11/19/24	**Time:**	11:45
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	19:58
QCBatch	120624-GCL		
Type	SA		
Can Number	631		
Can Factor	1.36		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**5.23E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443509A
QCBatch 120624-GCL
Can Factor 1.36
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.36
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	**Lab Qual**
Methane	16.00	9.31	9.31	6.11	6.11	6.11	0.50	0.68	2.04	0.68	2.04	0.45	1.34	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Can/Tube#: 631
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/06/24 **Time:** 19:58
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	9.31	0.45	1.34	6.11	

Sample Data Packages

SDG Number **224435**

Lab Id Number **10**

Client ID T-410

Analytical Method ASTM D3416

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 10

Client: C.E. Schmidt
Client ID: T-410
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 714
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 11:59
Received: 11/21/2024 Time: 13:00

LABORATORY | **Analytical Test:** | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

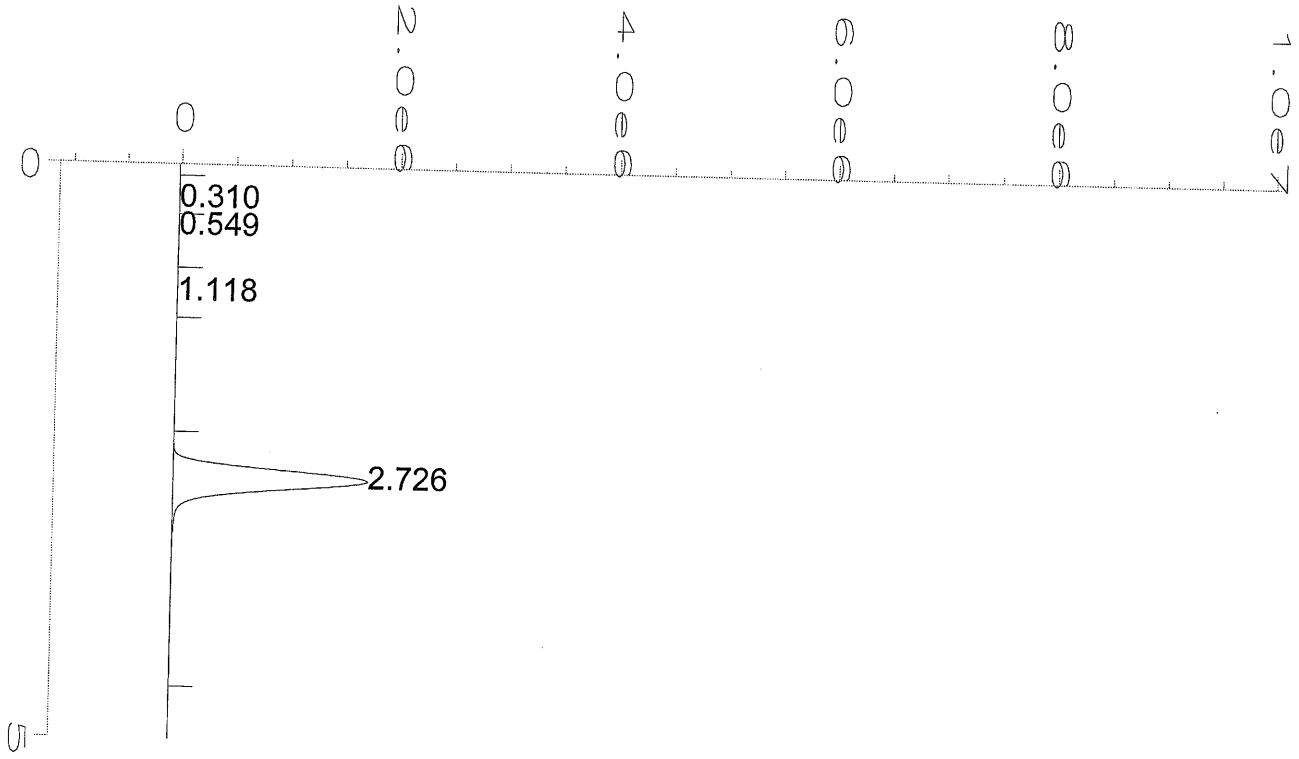
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443510A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-410
Run Time Bar Code:
Acquired on : 06 Dec 24 08:22 PM
Report Created on: 06 Dec 24 08:28 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443510A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.310	12766	856	BV	0.190	0.0587
2	0.549	13542	941	VV	0.175	0.0623
3	1.118	10118	1405	VB	0.090	0.0466
4	2.726	2.1694E+007	1773307	BB	0.190	99.8324

Total area = 2.17305E+007

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	10		
File Name:	2443510A		
Description:	T-410		
Date Sampled:	11/19/24	**Time:**	11:59
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	20:22
QCBatch	120624-GCL		
Type	SA		
Can Number	714		
Can Factor	1.36		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**2.17E+07**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443510A
QCBatch 120624-GCL
Can Factor 1.36
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.36
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration
RL Factor: 3 L10 = Curve

RF: 7965
RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	3863.68	3,863.68	2,533.56	2,533.56	2,533.56	0.50	0.68	2.04	0.68	2.04	0.45	1.34	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Can/Tube#: 714
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/06/24 **Time:** 20:22
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	3,863.68	0.45	1.34	2,533.56	

Sample Data Packages

SDG Number 224435

Lab Id Number 11

Client ID T-411

Analytical Method ASTM D3416

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Sample Calculations
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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 11

Client: C.E. Schmidt
Client ID: T-411
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 551
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:51
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location:

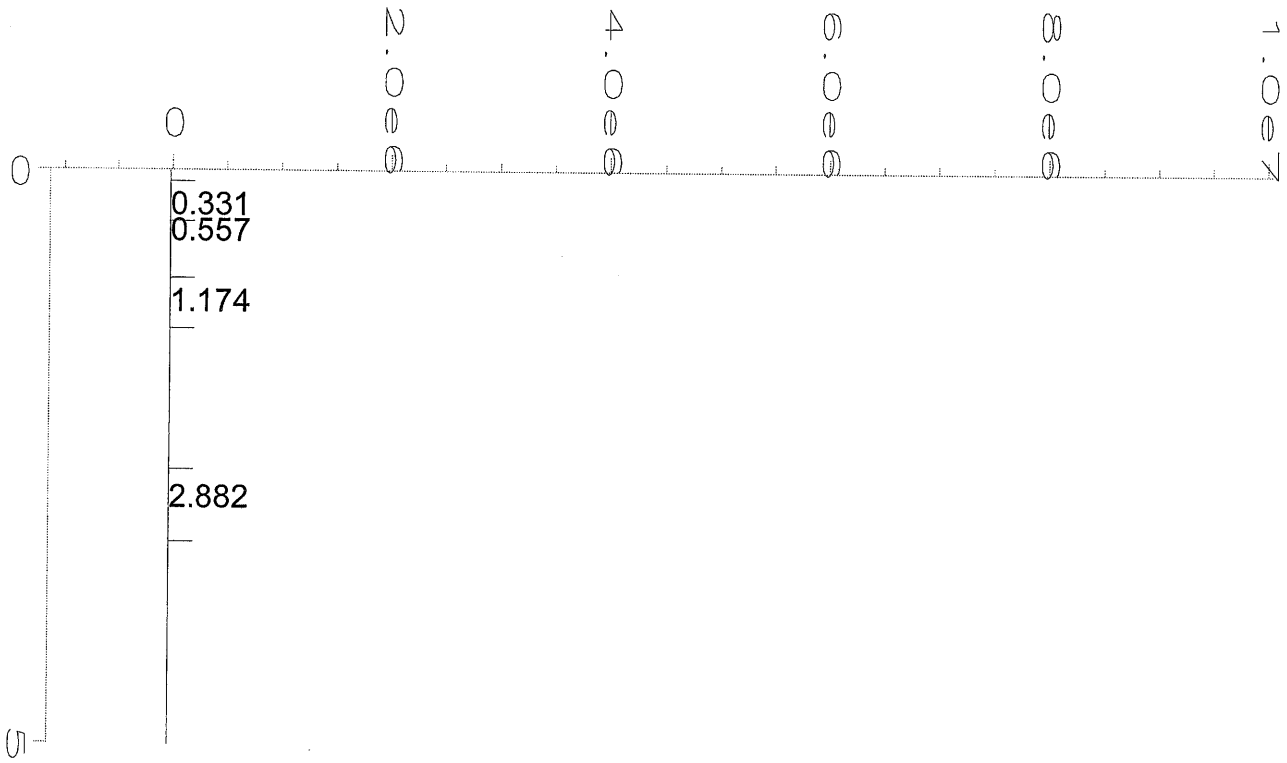
InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions | Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443511A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-411
Run Time Bar Code:
Acquired on : 06 Dec 24 08:48 PM
Report Created on: 06 Dec 24 08:53 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443511A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.331	14045	895	BV	0.204	24.3585
2	0.557	15093	913	VV	0.207	26.1773
3	1.174	11297	1451	VB	0.099	19.5936
4	2.882	17223	1381	BB	0.174	29.8706

Total area = 57658

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	11				
File Name:	2443511A			**SF:**	2
Description:	T-411			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	11:51	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	20:48	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	551				
Can Factor	1.28				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**1.72E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443511A
QCBatch 120624-GCL
Can Factor 1.28
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.28
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**
Calibration: **L10** **=>** L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	**Lab Qual**
Methane	16.00	2.89	2.89	1.89	1.89	1.89	0.50	0.64	1.92	0.64	1.92	0.42	1.26	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 11

File Name:	2443511A	**Date Sampled:**	11/19/24	**Time:**	11:51
Description:	T-411	**Date Analyzed:**	12/06/24	**Time:**	20:48
Can/Tube#:	551	**Dilution Factor:**	1.28		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	2.89	0.42	1.26	1.89	

Sample Data Packages

SDG Number **224435**

Lab Id Number **12**

Client ID T-412

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 12

Client: C.E. Schmidt
Client ID: T-412
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 881
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 12:06
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

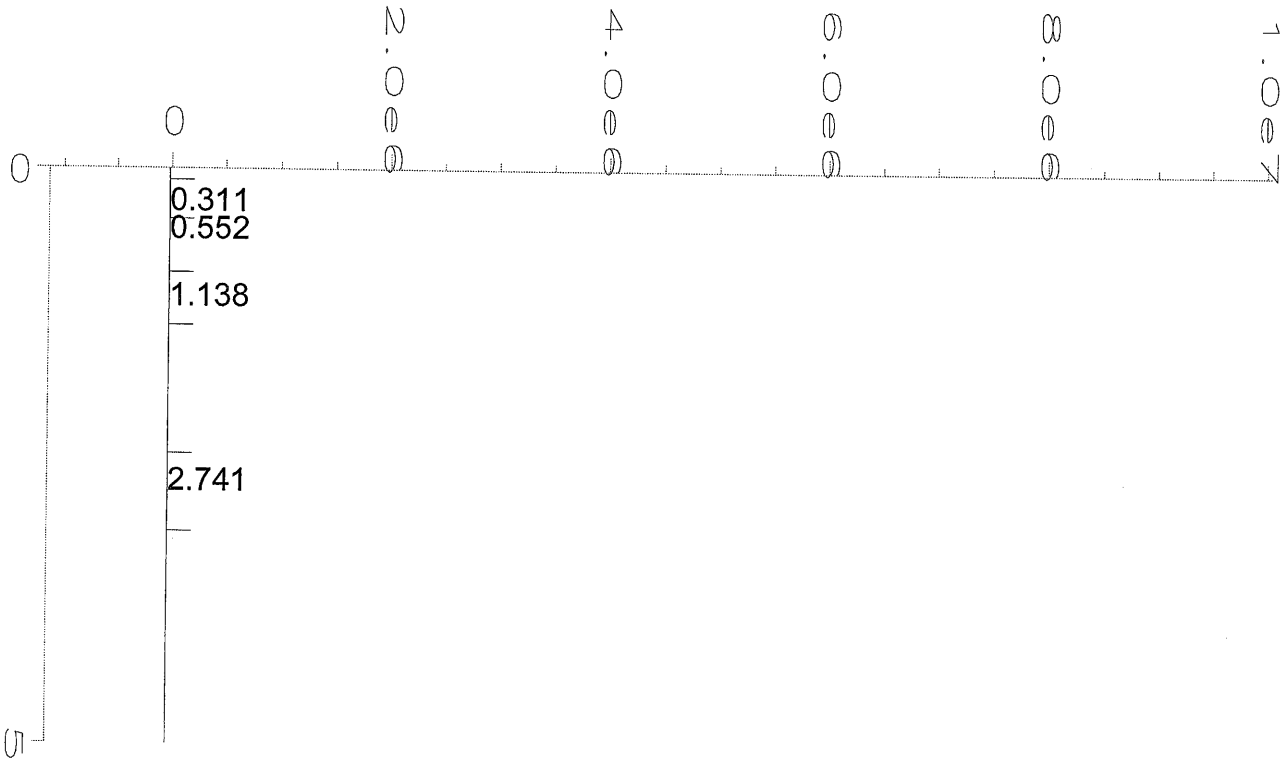
Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443512A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-412
Run Time Bar Code:
Acquired on : 06 Dec 24 09:02 PM
Report Created on: 06 Dec 24 09:07 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443512A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.311	12981	858	BV	0.190	18.9423
2	0.552	11119	769	VV	0.177	16.2250
3	1.138	10169	1502	VB	0.085	14.8382
4	2.741	34262	2803	BB	0.174	49.9945

Total area = 68531

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	12		
File Name:	2443512A		
Description:	T-412		
Date Sampled:	11/19/24	**Time:**	12:06
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	21:02
QCBatch	120624-GCL		
Type	SA		
Can Number	881		
Can Factor	1.32		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**3.43E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443512A
QCBatch 120624-GCL
Can Factor 1.32
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.32
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	5.92	5.92	3.88	3.88	3.88	0.50	0.66	1.98	0.66	1.98	0.43	1.30	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Can/Tube#: 881
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 12/06/24 **Time:** 21:02
Dilution Factor: 1.32

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.98	5.92	0.43	1.30	3.88	

Sample Data Packages

SDG Number **224435**
Lab Id Number **13**

Client ID T-413

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 13

Client: C.E. Schmidt
Client ID: T-413
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 766
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

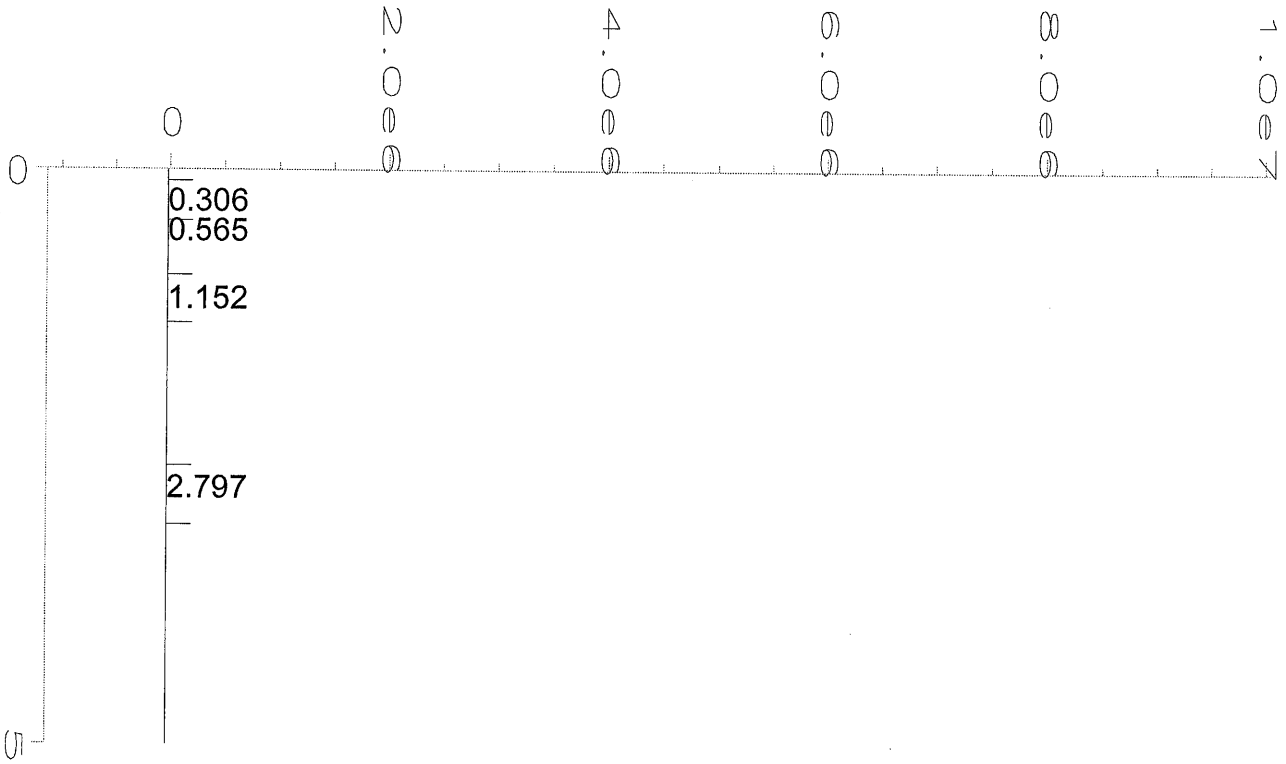
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443513A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-413
Run Time Bar Code:
Acquired on : 06 Dec 24 09:08 PM
Report Created on: 06 Dec 24 09:14 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443513A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.306	12527	840	BV	0.175	28.8676
2	0.565	13966	1093	VV	0.158	32.1841
3	1.152	11164	1504	VB	0.093	25.7268
4	2.797	5737	487	BB	0.146	13.2215

Total area = 43394

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	13				
File Name:	2443513A			**SF:**	2
Description:	T-413			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	13:37	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	21:08	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	766				
Can Factor	1.34				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**5.74E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443513A
QCBatch 120624-GCL
Can Factor 1.34
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.34
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**
Calibration: **L10** => L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.01	1.01	0.66	0.66	0.66	0.50	0.67	2.01	0.67	2.01	0.44	1.32	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 13

File Name: 2443513A
Description: T-413
Can/Tube#: 766
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/06/24 **Time:** 21:08
Dilution Factor: 1.34

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.67	2.01	1.01	0.44	1.32	0.66	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **14**

Client ID T-414

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 14

Client: C.E. Schmidt
Client ID: T-414
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 725
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test: | Sample Location:

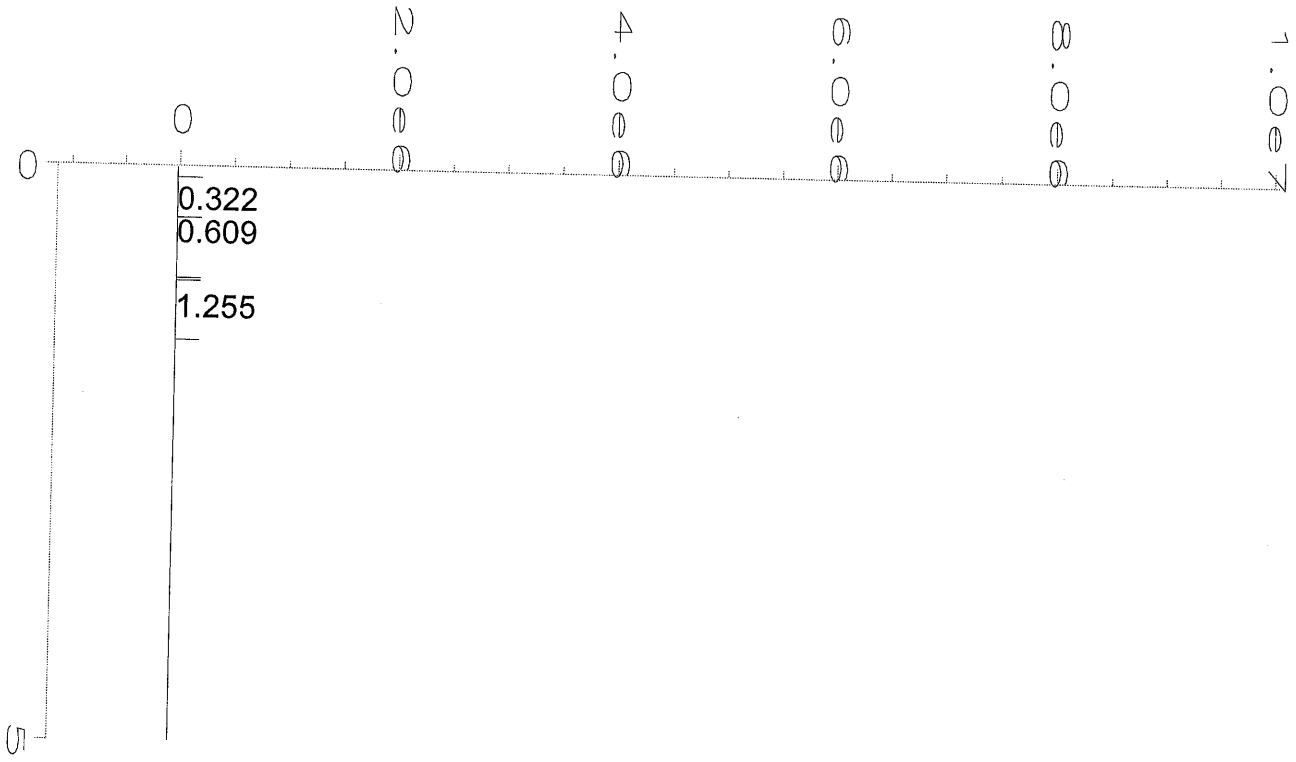
InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions | Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443514A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-414
Run Time Bar Code:
Acquired on : 06 Dec 24 09:15 PM
Report Created on: 06 Dec 24 09:20 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443514A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.322	11067	736	BV	0.190	34.2331
2	0.609	13673	1265	VB	0.136	42.2930
3	1.255	7589	1099	BB	0.087	23.4739

Total area = 32329

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	14		
File Name:	2443514A		
Description:	T-414		
Date Sampled:	11/19/24	**Time:**	13:37
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	21:15
QCBatch	120624-GCL		
Type	SA		
Can Number	725		
Can Factor	1.32		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**0.00E+00**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443514A
QCBatch 120624-GCL
Can Factor 1.32
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.32
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 7965
RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.66	1.98	0.66	1.98	0.43	1.30	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Can/Tube#: 725
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/06/24 **Time:** 21:15
Dilution Factor: 1.32

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.98	ND	0.43	1.30	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **15**

Client ID T-415

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 15

Client: C.E. Schmidt
Client ID: T-415
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 896
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 13:38
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

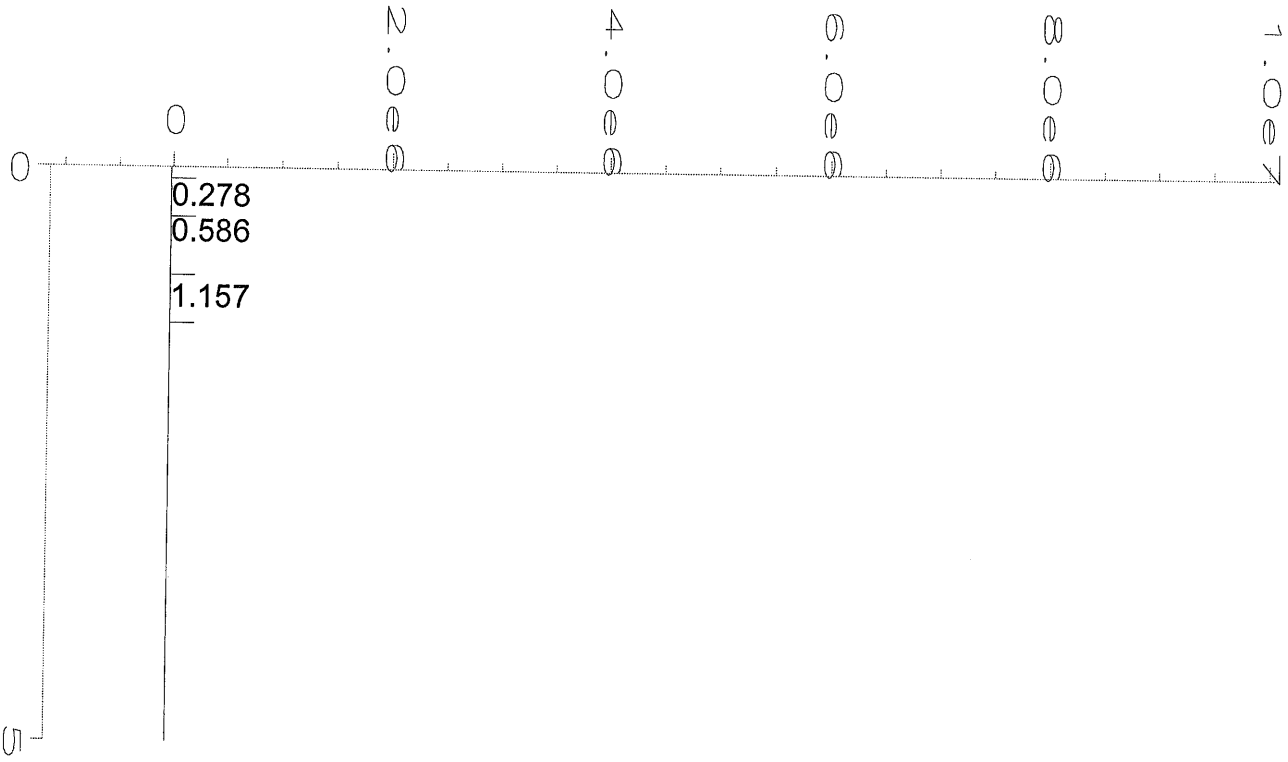
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443515A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-415
Run Time Bar Code:
Acquired on : 06 Dec 24 09:21 PM
Report Created on: 06 Dec 24 09:26 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443515A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.278	9897	762	BV	0.169	32.1378
2	0.586	12221	1357	VV	0.131	39.6829
3	1.157	8678	1330	VB	0.084	28.1794

Total area = 30797

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	15				
File Name:	2443515A			**SF:**	2
Description:	T-415			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	13:38	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	21:21	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	896				
Can Factor	1.31				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**0.00E+00**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443515A
QCBatch 120624-GCL
Can Factor 1.31
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.31
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.66	1.97	0.66	1.97	0.43	1.29	**U**

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 15

File Name:	2443515A	**Date Sampled:**	11/19/24	**Time:**	13:38
Description:	T-415	**Date Analyzed:**	12/06/24	**Time:**	21:21
Can/Tube#:	896	**Dilution Factor:**	1.31		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	ND	0.43	1.29	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **16**

Client ID T-416

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 16

Client: C.E. Schmidt
Client ID: T-416
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 659
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:24
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location: | Holding Time:

InstrumentMethod:	Item Description:	
GCL	ASTM D3416	ASTM D3416 Low Level Methane 30

Analysis Instructions

Sample Type:

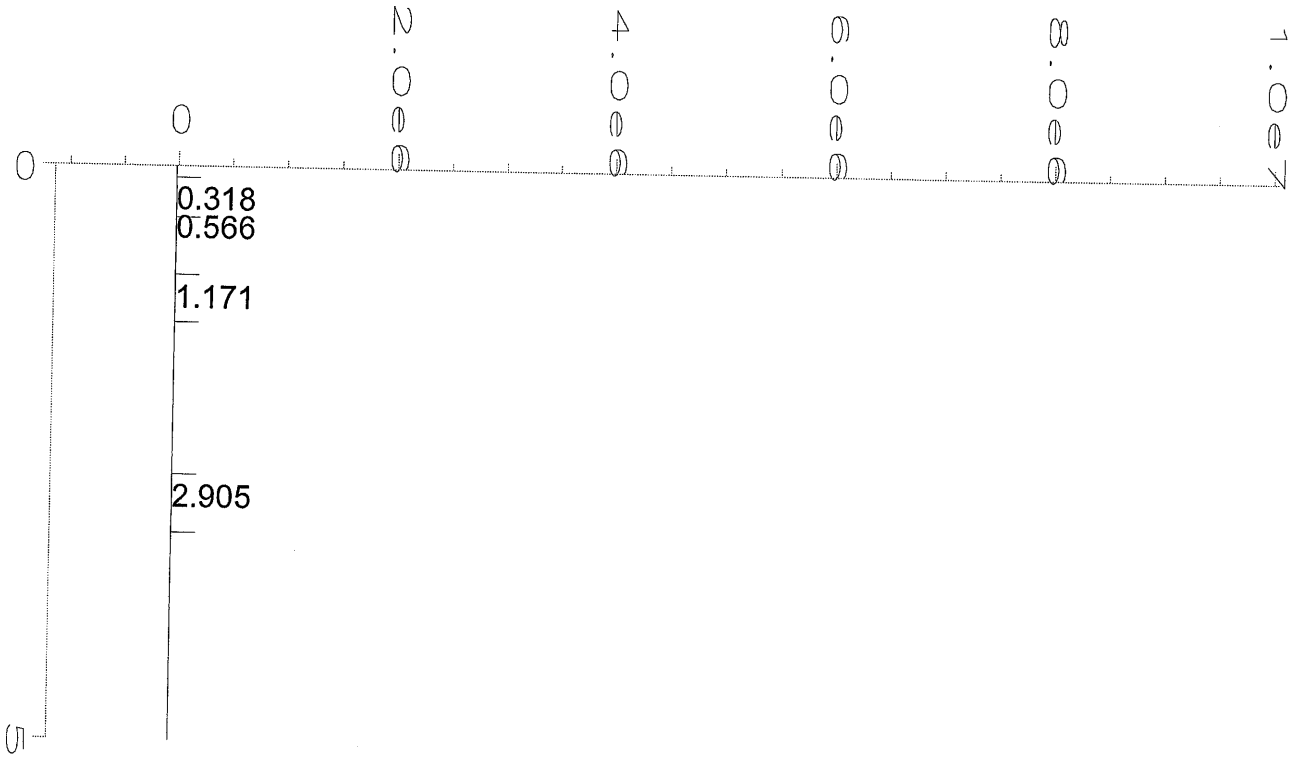
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443516A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-416
Run Time Bar Code:
Acquired on : 06 Dec 24 09:28 PM
Report Created on: 06 Dec 24 09:34 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443516A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.318	12996	861	BV	0.189	30.0672
2	0.566	15011	1091	VV	0.171	34.7287
3	1.171	9623	1309	VB	0.092	22.2627
4	2.905	5594	466	BB	0.151	12.9413

Total area = 43223

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	16		
File Name:	2443516A		
Description:	T-416		
Date Sampled:	11/19/24	**Time:**	13:24
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/06/24	**Time:**	21:28
QCBatch	120624-GCL		
Type	SA		
Can Number	659		
Can Factor	1.42		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**5.59E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name:	2443516A		**SDG:**	**224435**				
QCBatch	120624-GCL							
Can Factor	1.42		**Calibration:**	**L10**	**=>**	L9 = Daily Calibration	RF:	7965
Volume:	5.00	ml	**RL Factor:**	**3**		L10 = Curve	RF:	7636
Base Volume	5.00	ml					CAL:	7636
Dilution Factor	1.42							
Gas Constant:	24.4							
Decimal Places:	2							

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.04	1.04	0.68	0.68	0.68	0.50	0.71	2.13	0.71	2.13	0.47	1.40	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Can/Tube#: 659
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/06/24 **Time:** 21:28
Dilution Factor: 1.42

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.71	2.13	1.04	0.47	1.40	0.68	J

Sample Data Packages

SDG Number 224435
Lab Id Number 17

Client ID T-417

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 17

Client: C.E. Schmidt
Client ID: T-417
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 899
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:29
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions | Sample Type:

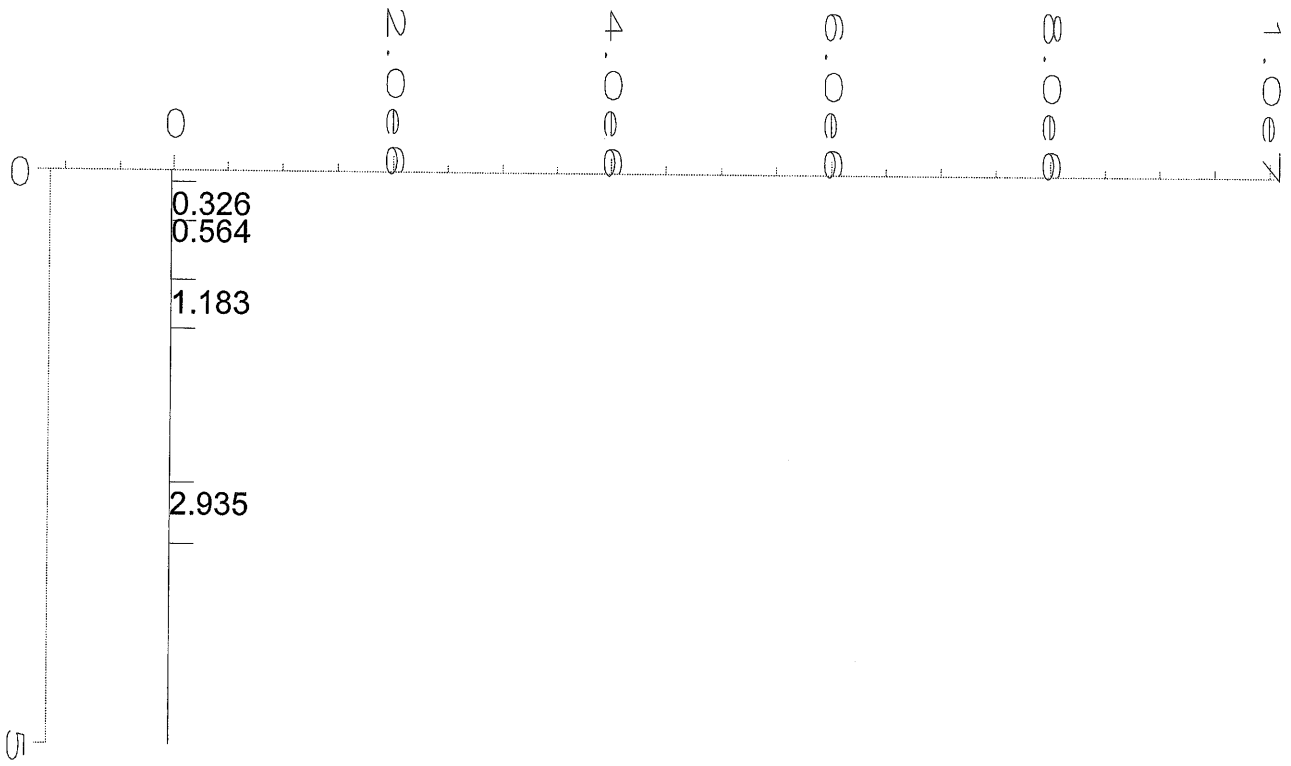
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions | **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443517A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-417
Run Time Bar Code:
Acquired on : 06 Dec 24 09:39 PM
Report Created on: 06 Dec 24 09:44 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443517A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.326	12760	847	BV	0.187	27.1567
2	0.564	16533	1118	VV	0.178	35.1870
3	1.183	10843	1365	VB	0.099	23.0777
4	2.935	6850	560	BB	0.153	14.5786

Total area = 46986

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	17				
File Name:	2443517A			**SF:**	2
Description:	T-417			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	13:29	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	21:39	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	899				
Can Factor	1.30				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**6.85E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name:	2443517A		**SDG:**	**224435**			
QCBatch	120624-GCL						
Can Factor	1.30		**Calibration:**	**L10**	=>	L9 = Daily Calibration	RF: 7965
Volume:	5.00	ml	**RL Factor:**	**3**		L10 = Curve	RF: 7636
Base Volume	5.00	ml					CAL: 7636
Dilution Factor	1.30						
Gas Constant:	24.4						
Decimal Places:	2						

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.17	1.17	0.76	0.76	0.76	0.50	0.65	1.95	0.65	1.95	0.43	1.28	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 17

File Name:	2443517A	**Date Sampled:**	11/19/24	**Time:**	13:29
Description:	T-417	**Date Analyzed:**	12/06/24	**Time:**	21:39
Can/Tube#:	899	**Dilution Factor:**	1.30		
QC_Batch:	120624-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.65	1.95	1.17	0.43	1.28	0.76	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **18**

Client ID T-418

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 18

Client: C.E. Schmidt
Client ID: T-418
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 522
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:40
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

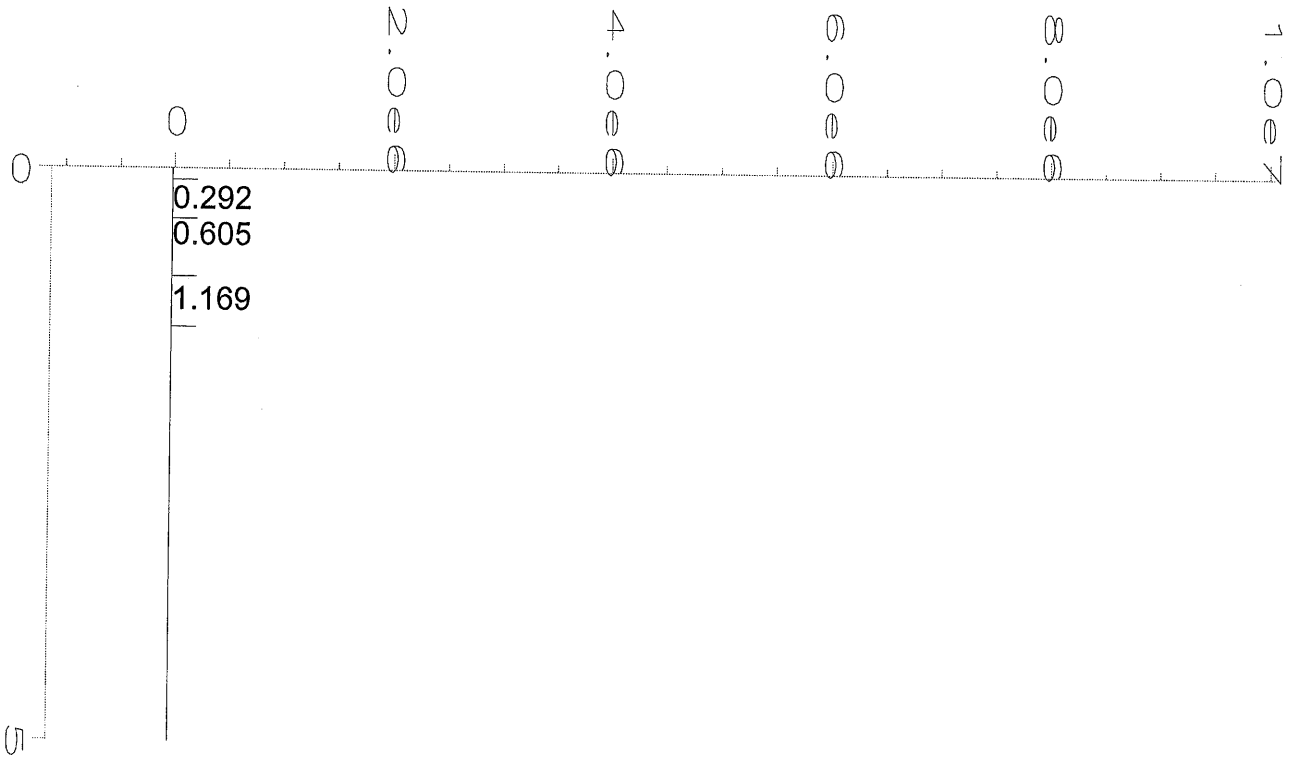
Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only
EDD Instructions | EDD Type:



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\2443518A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-418
Run Time Bar Code:
Acquired on : 06 Dec 24 10:02 PM
Report Created on: 06 Dec 24 10:07 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\2443518A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.292	9738	750	BV	0.165	28.5275
2	0.605	14082	1490	VV	0.122	41.2539
3	1.169	10315	1441	VB	0.089	30.2186

Total area = 34136

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	18				
File Name:	2443518A			**SF:**	2
Description:	T-418			**Not Detected Flag:**	ND
Date Sampled:	11/19/24	**Time:**	13:40	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/06/24	**Time:**	22:02	**Instrument**	GCL
QCBatch	120624-GCL			**Volume:**	5.0
Type	SA				
Can Number	522				
Can Factor	1.25				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**0.00E+00**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443518A
QCBatch 120624-GCL
Can Factor 1.25
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.25
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.63	1.88	0.63	1.88	0.41	1.23	**U**

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Can/Tube#: 522
QC_Batch: 120624-GCL

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/06/24 **Time:** 22:02
Dilution Factor: 1.25

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.63	1.88	ND	0.41	1.23	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **19**

Client ID T-501

Analytical Method ASTM D3416

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 19

Client: C.E. Schmidt
Client ID: T-501
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 664
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:30
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

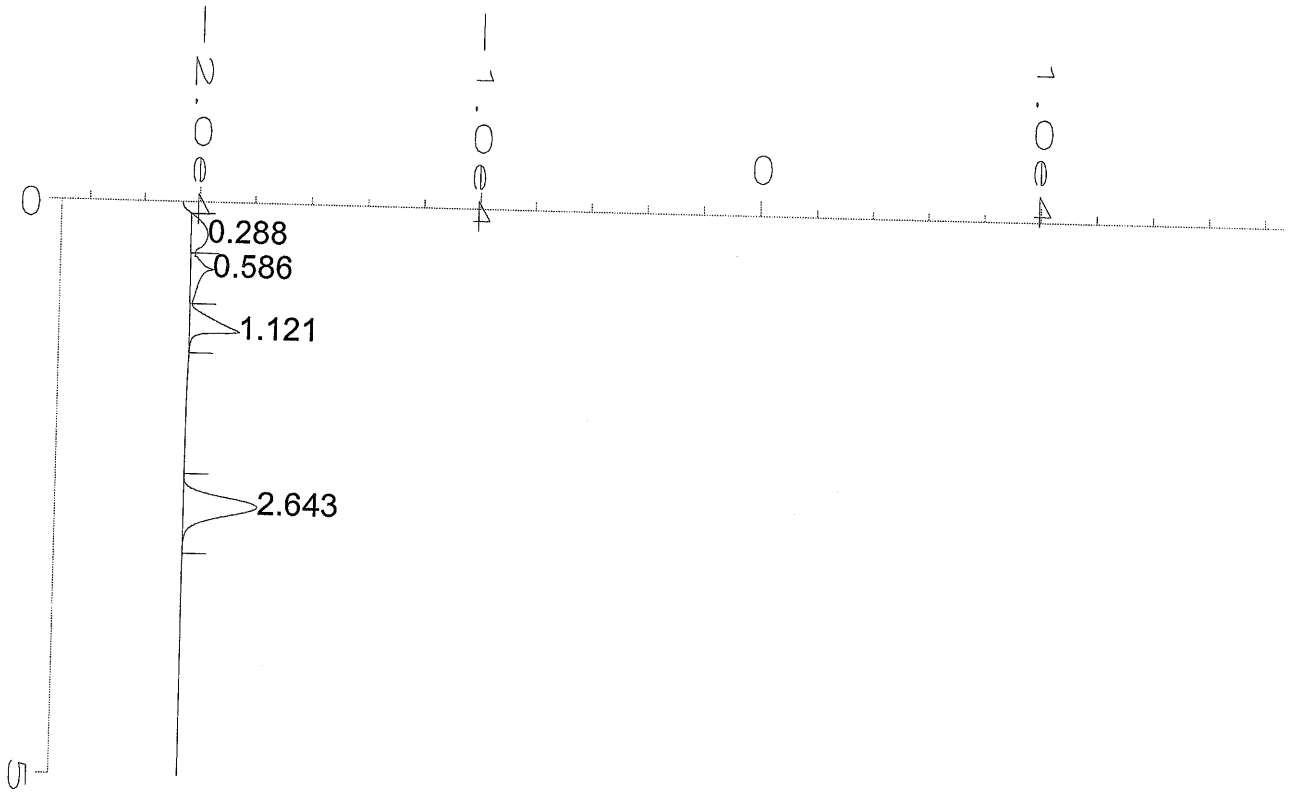
InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443519A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-501
Run Time Bar Code:
Acquired on : 09 Dec 24 11:45 AM
Report Created on: 09 Dec 24 11:50 AM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443519A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.288	8594	609	BV	0.181	13.8172
2	0.586	8493	914	VV	0.126	13.6542
3	1.121	13813	1777	VB	0.101	22.2082
4	2.643	31298	2661	BB	0.178	50.3203

Total area = 62198

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	19		
File Name:	2443519A		
Description:	T-501		
Date Sampled:	11/20/24	**Time:**	8:30
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/09/24	**Time:**	11:45
QCBatch	120924-GCL		
Type	SA		
Can Number	664		
Can Factor	1.28		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**31298**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443519A
QCBatch 120924-GCL
Can Factor 1.28
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.28
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	**Lab Qual**
Methane	16.00	3.42	3.42	2.24	2.24	2.24	0.50	0.64	1.92	0.64	1.92	0.42	1.26	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 19

File Name: 2443519A
Description: T-501
Can/Tube#: 664
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 12/09/24 **Time:** 11:45
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	3.42	0.42	1.26	2.24	

Sample Data Packages

SDG Number **224435**

Lab Id Number **20**

Client ID T-502

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 20

Client: C.E. Schmidt
Client ID: T-502
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 716
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

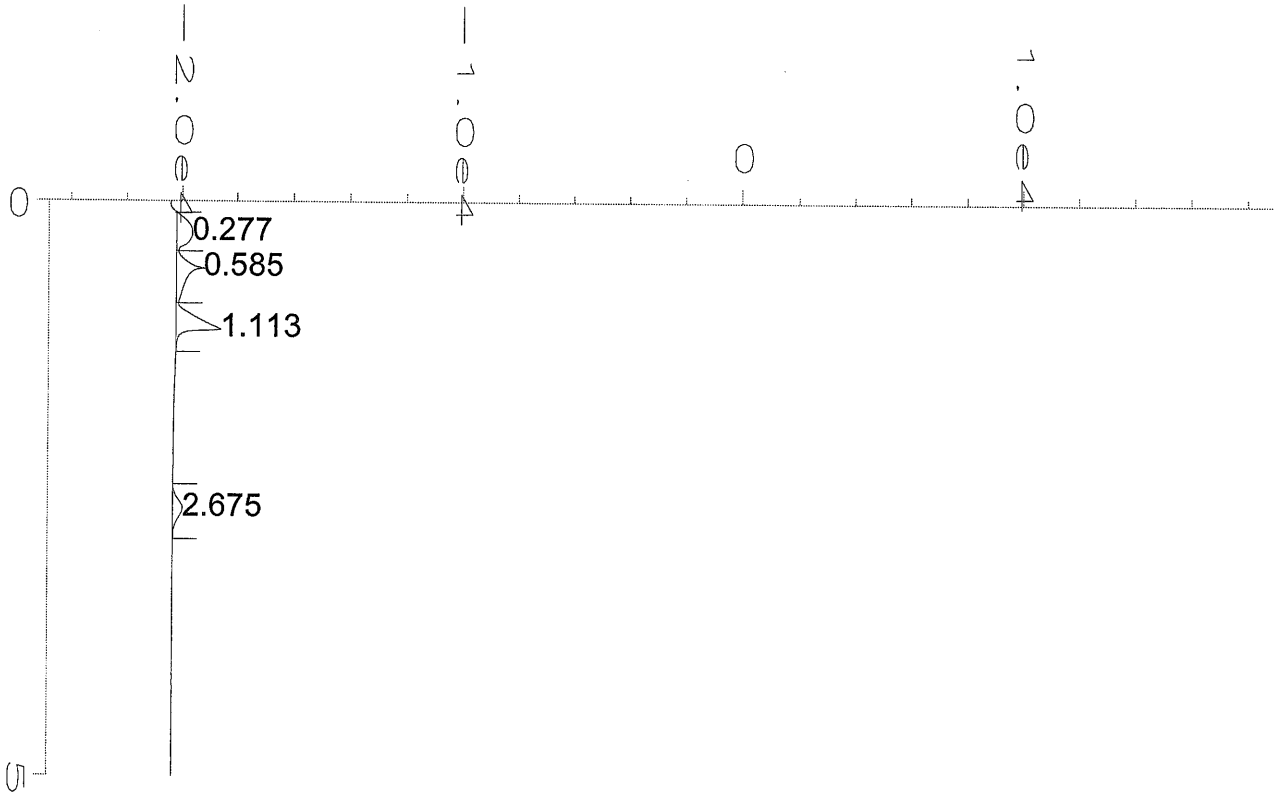
Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443520A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-502
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 11:52 AM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 11:57 AM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443520A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.277	7381	564	BV	0.166	23.4533
2	0.585	8584	1019	VV	0.120	27.2754
3	1.113	11556	1624	VB	0.088	36.7205
4	2.675	3950	343	BB	0.147	12.5507

Total area = 31471

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	20		
File Name:	2443520A		
Description:	T-502		
Date Sampled:	11/20/24	**Time:**	8:37
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/09/24	**Time:**	11:52
QCBatch	120924-GCL		
Type	SA		
Can Number	716		
Can Factor	1.33		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**3950**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443520A
QCBatch 120924-GCL
Can Factor 1.33
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.33
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.45	ND	ND	0		0.50	0.67	2.00	0.67	2.00	0.44	1.31	**U**

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 20

File Name: 2443520A
Description: T-502
Can/Tube#: 716
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 12/09/24 **Time:** 11:52
Dilution Factor: 1.33

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.67	2.00	ND	0.44	1.31	ND	

Sample Data Packages

SDG Number 224435
Lab Id Number 21

Client ID T-503

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 21

Client: C.E. Schmidt
Client ID: T-503
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 751
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:32
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

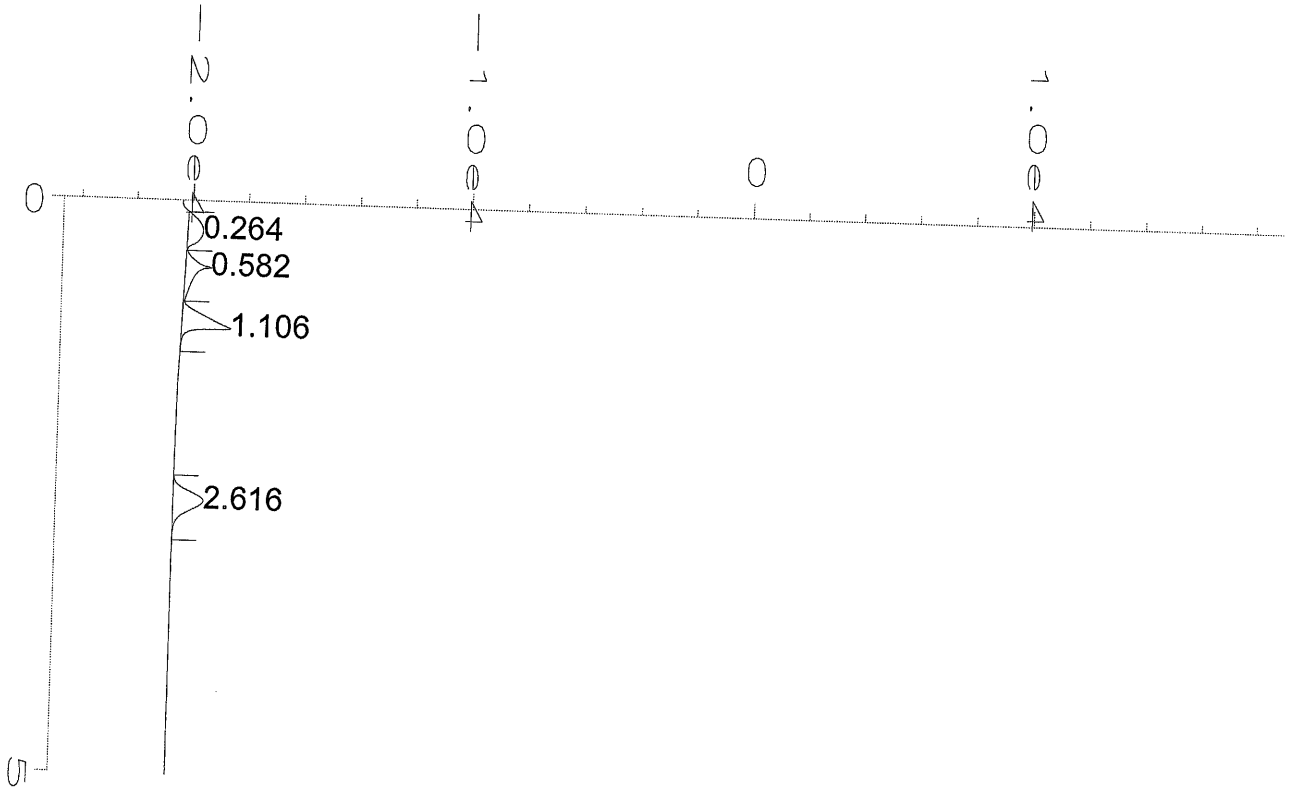
InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416 ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443521A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-503
Run Time Bar Code:
Acquired on : 09 Dec 24 11:59 AM
Report Created on: 09 Dec 24 12:04 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443521A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.264	6841	537	BV	0.163	17.6308
2	0.582	7216	1011	VV	0.097	18.5959
3	1.106	12498	1758	VB	0.089	32.2083
4	2.616	12248	1063	BB	0.154	31.5651

Total area = 38803

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435		
Lab Id:	21		
File Name:	2443521A		
Description:	T-503		
Date Sampled:	11/20/24	**Time:**	8:32
Date Received:	11/21/24	**Time:**	13:00
Date Analyzed:	12/09/24	**Time:**	11:59
QCBatch	120924-GCL		
Type	SA		
Can Number	751		
Can Factor	1.28		

Method: ASTM D3416

SF:	2
Not Detected Flag:	ND
Matrix	AA
Type	TRG
Instrument	GCL
Volume:	5.0

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**12248**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name:	2443521A		**SDG:**	**224435**			
QCBatch	120924-GCL						
Can Factor	1.28		**Calibration:**	**L10**	=>	L9 = Daily Calibration	RF: 10259
Volume:	5.00	ml	**RL Factor:**	**3**		L10 = Curve	RF: 11704
Base Volume	5.00	ml					CAL: 11704
Dilution Factor	1.28						
Gas Constant:	24.4						
Decimal Places:	2						

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.34	1.34	0.88	0.88	0.88	0.50	0.64	1.92	0.64	1.92	0.42	1.26	**J**

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 21

File Name:	2443521A	**Date Sampled:**	11/20/24	**Time:**	8:32
Description:	T-503	**Date Analyzed:**	12/09/24	**Time:**	11:59
Can/Tube#:	751	**Dilution Factor:**	1.28		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	1.34	0.42	1.26	0.88	J

Sample Data Packages

SDG Number 224435

Lab Id Number 22

Client ID T-504

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 22

Client: C.E. Schmidt
Client ID: T-504
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 644
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:44
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

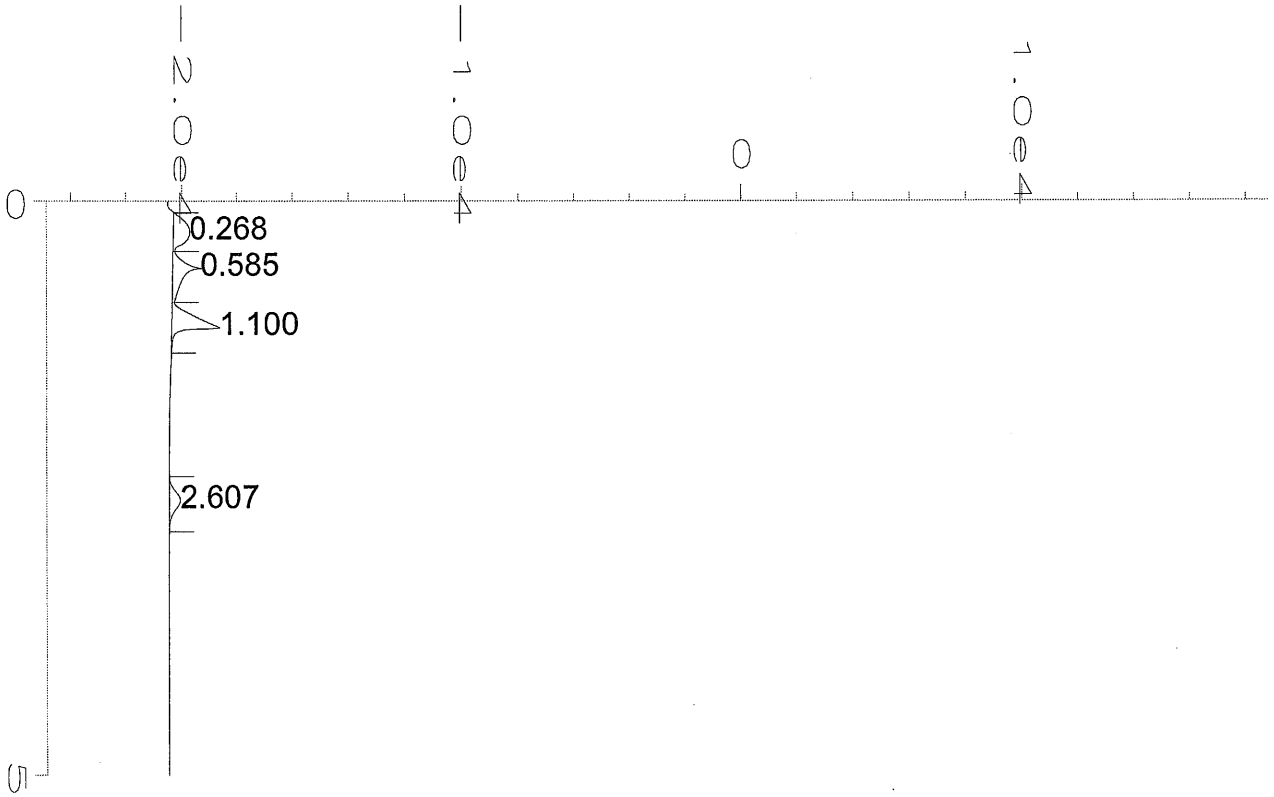
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443522A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-504
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:05 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 12:10 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443522A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.268	7321	572	BV	0.163	22.6220
2	0.585	8347	1035	VV	0.108	25.7925
3	1.100	12382	1732	VB	0.089	38.2608
4	2.607	4312	388	BB	0.143	13.3248

Total area = 32362

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	22				
File Name:	2443522A			**SF:**	2
Description:	T-504			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	8:44	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:05	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	644				
Can Factor	1.28				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**4312**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443522A
QCBatch 120924-GCL
Can Factor 1.28
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.28
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.47	ND	ND	0		0.50	0.64	1.92	0.64	1.92	0.42	1.26	**U**

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Can/Tube#: 644
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 12/09/24 **Time:** 12:05
Dilution Factor: 1.28

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	ND	0.42	1.26	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **23**

Client ID T-505

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 23

Client: C.E. Schmidt
Client ID: T-505
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 883
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:55
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

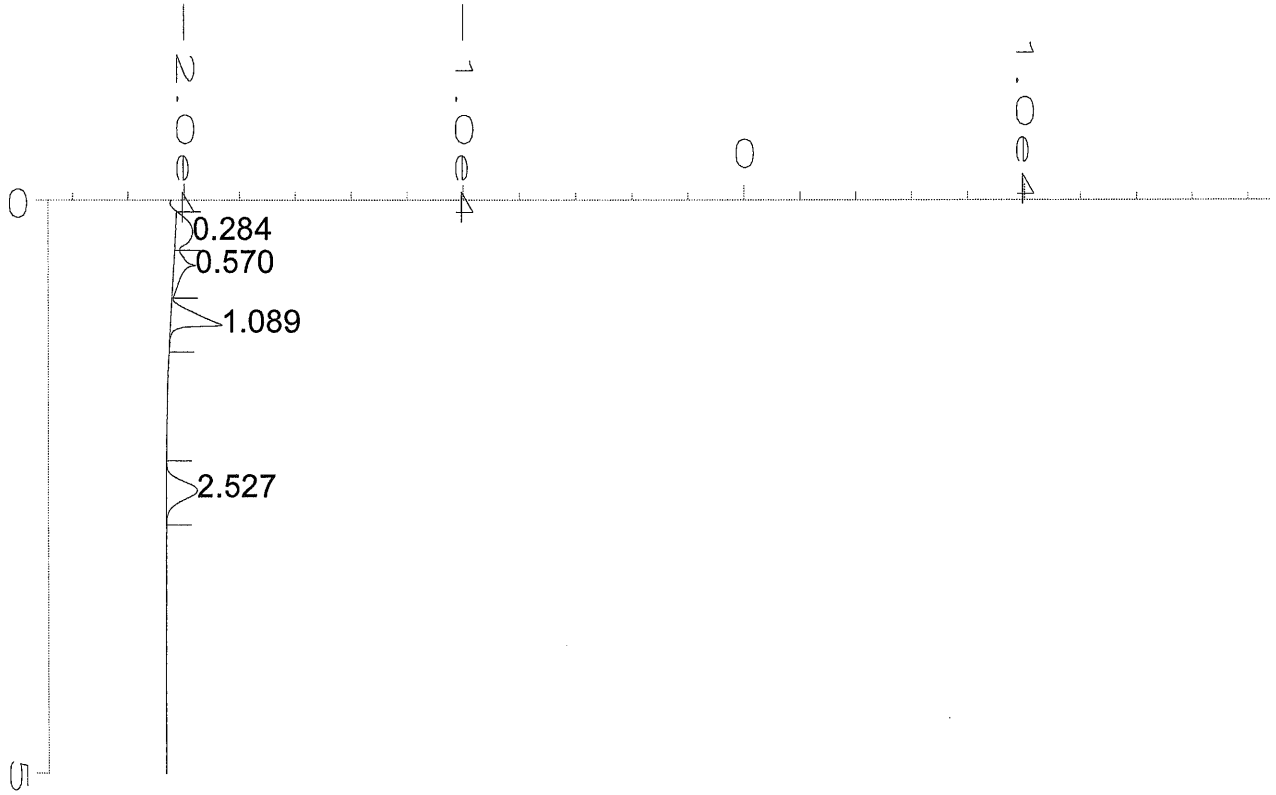
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443523A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-505
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:12 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 12:17 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443523A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.284	8322	597	BV	0.173	20.4027
2	0.570	6940	773	VV	0.114	17.0157
3	1.089	13180	1853	VB	0.090	32.3146
4	2.527	12345	1086	BB	0.149	30.2670

Total area = 40788

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	23				
File Name:	2443523A			**SF:**	2
Description:	T-505			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	10:55	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:12	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	883				
Can Factor	1.35				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**12345**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443523A
QCBatch 120924-GCL
Can Factor 1.35
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.35
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: 3 L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1.42	1.42	0.93	0.93	0.93	0.50	0.68	2.03	0.68	2.03	0.44	1.33	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 23

File Name:	2443523A	**Date Sampled:**	11/20/24	**Time:**	10:55
Description:	T-505	**Date Analyzed:**	12/09/24	**Time:**	12:12
Can/Tube#:	883	**Dilution Factor:**	1.35		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.03	1.42	0.44	1.33	0.93	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **24**

Client ID T-506

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 24

Client: C.E. Schmidt
Client ID: T-506
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 784
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:11
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions | Sample Type:

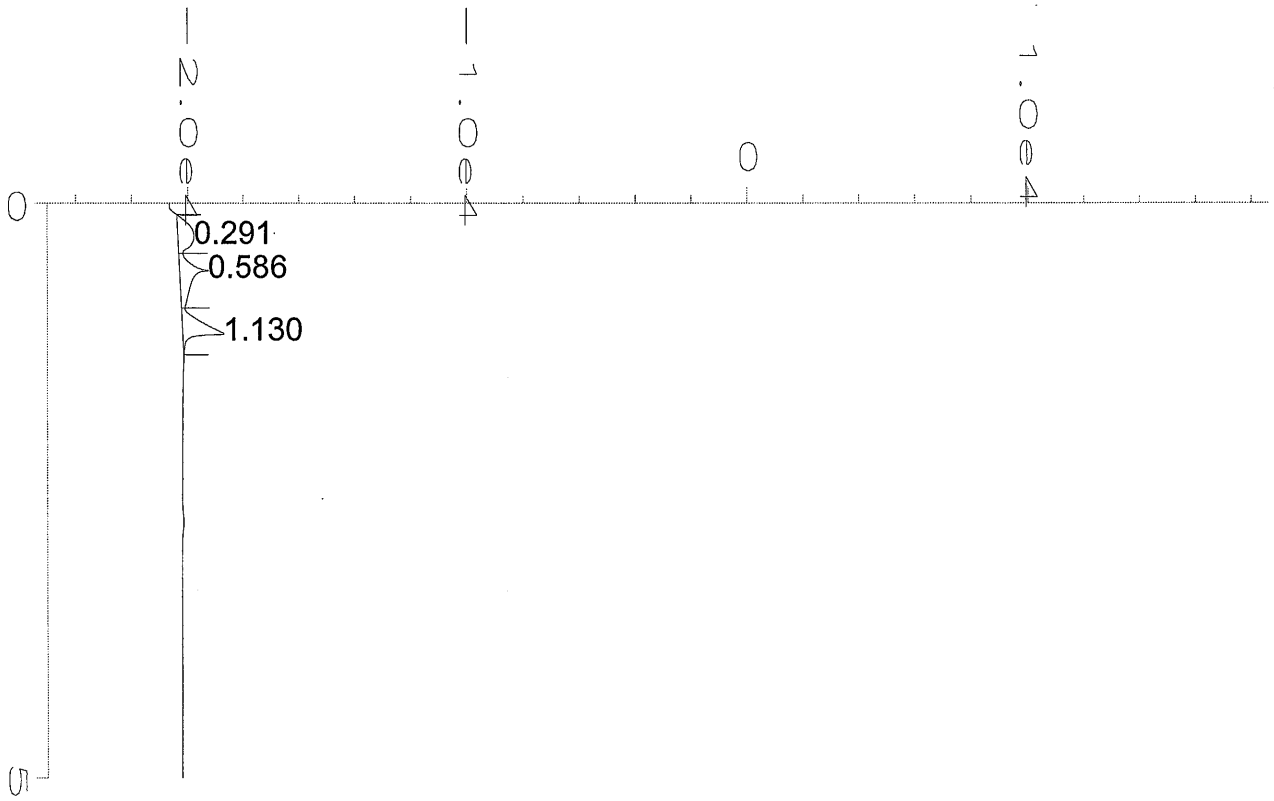
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443524A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-506
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:19 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 12:24 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443524A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.291	8055	583	BV	0.179	27.3525
2	0.586	10322	1046	VV	0.136	35.0517
3	1.130	11071	1467	VB	0.097	37.5958

Total area = 29447

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	24				
File Name:	2443524A			**SF:**	2
Description:	T-506			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	10:11	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:19	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	784				
Can Factor	1.36				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443524A
QCBatch 120924-GCL
Can Factor 1.36
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.36
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.68	2.04	0.68	2.04	0.45	1.34	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 24

File Name:	2443524A	**Date Sampled:**	11/20/24	**Time:**	10:11
Description:	T-506	**Date Analyzed:**	12/09/24	**Time:**	12:19
Can/Tube#:	784	**Dilution Factor:**	1.36		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	ND	0.45	1.34	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **25**

Client ID T-507

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 25

Client: C.E. Schmidt
Client ID: T-507
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 712
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:56
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

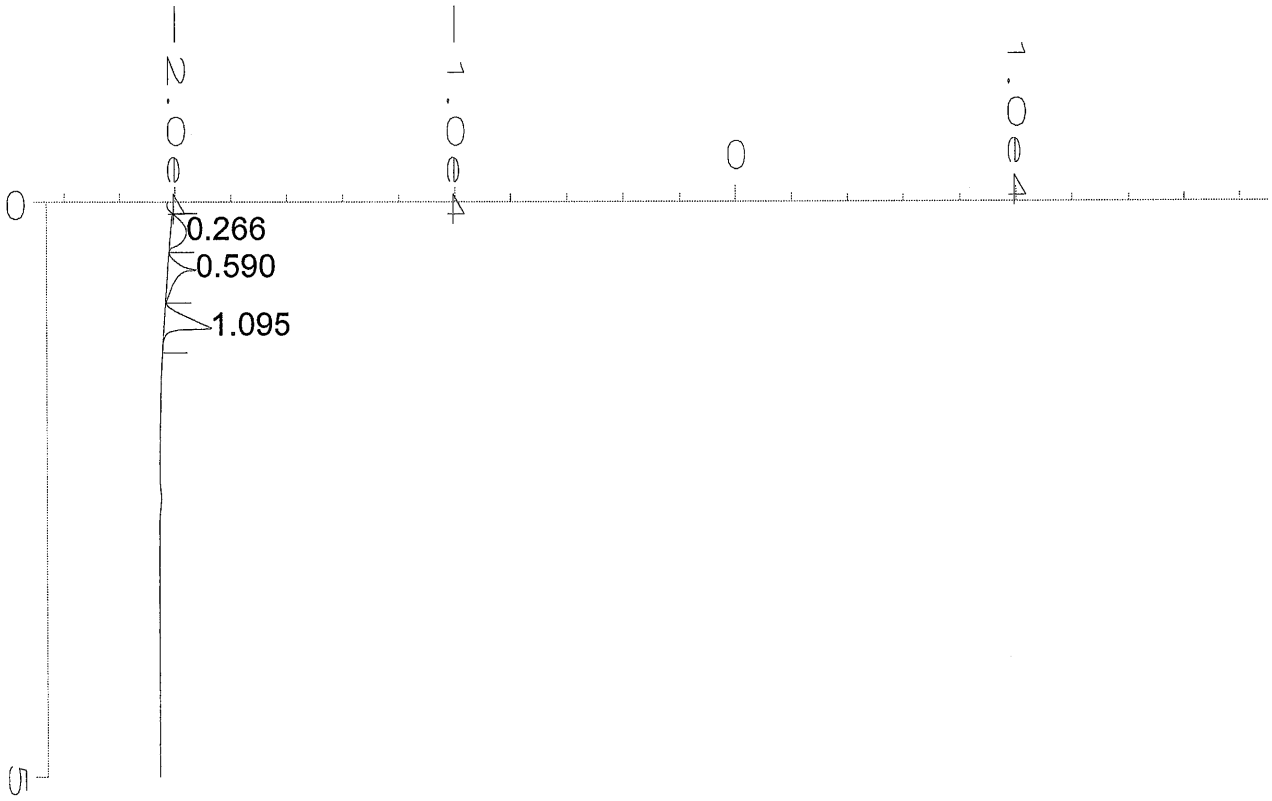
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443525A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-507
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:28 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 12:33 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443525A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.266	7005	555	BV	0.161	27.5353
2	0.590	6896	1011	PV	0.100	27.1068
3	1.095	11540	1712	VB	0.088	45.3579

Total area = 25442

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	25				
File Name:	2443525A			**SF:**	2
Description:	T-507			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	10:56	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:28	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	712				
Can Factor	1.38				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443525A
QCBatch 120924-GCL
Can Factor 1.38
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.38
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.69	2.07	0.69	2.07	0.45	1.36	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 25

File Name:	2443525A	**Date Sampled:**	11/20/24	**Time:**	10:56
Description:	T-507	**Date Analyzed:**	12/09/24	**Time:**	12:28
Can/Tube#:	712	**Dilution Factor:**	1.38		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 26

Client ID T-508

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 26

Client: C.E. Schmidt
Client ID: T-508
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 549
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:40
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

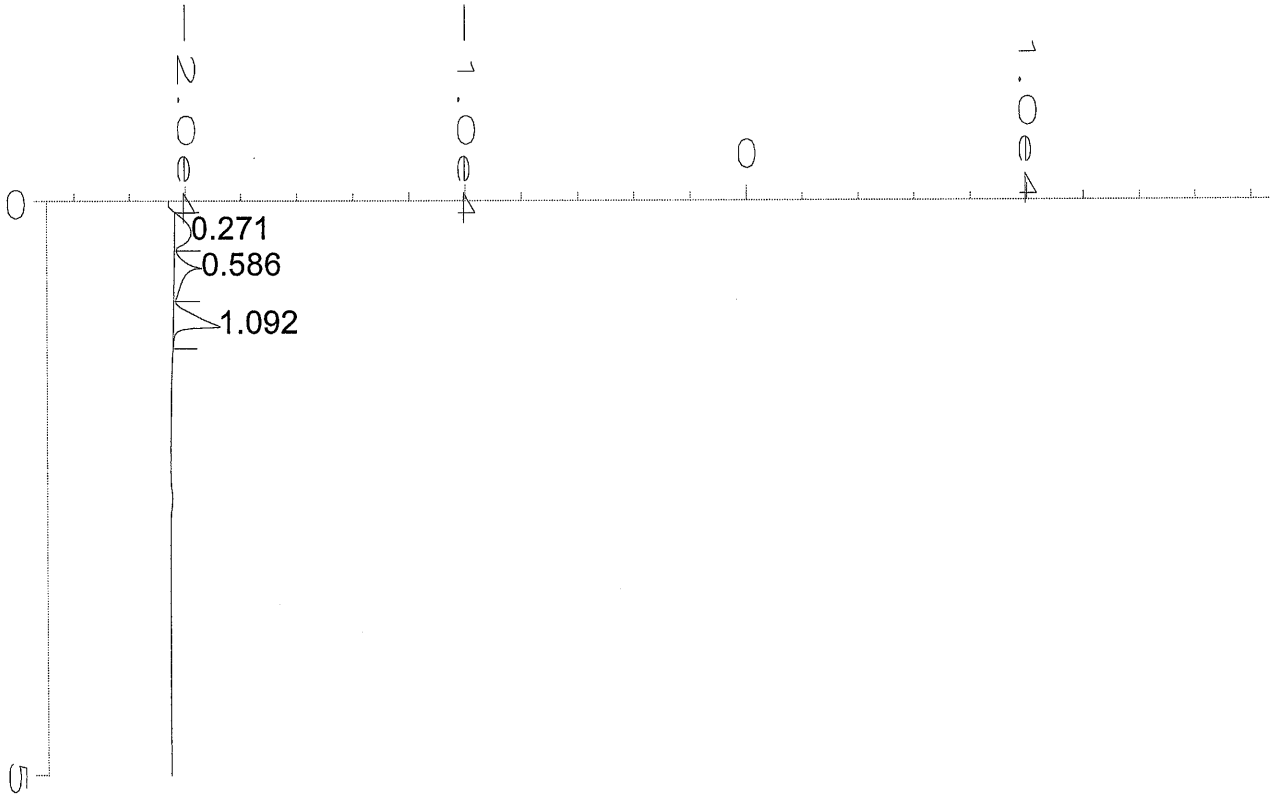
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443526A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-508
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:34 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 12:39 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443526A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.271	7525	582	BV	0.174	27.4173
2	0.586	8172	1016	VV	0.118	29.7722
3	1.092	11750	1662	VB	0.091	42.8104

Total area = 27448

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	26				
File Name:	2443526A			**SF:**	2
Description:	T-508			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	10:40	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:34	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	549				
Can Factor	1.38				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443526A
QCBatch 120924-GCL
Can Factor 1.38
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.38
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.69	2.07	0.69	2.07	0.45	1.36	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 26

File Name:	2443526A	**Date Sampled:**	11/20/24	**Time:**	10:40
Description:	T-508	**Date Analyzed:**	12/09/24	**Time:**	12:34
Can/Tube#:	549	**Dilution Factor:**	1.38		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 27

Client ID T-509

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 27

Client: C.E. Schmidt
Client ID: T-509
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 882
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:20
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

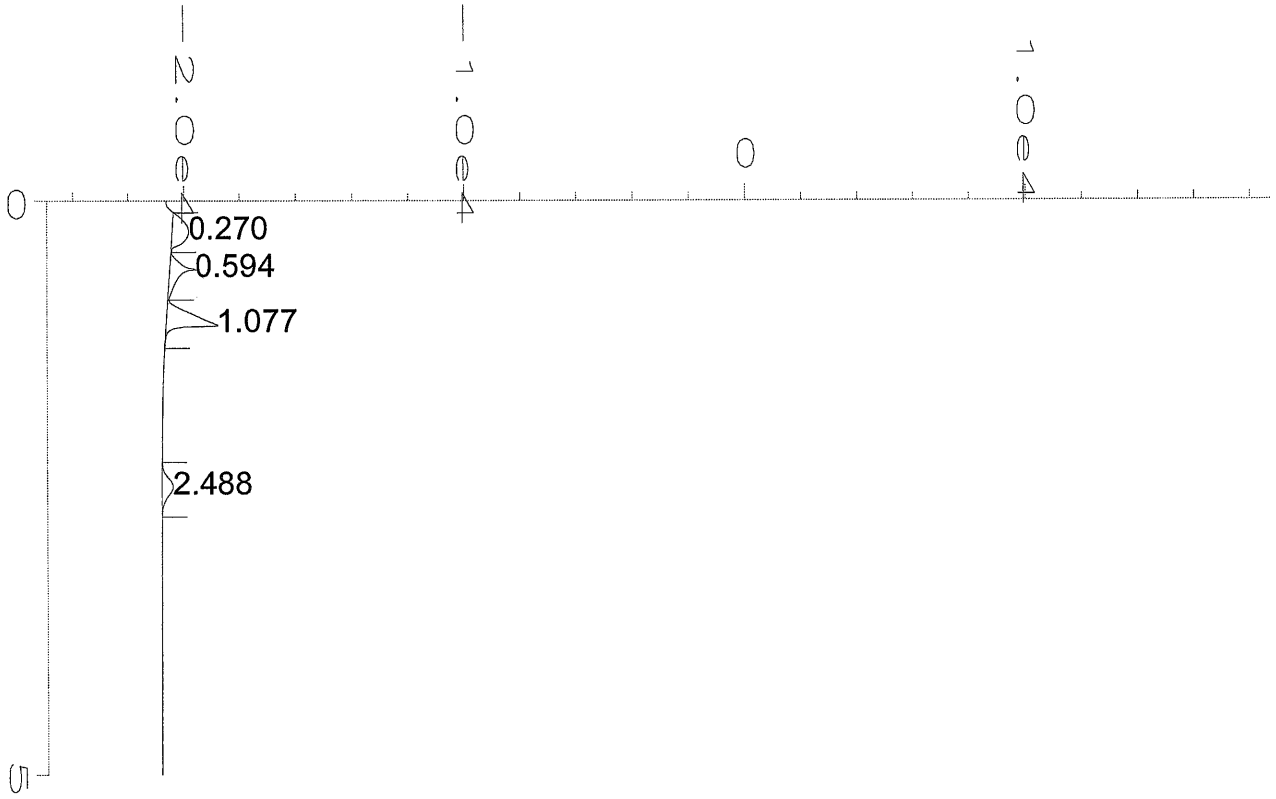
Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443527A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-509
Run Time Bar Code:
Acquired on : 09 Dec 24 12:40 PM
Report Created on: 09 Dec 24 12:45 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443527A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.270	7414	577	BV	0.166	23.6744
2	0.594	6572	930	VV	0.100	20.9846
3	1.077	12890	1828	VB	0.092	41.1582
4	2.488	4442	397	BB	0.165	14.1828

Total area = 31318

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	27				
File Name:	2443527A			**SF:**	2
Description:	T-509			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	12:20	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:40	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	882				
Can Factor	1.40				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**4442**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443527A
QCBatch 120924-GCL
Can Factor 1.40
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.40
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.53	ND	ND	0		0.50	0.70	2.10	0.70	2.10	0.46	1.38	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 27

File Name: 2443527A
Description: T-509
Can/Tube#: 882
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/09/24 **Time:** 12:40
Dilution Factor: 1.40

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.70	2.10	ND	0.46	1.38	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **28**

Client ID T-510

Analytical Method ASTM D3416

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Due:

Expires: 12/20/2024

224435 28

Client: C.E. Schmidt
Client ID: T-510
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 860
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

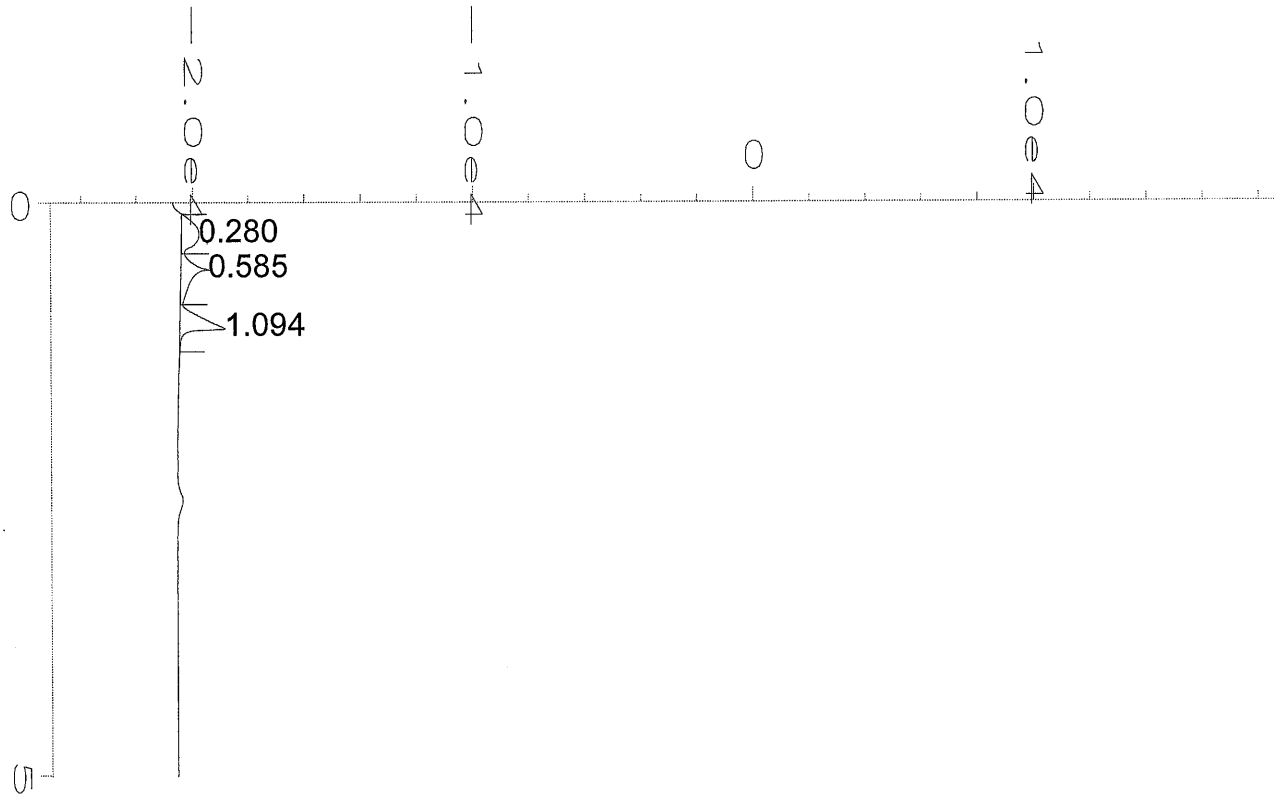
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443528A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-510
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:46 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 12:51 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443528A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.280	8235	612	BV	0.170	29.1727
2	0.585	8774	1017	VV	0.111	31.0833
3	1.094	11219	1621	VB	0.089	39.7440

Total area = 28228

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	28				
File Name:	2443528A			**SF:**	2
Description:	T-510			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	12:18	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:46	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	860				
Can Factor	1.42				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443528A
QCBatch 120924-GCL
Can Factor 1.42
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.42
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: 3 L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.71	2.13	0.71	2.13	0.47	1.40	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 28

File Name: 2443528A
Description: T-510
Can/Tube#: 860
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/09/24 **Time:** 12:46
Dilution Factor: 1.42

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.71	2.13	ND	0.47	1.40	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **29**

Client ID T-511

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 29

Client: C.E. Schmidt
Client ID: T-511
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 627
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:31
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

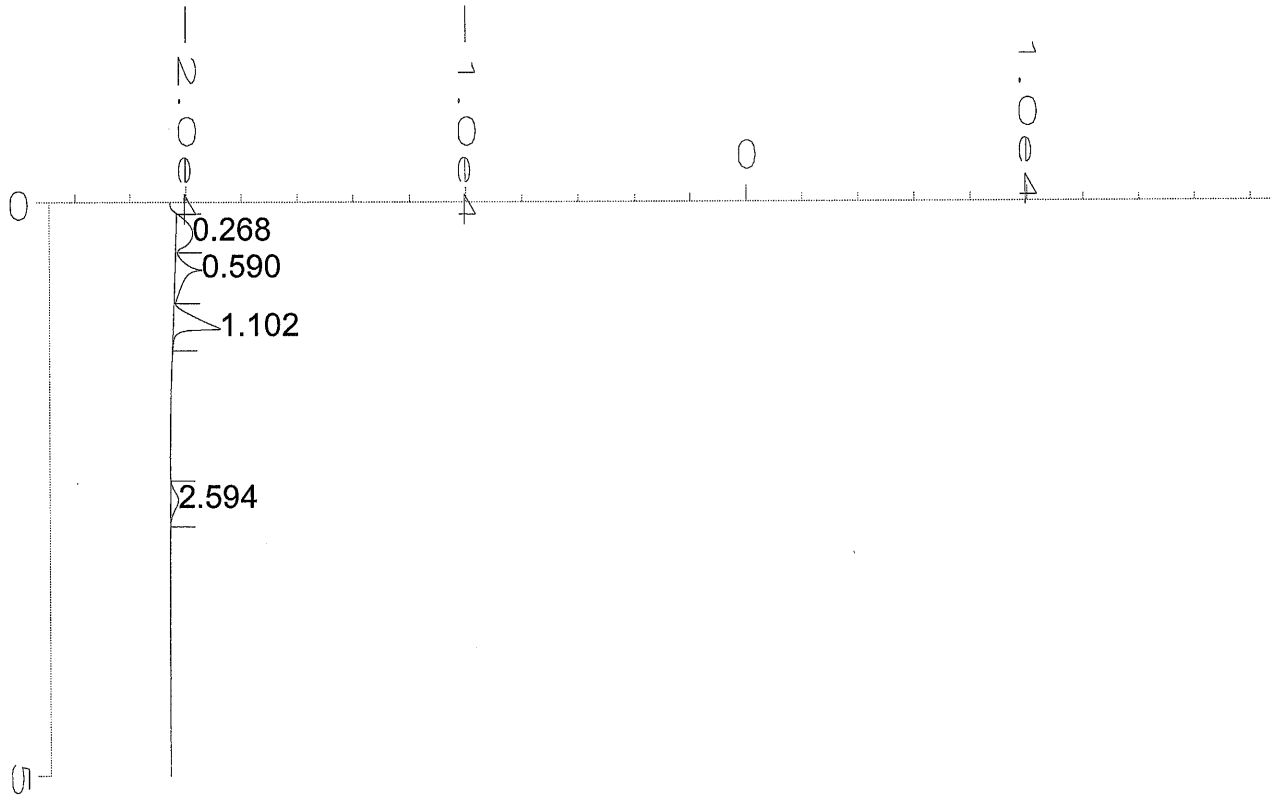
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443529A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-511
Run Time Bar Code:
Acquired on : 09 Dec 24 12:52 PM
Report Created on: 09 Dec 24 12:57 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443529A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.268	7762	584	BV	0.165	25.5941
2	0.590	7797	981	VV	0.106	25.7089
3	1.102	11836	1715	VB	0.089	39.0283
4	2.594	2932	276	BB	0.138	9.6688

Total area = 30328

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	29				
File Name:	2443529A			**SF:**	2
Description:	T-511			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	12:31	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:52	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	627				
Can Factor	1.37				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**2932**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443529A
QCBatch 120924-GCL
Can Factor 1.37
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.37
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.34	ND	ND	0		0.50	0.69	2.06	0.69	2.06	0.45	1.35	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 29

File Name: 2443529A
Description: T-511
Can/Tube#: 627
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/09/24 **Time:** 12:52
Dilution Factor: 1.37

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.06	ND	0.45	1.35	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 30

Client ID T-512

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 30

Client: C.E. Schmidt
Client ID: T-512
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 417
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:41
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

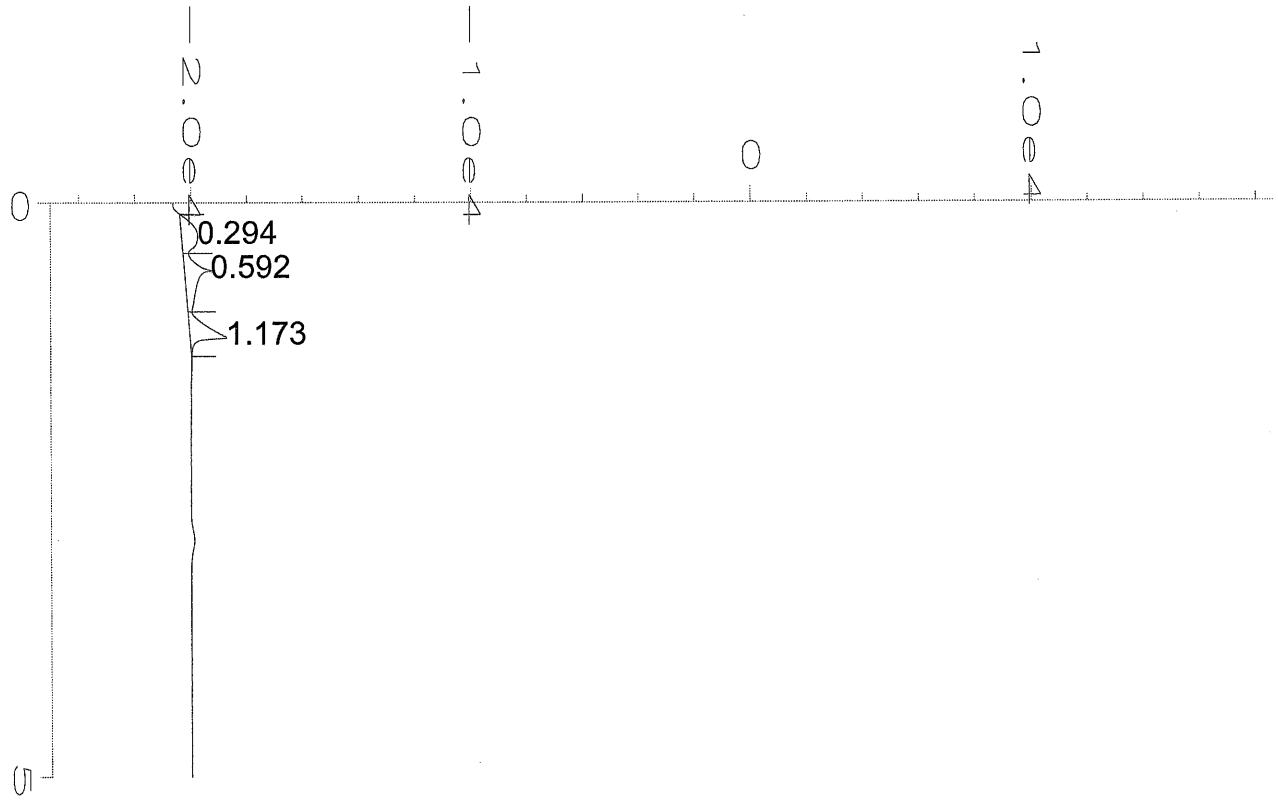
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443530A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-512
Run Time Bar Code:
Acquired on : 09 Dec 24 12:57 PM
Report Created on: 09 Dec 24 01:03 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443530A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.294	8114	564	BV	0.185	27.3403
2	0.592	11366	1066	VV	0.145	38.2976
3	1.173	10198	1327	VB	0.097	34.3621

Total area = 29679

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	30				
File Name:	2443530A			**SF:**	2
Description:	T-512			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	12:41	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	12:57	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	417				
Can Factor	1.36				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	0

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443530A
QCBatch 120924-GCL
Can Factor 1.36
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.36
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.68	2.04	0.68	2.04	0.45	1.34	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **30**

File Name: 2443530A
Description: T-512
Can/Tube#: 417
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/09/24 **Time:** 12:57
Dilution Factor: 1.36

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	ND	0.45	1.34	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 31

Client ID T-513

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 31

Client: C.E. Schmidt
Client ID: T-513
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 781
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:28
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

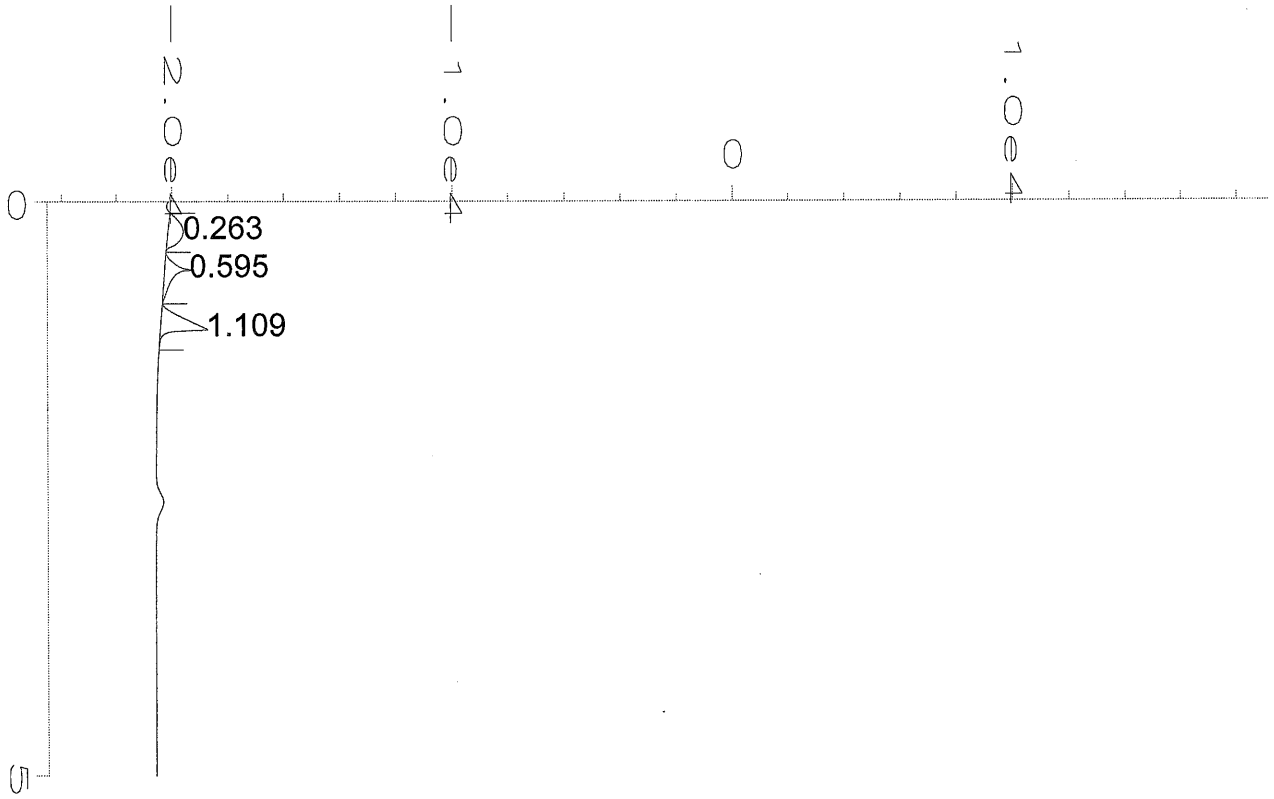
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443531A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-513
Run Time Bar Code:
Acquired on : 09 Dec 24 01:03 PM
Report Created on: 09 Dec 24 01:08 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443531A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.263	6886	539	BV	0.167	27.1707
2	0.595	6654	928	PV	0.106	26.2545
3	1.109	11804	1681	VB	0.095	46.5748

Total area = 25345

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	31				
File Name:	2443531A			**SF:**	2
Description:	T-513			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	12:28	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:03	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	781				
Can Factor	1.36				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443531A
QCBatch 120924-GCL
Can Factor 1.36
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.36
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.68	2.04	0.68	2.04	0.45	1.34	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: **ASTM D3416**

SDG: **224435**
Laboratory Number: **31**

File Name:	2443531A	**Date Sampled:**	11/20/24	**Time:**	12:28
Description:	T-513	**Date Analyzed:**	12/09/24	**Time:**	13:03
Can/Tube#:	781	**Dilution Factor:**	1.36		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.04	ND	0.45	1.34	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **32**

Client ID T-514

Analytical Method ASTM D3416

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Due:

Expires: 12/20/2024

224435 32

Client: C.E. Schmidt
Client ID: T-514
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 506
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:45
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

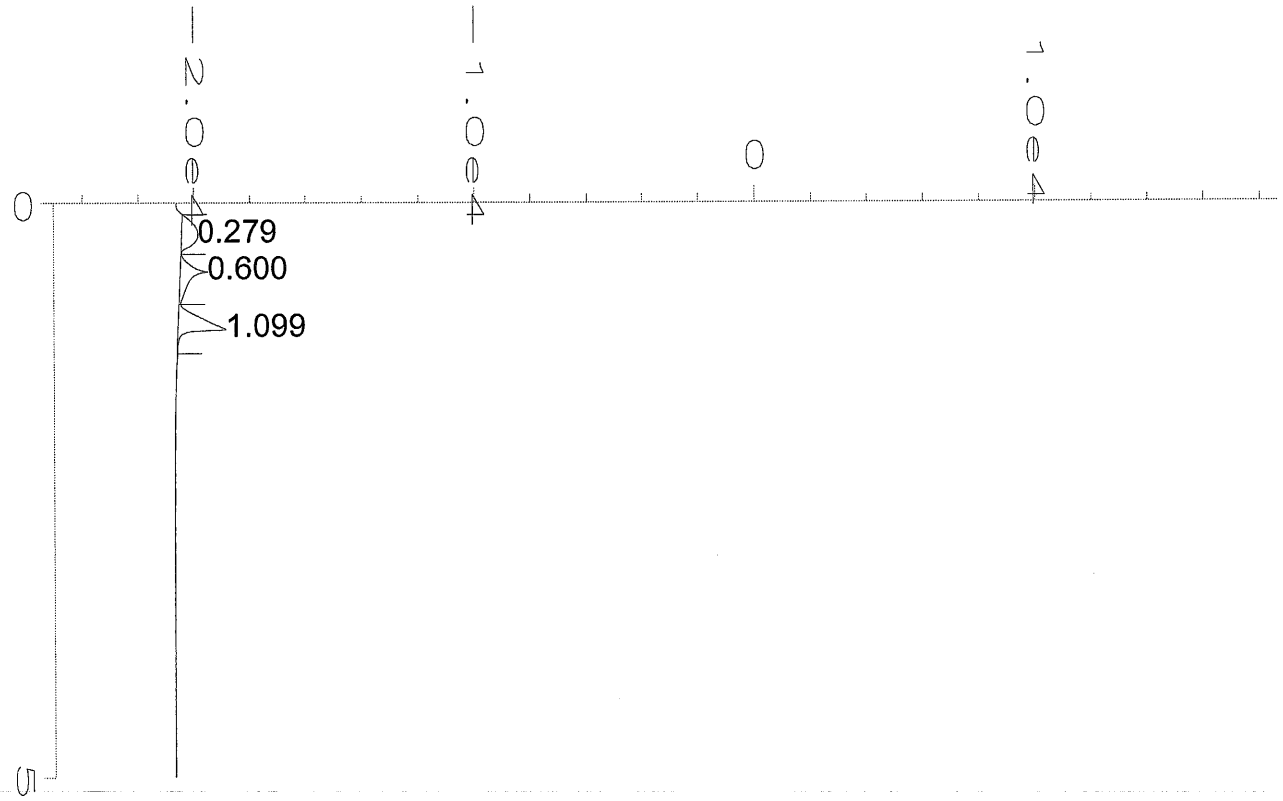
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443532A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-514
Run Time Bar Code:
Acquired on : 09 Dec 24 01:09 PM
Report Created on: 09 Dec 24 01:14 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443532A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.279	7417	580	BV	0.166	27.1580
2	0.600	7617	1018	VV	0.100	27.8881
3	1.099	12278	1744	VB	0.088	44.9539

Total area = 27312

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	32				
File Name:	2443532A			**SF:**	2
Description:	T-514			**Not Detected Flag:**	ND
Date Sampled:	11/20/24	**Time:**	12:45	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:09	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	506				
Can Factor	1.38				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443532A
QCBatch 120924-GCL
Can Factor 1.38
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.38
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.69	2.07	0.69	2.07	0.45	1.36	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Can/Tube#: 506
QC_Batch: 120924-GCL

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/09/24 **Time:** 13:09
Dilution Factor: 1.38

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 33

Client ID T-601

Analytical Method ASTM D3416

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Due:

Expires: 12/21/2024

224435 33

Client: C.E. Schmidt
Client ID: T-601
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 700
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

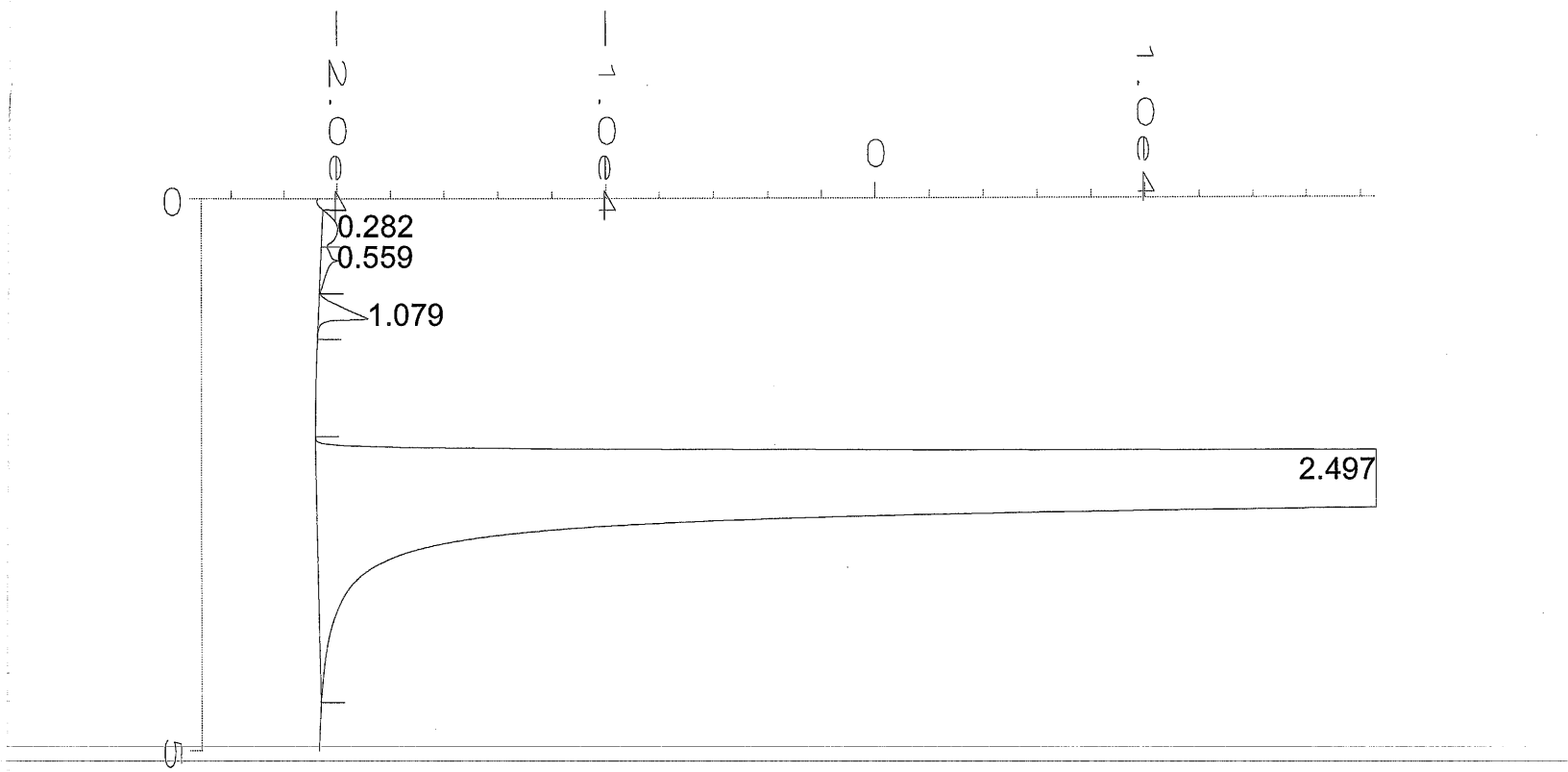
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443533A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-601
Run Time Bar Code:
Acquired on : 09 Dec 24 01:17 PM
Report Created on: 09 Dec 24 01:22 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443533A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.282	8181	579	BV	0.180	0.0151
2	0.559	6434	655	VV	0.127	0.0119
3	1.079	13301	1879	VB	0.092	0.0246
4	2.497	5.40234E+007	4680447	BB	0.180	99.9484

Total area = 5.40513E+007

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	**224435**			**Method:**	**ASTM D3416**
Lab Id:	**33**				
File Name:	**2443533A**			**SF:**	**2**
Description:	**T-601**			**Not Detected Flag:**	**ND**
Date Sampled:	**11/21/24**	**Time:**	**8:18**	**Matrix**	**AA**
Date Received:	**11/21/24**	**Time:**	**13:00**	**Type**	**TRG**
Date Analyzed:	**12/09/24**	**Time:**	**13:17**	**Instrument**	**GCL**
QCBatch	**120924-GCL**			**Volume:**	**5.0**
Type	**SA**				
Can Number	**700**				
Can Factor	**1.30**				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**5.40E+07**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443533A
QCBatch 120924-GCL
Can Factor 1.30
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.30
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	6000.60	6,000.60	3,934.82	3,934.82	3,934.82	0.50	0.65	1.95	0.65	1.95	0.43	1.28	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Can/Tube#: 700
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 13:17
Dilution Factor: 1.30

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.65	1.95	6,000.60	0.43	1.28	3,934.82	

Sample Data Packages

SDG Number **224435**

Lab Id Number **34**

Client ID T-602

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 34

Client: C.E. Schmidt
Client ID: T-602
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 673
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 8:29
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

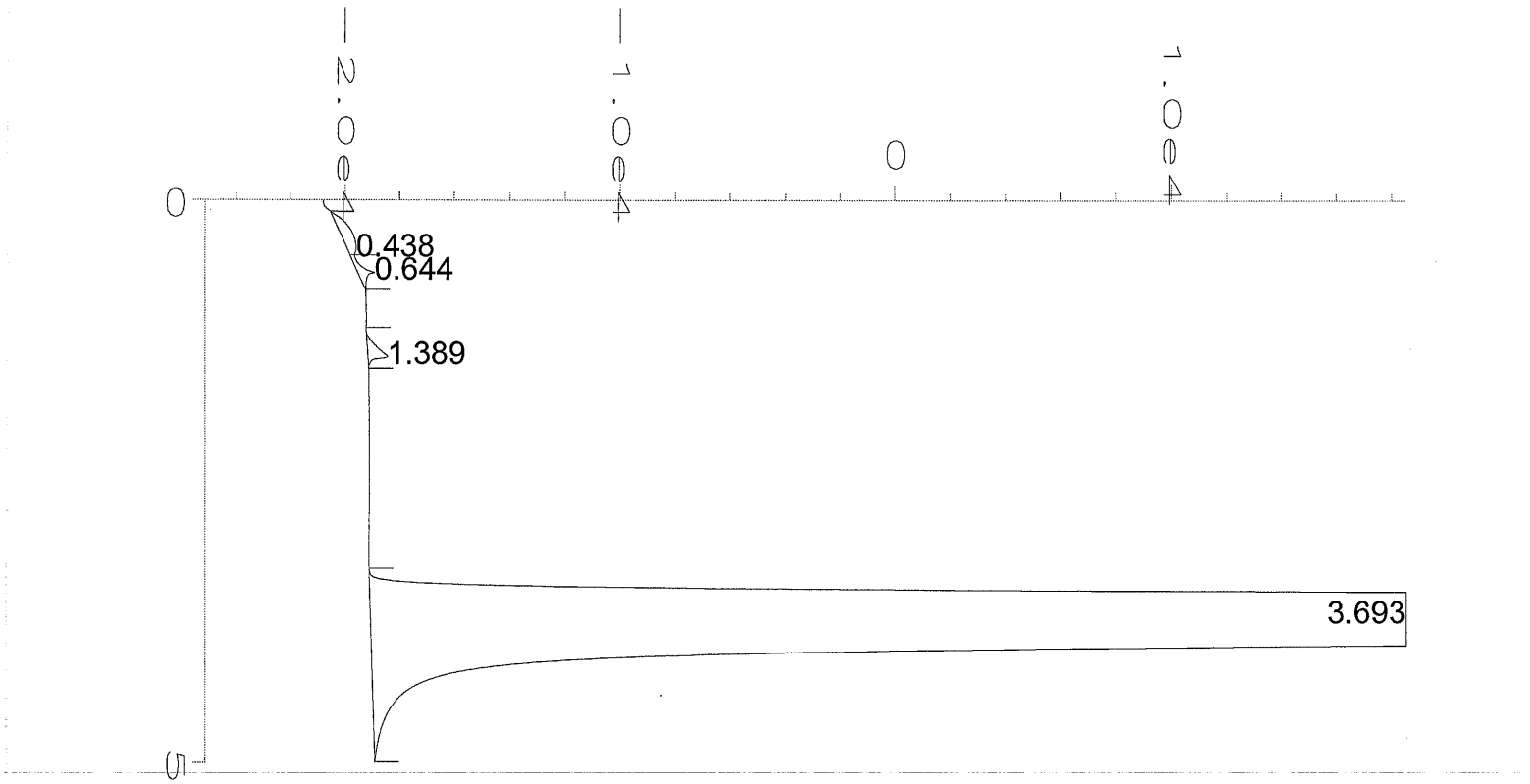
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443534A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-602
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:23 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 01:28 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443534A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.438	7721	324	BV	0.290	0.0727
2	0.644	3899	625	VB	0.082	0.0367
3	1.389	4771	720	BB	0.085	0.0449
4	3.693	1.06013E+007	731479	BBA	0.225	99.8456

Total area = 1.06177E+007

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	34				
File Name:	2443534A			**SF:**	2
Description:	T-602			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	8:29	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:23	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	673				
Can Factor	1.28				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**1.06E+07**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443534A
QCBatch 120924-GCL
Can Factor 1.28
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.28
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1159.41	1,159.41	760.27	760.27	760.27	0.50	0.64	1.92	0.64	1.92	0.42	1.26	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 34

File Name:	2443534A	**Date Sampled:**	11/21/24	**Time:**	8:29
Description:	T-602	**Date Analyzed:**	12/09/24	**Time:**	13:23
Can/Tube#:	673	**Dilution Factor:**	1.28		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.64	1.92	1,159.41	0.42	1.26	760.27	

Sample Data Packages

SDG Number **224435**

Lab Id Number **35**

Client ID T-603

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 35

Client: C.E. Schmidt
Client ID: T-603
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 550
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:31
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

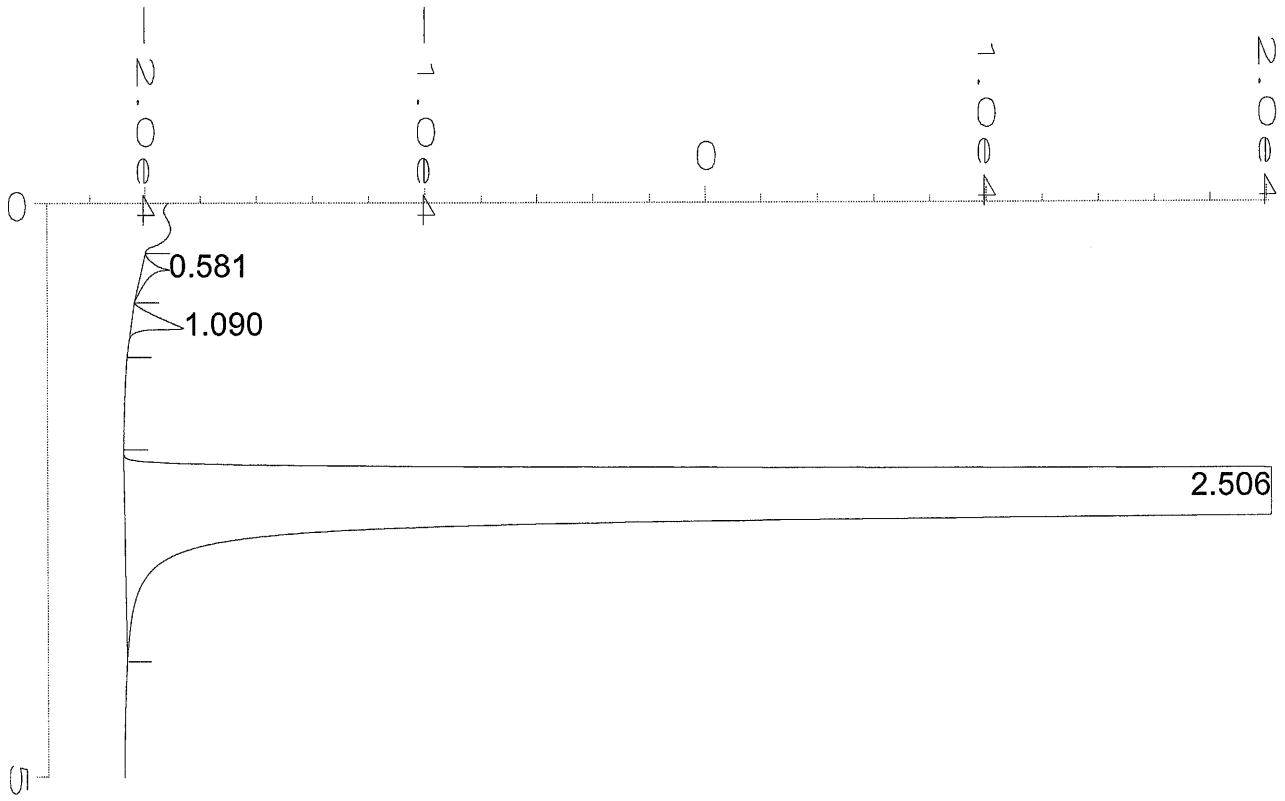
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443535A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-603
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:28 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 01:34 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443535A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.581	6480	995	PV	0.092	0.0411
2	1.090	12929	1883	PB	0.085	0.0819
3	2.506	1.57614E+007	1378344	BB	0.178	99.8770

Total area = 1.57808E+007

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	35				
File Name:	2443535A			**SF:**	2
Description:	T-603			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	8:31	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:28	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	550				
Can Factor	1.24				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**1.58E+07**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443535A
QCBatch 120924-GCL
Can Factor 1.24
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.24
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	1669.88	1,669.88	1,095.00	1,095.00	1,095.00	0.50	0.62	1.86	0.62	1.86	0.41	1.22	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Can/Tube#: 550
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/09/24 **Time:** 13:28
Dilution Factor: 1.24

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.62	1.86	1,669.88	0.41	1.22	1,095.00	

Sample Data Packages

SDG Number **224435**

Lab Id Number **36**

Client ID T-604

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 36

Client: C.E. Schmidt
Client ID: T-604
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 738
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

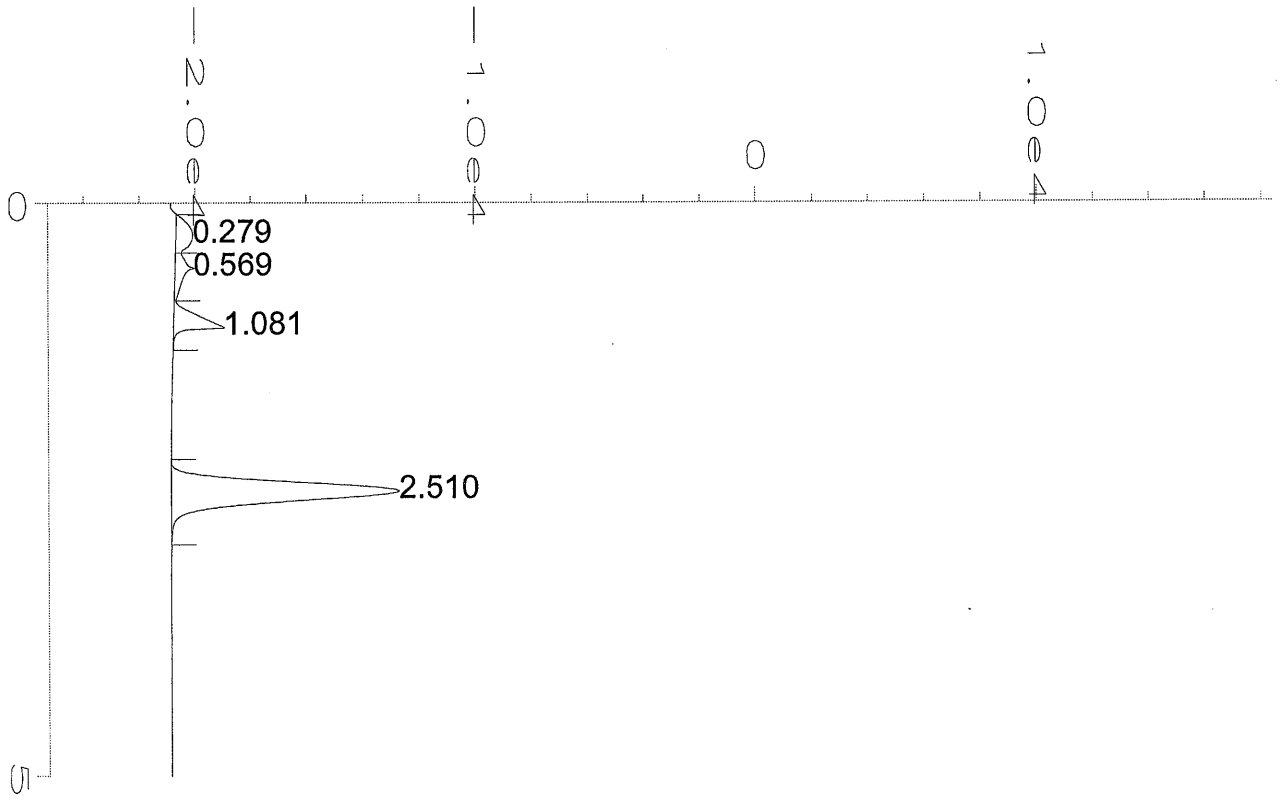
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443536A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-604
Run Time Bar Code:
Acquired on : 09 Dec 24 01:36 PM
Report Created on: 09 Dec 24 01:41 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443536A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.279	8300	585	BV	0.183	6.8198
2	0.569	6979	710	VV	0.135	5.7347
3	1.081	13556	1832	VB	0.095	11.1385
4	2.510	92866	8129	BB	0.178	76.3070

Total area = 121700

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	36				
File Name:	2443536A			**SF:**	2
Description:	T-604			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	8:18	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:36	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	738				
Can Factor	1.33				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**9.29E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443536A
QCBatch 120924-GCL
Can Factor 1.33
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.33
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	10.55	10.55	6.92	6.92	6.92	0.50	0.67	2.00	0.67	2.00	0.44	1.31	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Can/Tube#: 738
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 13:36
Dilution Factor: 1.33

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.67	2.00	10.55	0.44	1.31	6.92	

Sample Data Packages

SDG Number **224435**

Lab Id Number **37**

Client ID T-605

Analytical Method ASTM D3416

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 37

Client: C.E. Schmidt
Client ID: T-605
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 892
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

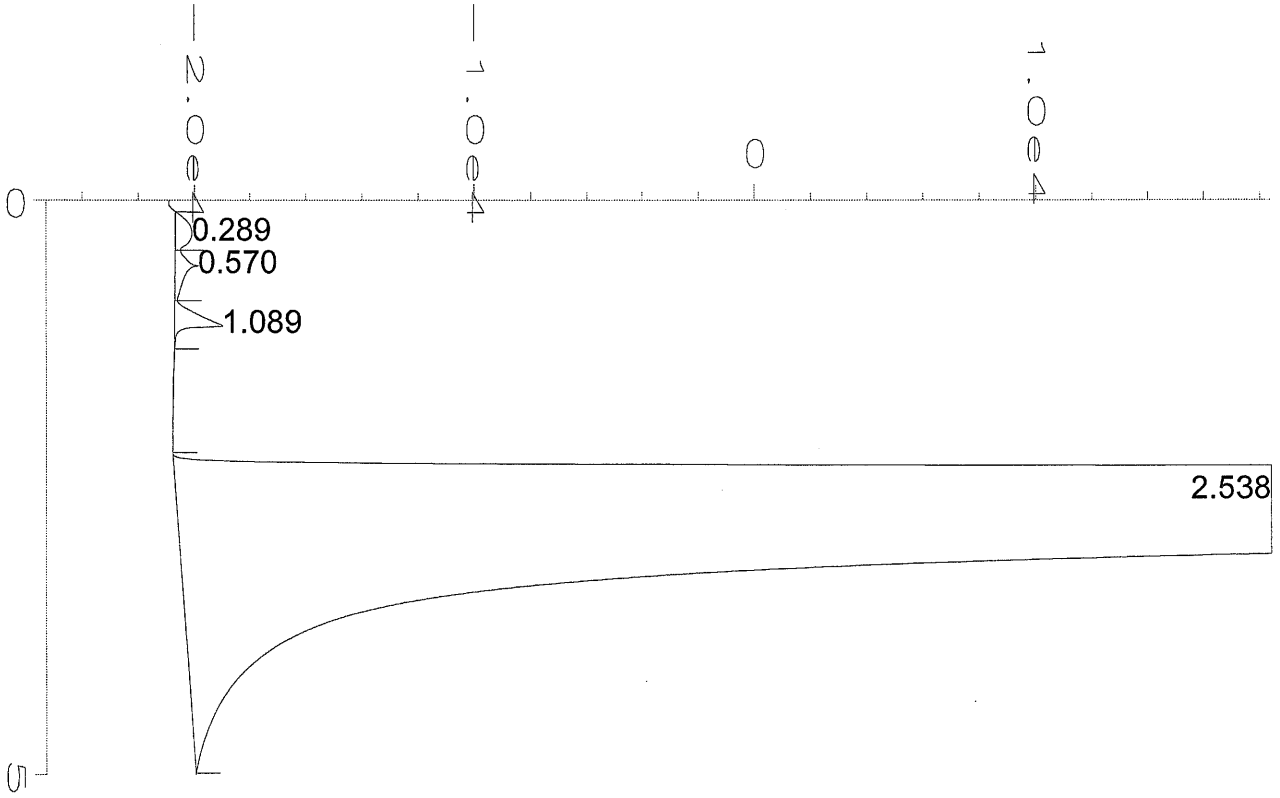
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443537A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-605
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:41 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 01:46 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443537A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.289	8081	581	BV	0.172	0.0031
2	0.570	8025	835	VV	0.124	0.0031
3	1.089	12362	1745	VB	0.088	0.0048
4	2.538	2.57512E+008	2.13274E+007	BBA	0.189	99.9889

Total area = 2.57541E+008

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	37				
File Name:	2443537A			**SF:**	2
Description:	T-605			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	9:41	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:41	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	892				
Can Factor	1.31				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**2.58E+08**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443537A
QCBatch 120924-GCL
Can Factor 1.31
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.31
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	28822.91	28,822.91	18,900.27	18,900.27	18,900.27	0.50	0.66	1.97	0.66	1.97	0.43	1.29	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 37

File Name:	2443537A	**Date Sampled:**	11/21/24	**Time:**	9:41
Description:	T-605	**Date Analyzed:**	12/09/24	**Time:**	13:41
Can/Tube#:	892	**Dilution Factor:**	1.31		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	28,822.91	0.43	1.29	18,900.27	

Sample Data Packages

SDG Number **224435**

Lab Id Number **38**

Client ID T-606

Analytical Method ASTM D3416

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 38

Client: C.E. Schmidt
Client ID: T-606
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 608
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:58
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

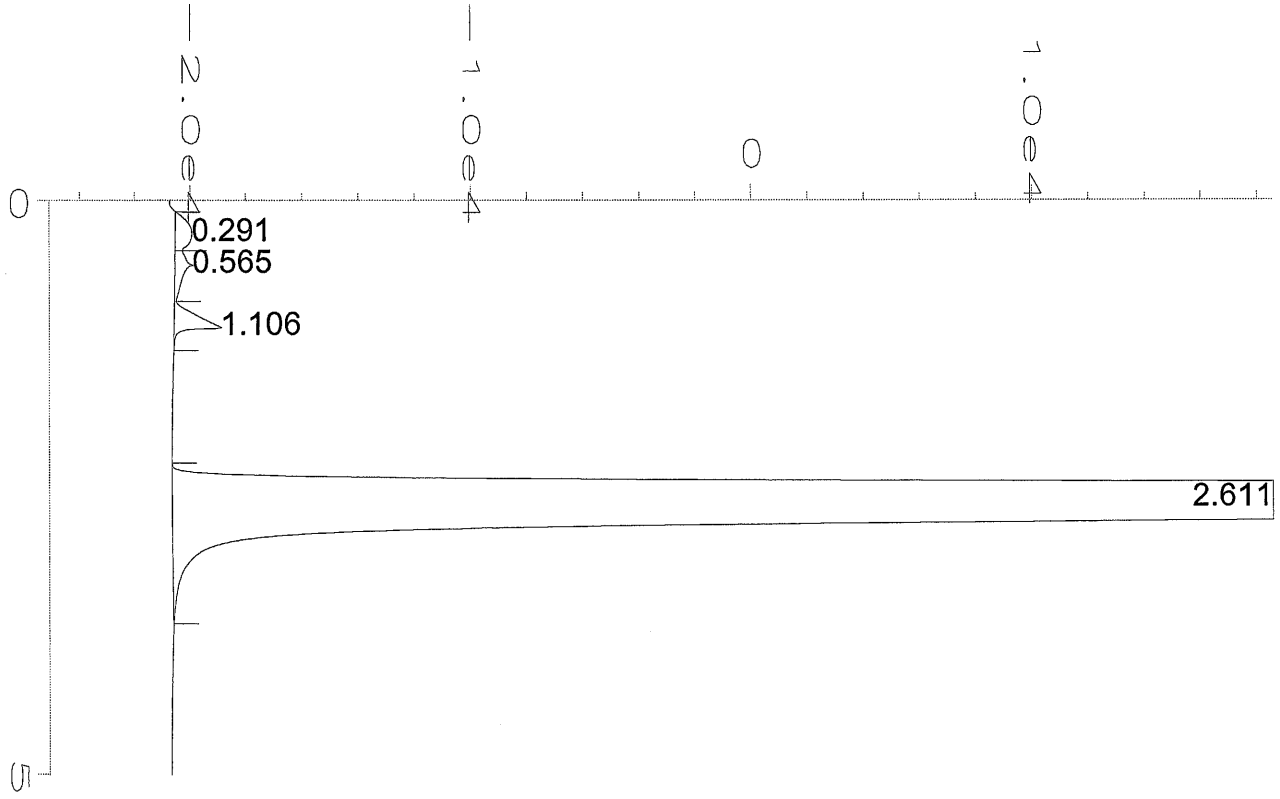
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443538A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-606
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:50 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 01:55 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443538A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.291	8305	567	BV	0.185	0.1730
2	0.565	7263	622	VV	0.142	0.1513
3	1.106	12579	1699	VB	0.092	0.2620
4	2.611	4773365	404281	BB	0.184	99.4138

Total area = 4801513

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	38				
File Name:	2443538A			**SF:**	2
Description:	T-606			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	9:58	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:50	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	608				
Can Factor	1.38				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**4.77E+06**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name:	2443538A		**SDG:**	**224435**			
QCBatch	120924-GCL						
Can Factor	1.38		**Calibration:**	**L10**	=>	L9 = Daily Calibration	RF: 10259
Volume:	5.00	ml	**RL Factor:**	**3**		L10 = Curve	RF: 11704
Base Volume	5.00	ml					CAL: 11704
Dilution Factor	1.38						
Gas Constant:	24.4						
Decimal Places:	2						

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	562.82	562.82	369.07	369.07	369.07	0.50	0.69	2.07	0.69	2.07	0.45	1.36	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416 **Laboratory Number:** 38

File Name:	2443538A	**Date Sampled:**	11/21/24	**Time:**	9:58
Description:	T-606	**Date Analyzed:**	12/09/24	**Time:**	13:50
Can/Tube#:	608	**Dilution Factor:**	1.38		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	562.82	0.45	1.36	369.07	

Sample Data Packages

SDG Number 224435

Lab Id Number 39

Client ID T-607

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 39

Client: C.E. Schmidt
Client ID: T-607
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 771
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:52
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

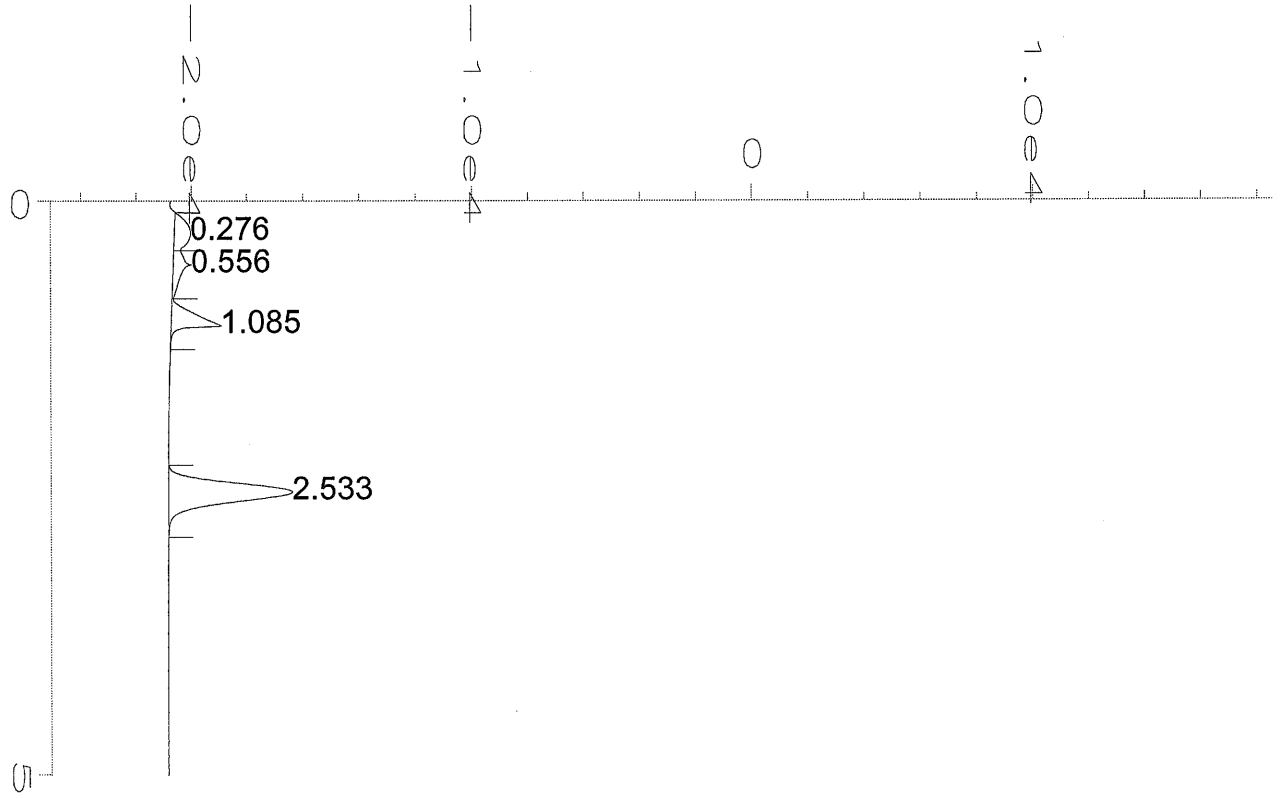
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443539A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-607
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:55 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 02:00 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443539A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.276	7943	560	BV	0.180	10.1709
2	0.556	6586	634	VV	0.133	8.4337
3	1.085	12942	1801	VB	0.090	16.5725
4	2.533	50624	4442	BB	0.167	64.8229

Total area = 78096

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	39				
File Name:	2443539A			**SF:**	2
Description:	T-607			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	9:52	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	13:55	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	771				
Can Factor	1.31				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**5.06E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443539A
QCBatch 120924-GCL
Can Factor 1.31
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.31
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	5.67	5.67	3.72	3.72	3.72	0.50	0.66	1.97	0.66	1.97	0.43	1.29	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

SDG: 224435
Modified Analytical Method: ASTM D3416
Laboratory Number: 39

File Name: 2443539A
Description: T-607
Can/Tube#: 771
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 9:52
Date Analyzed: 12/09/24 **Time:** 13:55
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	5.67	0.43	1.29	3.72	

Sample Data Packages

SDG Number **224435**

Lab Id Number **40**

Client ID T-608

Analytical Method ASTM D3416

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Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 40

Client: C.E. Schmidt
Client ID: T-608
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 531
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 9:47
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

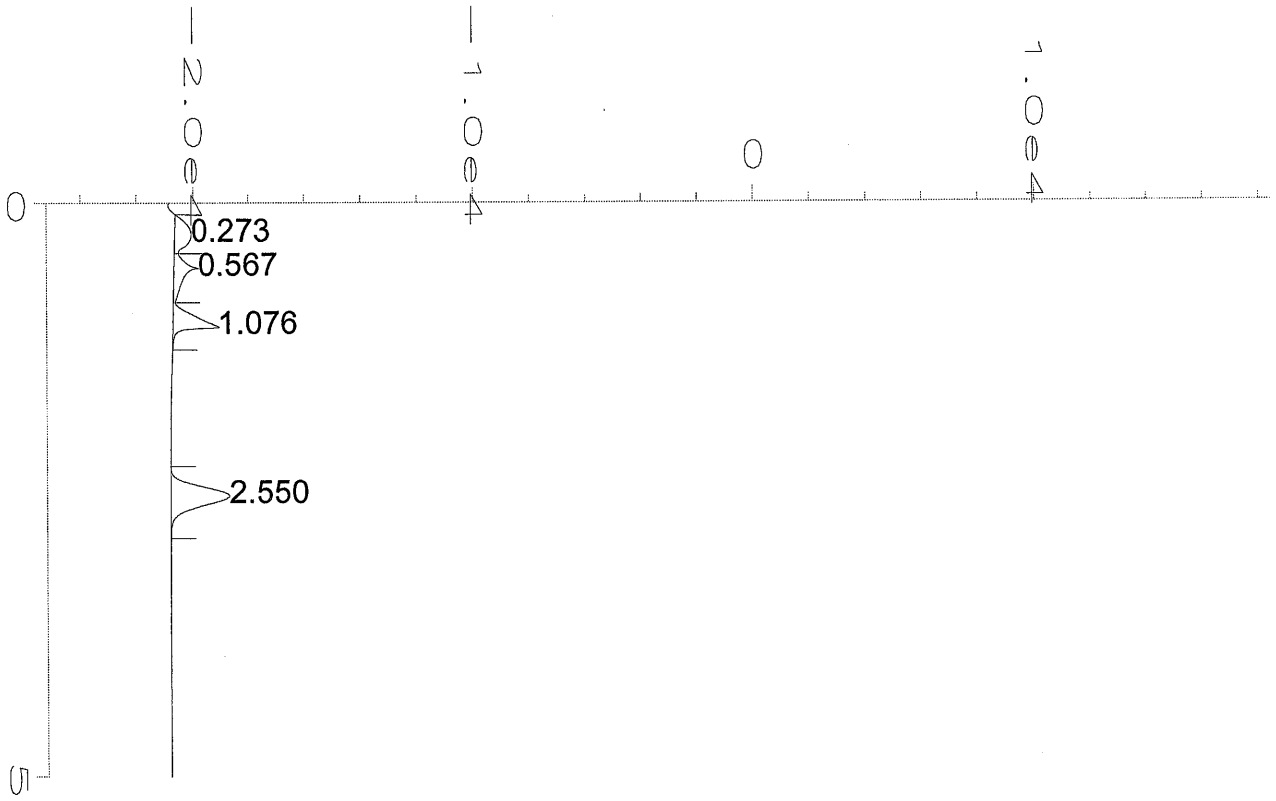
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443540A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-608
Run Time Bar Code:
Acquired on : 09 Dec 24 02:01 PM
Report Created on: 09 Dec 24 02:06 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443540A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.273	7753	573	BV	0.176	15.1672
2	0.567	7747	873	VV	0.125	15.1545
3	1.076	11542	1650	VB	0.091	22.5791
4	2.550	24077	2120	BB	0.174	47.0992

Total area = 51120

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	40				
File Name:	2443540A			**SF:**	2
Description:	T-608			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	9:47	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:01	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	531				
Can Factor	1.35				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**2.41E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443540A
QCBatch 120924-GCL
Can Factor 1.35
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.35
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	2.78	2.78	1.82	1.82	1.82	0.50	0.68	2.03	0.68	2.03	0.44	1.33	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 40

File Name: 2443540A
Description: T-608
Can/Tube#: 531
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 9:47
Date Analyzed: 12/09/24 **Time:** 14:01
Dilution Factor: 1.35

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.03	2.78	0.44	1.33	1.82	

Sample Data Packages

SDG Number **224435**

Lab Id Number **41**

Client ID T-609

Analytical Method ASTM D3416

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Due: | Expires: 12/21/2024 | 224435 | 41

Client: C.E. Schmidt
Client ID: T-609
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 668
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:38
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

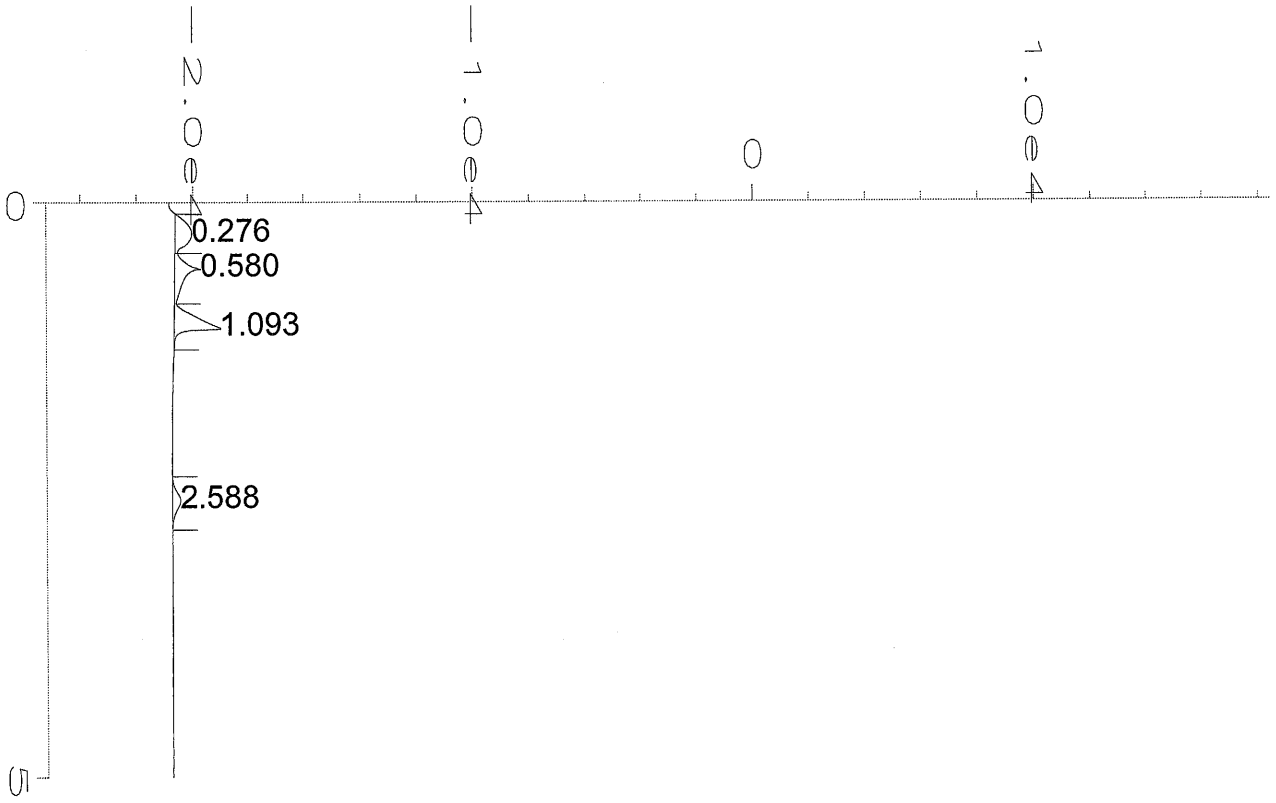
InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443541A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-609
Run Time Bar Code:
Acquired on : 09 Dec 24 02:07 PM
Report Created on: 09 Dec 24 02:12 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443541A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.276	7525	566	BV	0.172	24.7441
2	0.580	7804	931	VV	0.125	25.6638
3	1.093	11847	1666	VB	0.094	38.9578
4	2.588	3234	285	BB	0.157	10.6342

Total area = 30410

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	41				
File Name:	2443541A			**SF:**	2
Description:	T-609			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	11:38	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:07	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	668				
Can Factor	1.31				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**3.23E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443541A
QCBatch 120924-GCL
Can Factor 1.31
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.31
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: 3 L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.36	ND	ND	0		0.50	0.66	1.97	0.66	1.97	0.43	1.29	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 41

File Name: 2443541A
Description: T-609
Can/Tube#: 668
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/09/24 **Time:** 14:07
Dilution Factor: 1.31

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.66	1.97	ND	0.43	1.29	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 42

Client ID T-610

Analytical Method ASTM D3416

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Due: | Expires: 12/21/2024 | 224435 | 42

Client: C.E. Schmidt
Client ID: T-610
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 730
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:11
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

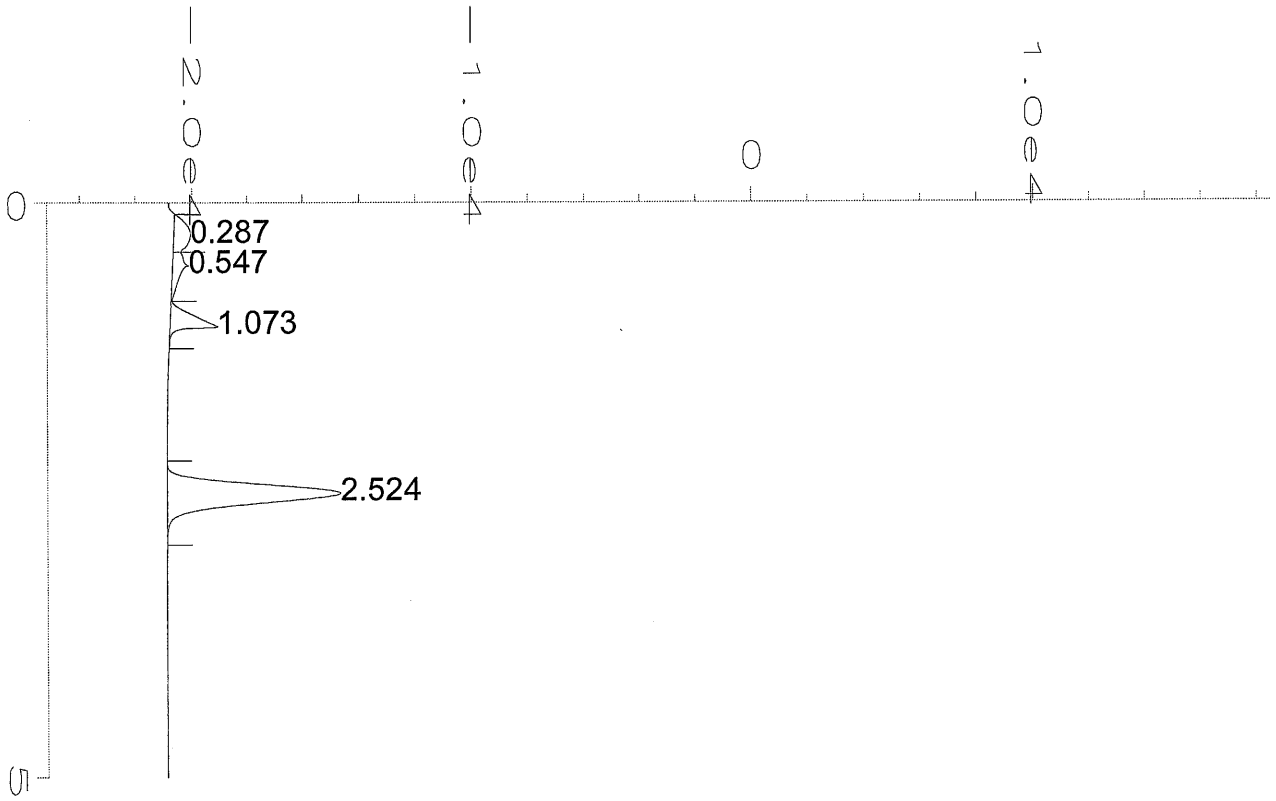
InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443542A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-610
Run Time Bar Code:
Acquired on : 09 Dec 24 02:13 PM
Report Created on: 09 Dec 24 02:19 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443542A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.287	8258	577	BV	0.190	8.4448
2	0.547	6496	565	VV	0.151	6.6436
3	1.073	12111	1716	VB	0.091	12.3859
4	2.524	70919	6219	BB	0.178	72.5258

Total area = 97785

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	42				
File Name:	2443542A			**SF:**	2
Description:	T-610			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	11:11	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:13	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	730				
Can Factor	1.37				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**7.09E+04**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443542A
QCBatch 120924-GCL
Can Factor 1.37
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.37
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** **=>** L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	8.30	8.30	5.44	5.44	5.44	0.50	0.69	2.06	0.69	2.06	0.45	1.35	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 42

File Name: 2443542A
Description: T-610
Can/Tube#: 730
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/09/24 **Time:** 14:13
Dilution Factor: 1.37

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.06	8.30	0.45	1.35	5.44	

Sample Data Packages

SDG Number **224435**

Lab Id Number **43**

Client ID T-611

Analytical Method ASTM D3416

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Due:

Expires: 12/21/2024

224435 43

Client: C.E. Schmidt
Client ID: T-611
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 701
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 11:28
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

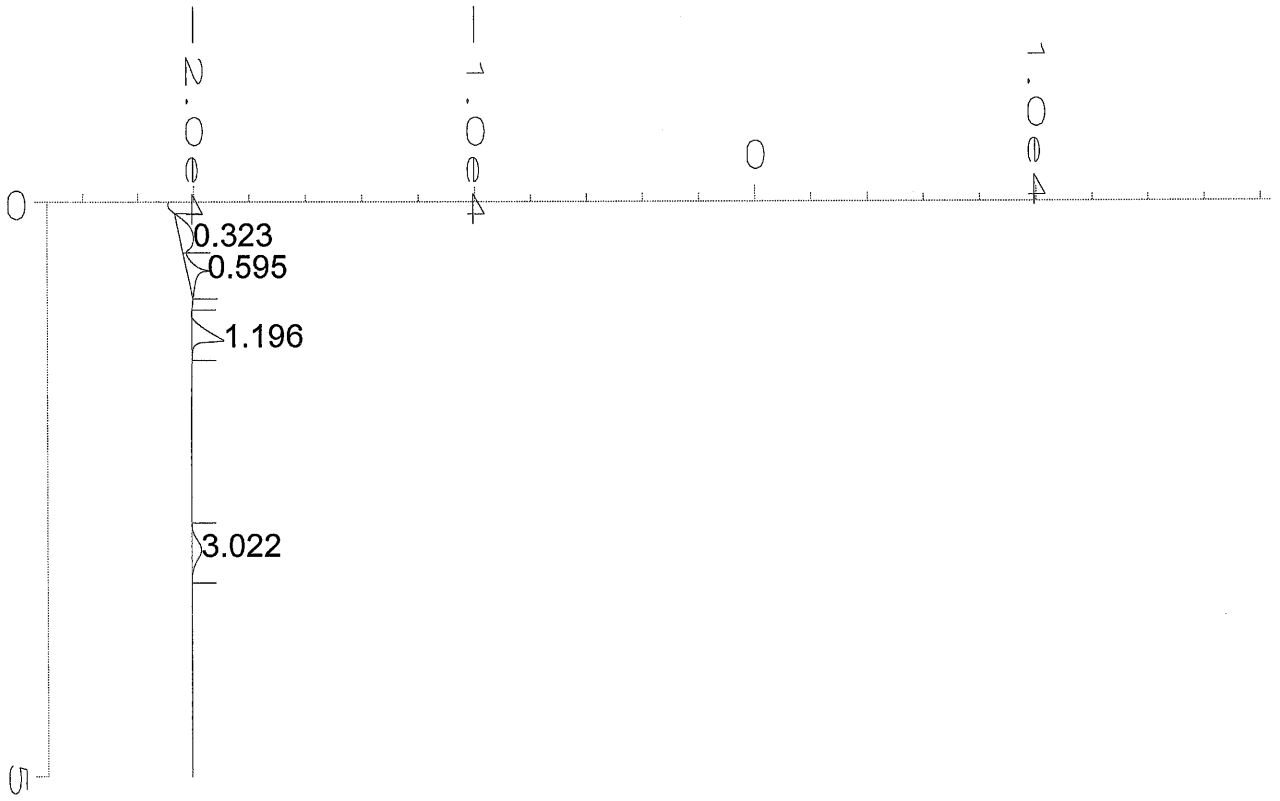
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443543A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-611
Run Time Bar Code:
Acquired on : 09 Dec 24 02:19 PM
Report Created on: 09 Dec 24 02:25 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443543A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.323	7157	478	BV	0.195	28.6104
2	0.595	5780	795	VB	0.108	23.1064
3	1.196	7598	1144	BB	0.087	30.3735
4	3.022	4480	361	BB	0.169	17.9097

Total area = 25014

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	43				
File Name:	2443543A			**SF:**	2
Description:	T-611			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	11:28	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:19	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	701				
Can Factor	1.35				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**4.48E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443543A
QCBatch 120924-GCL
Can Factor 1.35
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.35
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.52	ND	ND	0		0.50	0.68	2.03	0.68	2.03	0.44	1.33	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 43

File Name: 2443543A
Description: T-611
Can/Tube#: 701
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/09/24 **Time:** 14:19
Dilution Factor: 1.35

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.68	2.03	ND	0.44	1.33	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 44

Client ID T-612

Analytical Method ASTM D3416

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Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 44

Client: C.E. Schmidt
Client ID: T-612
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 514
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

Sample Type:

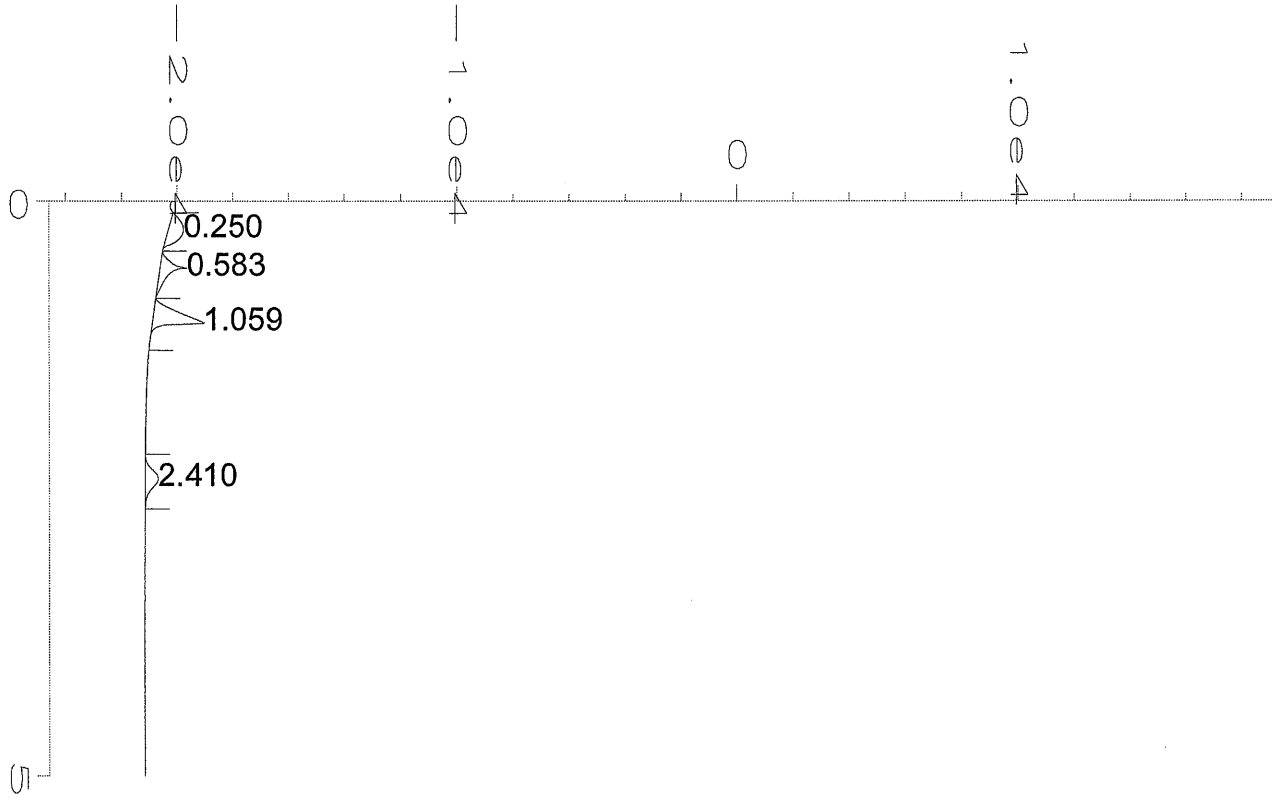
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443544A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-612
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:27 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 02:32 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443544A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.250	6688	543	BV	0.158	22.3846
2	0.583	6160	967	PV	0.086	20.6172
3	1.059	12135	1870	PB	0.083	40.6141
4	2.410	4895	457	BB	0.141	16.3841

Total area = 29879

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	44				
File Name:	2443544A			**SF:**	2
Description:	T-612			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	11:20	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:27	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	514				
Can Factor	1.39				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**4.90E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443544A
QCBatch 120924-GCL
Can Factor 1.39
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.39
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.58	ND	ND	0		0.50	0.70	2.09	0.70	2.09	0.46	1.37	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 44

File Name:	2443544A	**Date Sampled:**	11/21/24	**Time:**	11:20
Description:	T-612	**Date Analyzed:**	12/09/24	**Time:**	14:27
Can/Tube#:	514	**Dilution Factor:**	1.39		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.70	2.09	ND	0.46	1.37	ND	

Sample Data Packages

SDG Number 224435

Lab Id Number 45

Client ID T-613

Analytical Method ASTM D3416

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Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 45

Client: C.E. Schmidt
Client ID: T-613
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 694
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:25
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCL ASTM D3416	ASTM D3416 Low Level Methane	30

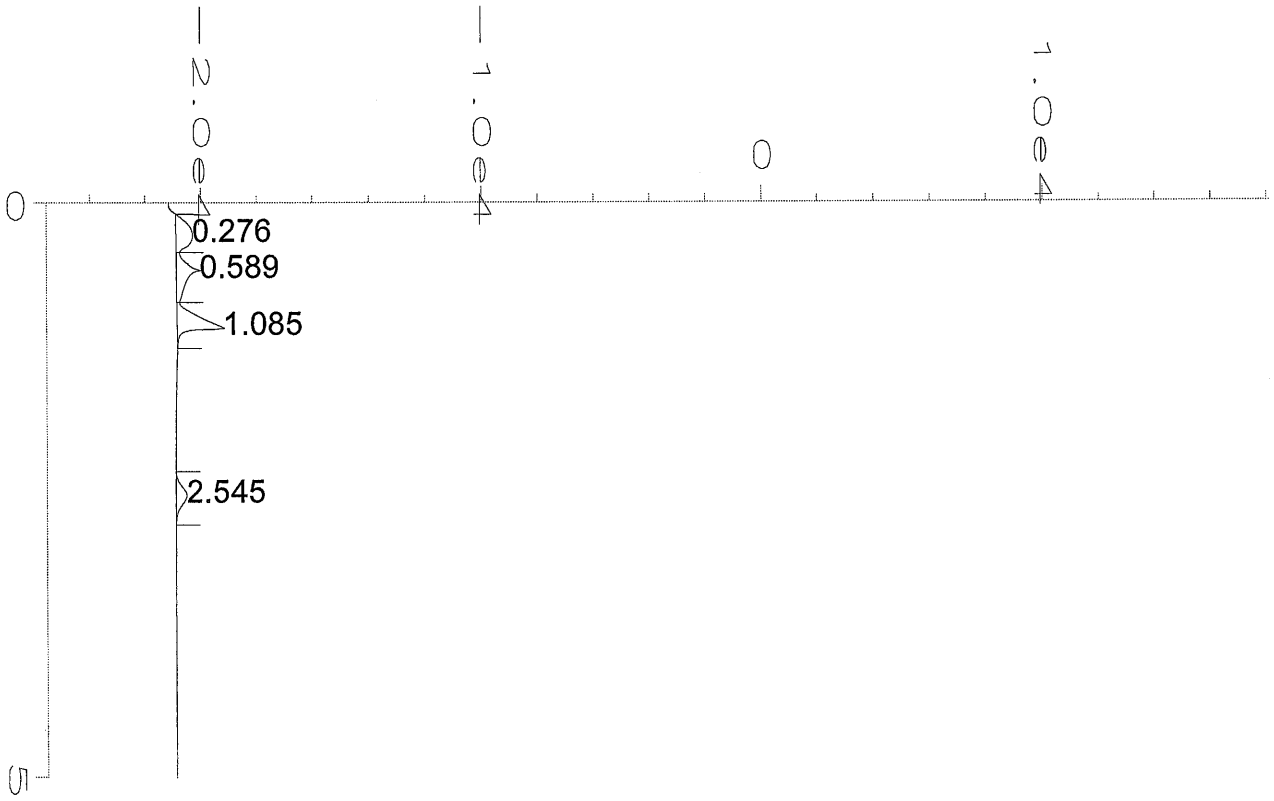
Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443545A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-613
Run Time Bar Code:
Acquired on : 09 Dec 24 02:32 PM
Report Created on: 09 Dec 24 02:37 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443545A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.276	7979	591	BV	0.176	24.3274
2	0.589	8415	965	VV	0.120	25.6577
3	1.085	12239	1681	VB	0.093	37.3173
4	2.545	4165	374	BB	0.168	12.6977

Total area = 32798

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	45				
File Name:	2443545A			**SF:**	2
Description:	T-613			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	11:25	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:32	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	694				
Can Factor	1.39				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**4.17E+03**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443545A
QCBatch 120924-GCL
Can Factor 1.39
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.39
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration
RL Factor: **3** L10 = Curve

RF: 10259
RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.49	ND	ND	0		0.50	0.70	2.09	0.70	2.09	0.46	1.37	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 45

File Name: 2443545A
Description: T-613
Can/Tube#: 694
QC_Batch: 120924-GCL

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/09/24 **Time:** 14:32
Dilution Factor: 1.39

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.70	2.09	ND	0.46	1.37	ND	

Sample Data Packages

SDG Number **224435**

Lab Id Number **46**

Client ID T-614

Analytical Method ASTM D3416

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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 46

Client: C.E. Schmidt
Client ID: T-614
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 880
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:36
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCL	ASTM D3416	ASTM D3416 Low Level Methane	30

Analysis Instructions

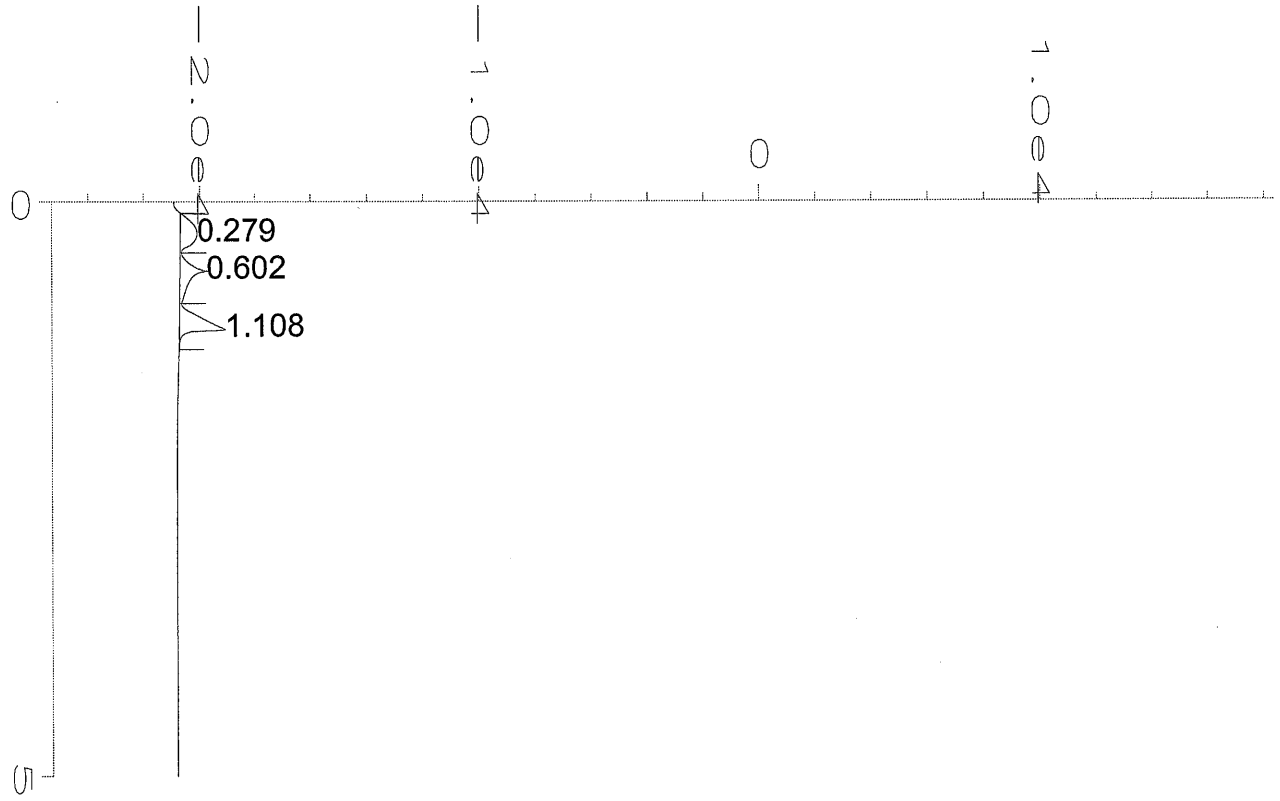
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\2443546A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-614
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:38 PM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 02:43 PM
Analysis Method : 3416CH4.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\2443546A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.279	7610	578	BV	0.165	27.6987
2	0.602	8050	1060	VV	0.097	29.3006
3	1.108	11814	1658	VB	0.091	43.0007

Total area = 27473

==========

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	224435			**Method:**	ASTM D3416
Lab Id:	46				
File Name:	2443546A			**SF:**	2
Description:	T-614			**Not Detected Flag:**	ND
Date Sampled:	11/21/24	**Time:**	11:36	**Matrix**	AA
Date Received:	11/21/24	**Time:**	13:00	**Type**	TRG
Date Analyzed:	12/09/24	**Time:**	14:38	**Instrument**	GCL
QCBatch	120924-GCL			**Volume:**	5.0
Type	SA				
Can Number	880				
Can Factor	1.38				

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0.00E+00**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: 2443546A
QCBatch 120924-GCL
Can Factor 1.38
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.38
Gas Constant: 24.4
Decimal Places: 2

SDG: **224435**

Calibration: **L10** => L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	Lab Qual
Methane	16.00	0.00	ND	ND	0		0.50	0.69	2.07	0.69	2.07	0.45	1.36	U

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID

Modified Analytical Method: ASTM D3416

SDG: 224435
Laboratory Number: 46

File Name:	2443546A	**Date Sampled:**	11/21/24	**Time:**	11:36
Description:	T-614	**Date Analyzed:**	12/09/24	**Time:**	14:38
Can/Tube#:	880	**Dilution Factor:**	1.38		
QC_Batch:	120924-GCL				

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.69	2.07	ND	0.45	1.36	ND	

Method Blank Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Method Blank QC Batch report for each DAB in this SDG.

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METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID
Modified Analytical Method: **ASTM D3416**

SDG: **LABQC**
Laboratory Number: **B12064**

File Name: B12064A
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 120624-GCL

Date Sampled: **Time:**
Date Analyzed: 12/06/24 **Time:** 15:04
Dilution Factor: 1.00

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.50	1.50	ND	0.33	0.98	ND	

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	**LABQC**				**Method:**	**ASTM D3416**
Lab Id:	**B12064**					
File Name:	**B12064A**				**SF:**	**2**
Description:	**METHOD BLANK**				**Not Detected Flag:**	**ND**
Date Sampled:	**NA**	**Time:**	**NA**		**Matrix**	**AA**
Date Received:	**NA**	**Time:**	**NA**		**Type**	**TRG**
Date Analyzed:	**12/06/24**	**Time:**		**15:04**	**Instrument**	**GCL**
QCBatch	**120624-GCL**				**Volume:**	**5.0**
Type	**MB**					
Can Number	**NA**					
Can Factor	**1.00**					

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.74	103.20	**822005**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

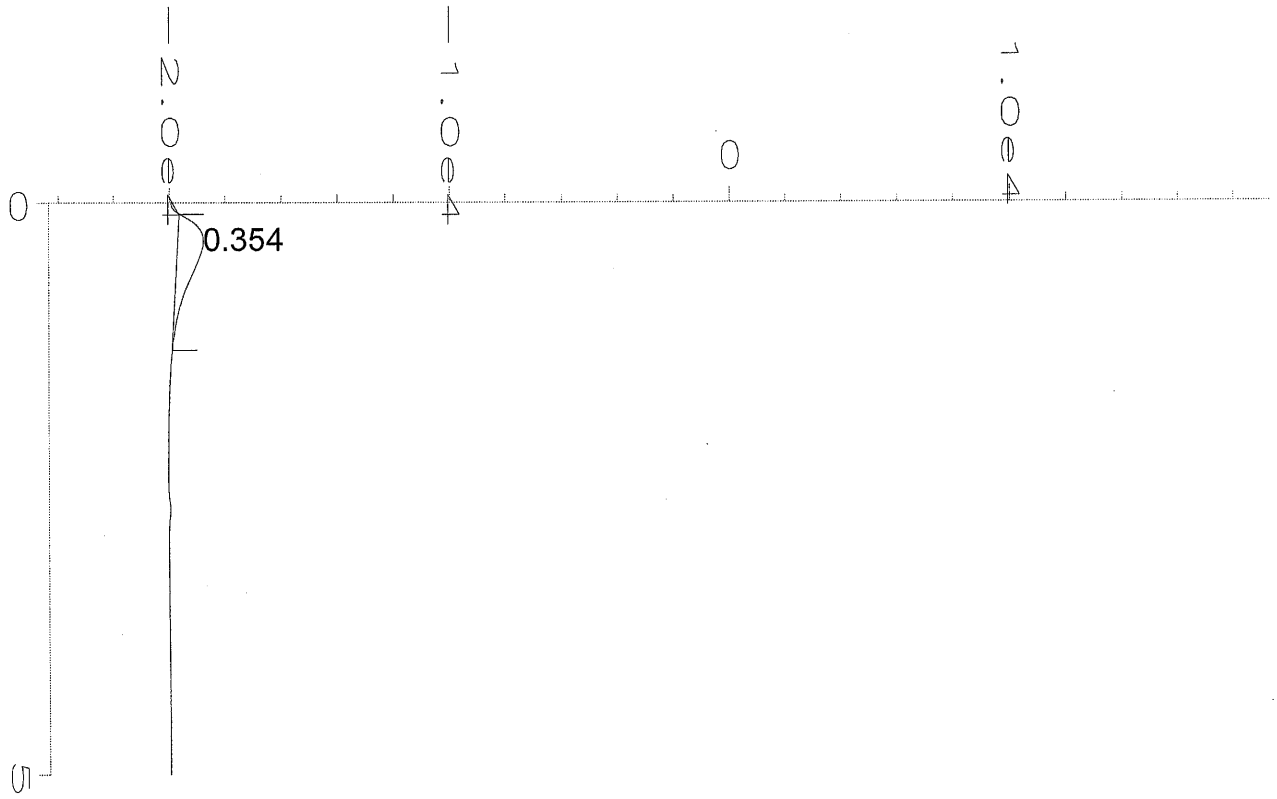
File Name: B12064A
QCBatch 120624-GCL
Can Factor 1.00
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.00
Gas Constant: 24.4
Decimal Places: 2

SDG: **LABQC**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 7965
RL Factor: **3** L10 = Curve RF: 7636
CAL: 7636

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	**Lab Qual**
Methane	16.00	0.00	ND	ND	0		0.50	0.50	1.50	0.50	1.50	0.33	0.98	**U**

EPA Qual	Det Qual	Rpt
	ND	Y



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\B12064A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : METHOD BLANK
Run Time Bar Code:
Acquired on : 06 Dec 24 03:04 PM
Report Created on: 06 Dec 24 03:09 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\B12064A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.354	29711	914	BB	0.401	100.0000

Total area = 29711

==========

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D3416 Methane by GC/FID
Modified Analytical Method: **ASTM D3416**

SDG: **LABQC**
Laboratory Number: **B12094**

File Name: B12094A
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 120924-GCL

Date Sampled: **Time:**
Date Analyzed: 12/09/24 **Time:** 11:24
Dilution Factor: 1.00

CAS#	Compound	MDL ppmv	RL ppmv	Result ppmv	MDL mg/m3	RL mg/m3	Result mg/m3	Flag
74-82-8	Methane	0.50	1.50	ND	0.33	0.98	ND	

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	**LABQC**				**Method:**	**ASTM D3416**
Lab Id:	**B12094**					
File Name:	**B12094A**				**SF:**	**2**
Description:	**METHOD BLANK**				**Not Detected Flag:**	**ND**
Date Sampled:	**NA**	**Time:**	**NA**		**Matrix**	**AA**
Date Received:	**NA**	**Time:**	**NA**		**Type**	**TRG**
Date Analyzed:	**12/09/24**	**Time:**		**11:24**	**Instrument**	**GCL**
QCBatch	**120924-GCL**				**Volume:**	**5.0**
Type	**MB**					
Can Number	**NA**					
Can Factor	**1.00**					

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC

CALCULATIONS

ASTM D3416 Methane by GC/FID

File Name: B12094A
QCBatch 120924-GCL
Can Factor 1.00
Volume: 5.00 ml
Base Volume 5.00 ml
Dilution Factor 1.00
Gas Constant: 24.4
Decimal Places: 2

SDG: **LABQC**

Calibration: **L10** **=>** L9 = Daily Calibration RF: 10259
RL Factor: **3** L10 = Curve RF: 11704
CAL: 11704

Compound	MW	Curve Result ppmv	Fixed ResultV ppmv	Fixed Result mg/m3	ResultQ mg/m3	ResultG mg/m3	MDL ppmv	Calc MDL ppmv	Calc RL ppmv	Fixed MDL ppmv	Fixed RL ppmv	Fixed MDL mg/m3	Fixed RL mg/m3	**Lab Qual**
Methane	16.00	0.00	ND	ND	0		0.50	0.50	1.50	0.50	1.50	0.33	0.98	**U**

EPA Qual	Det Qual	Rpt
	ND	Y

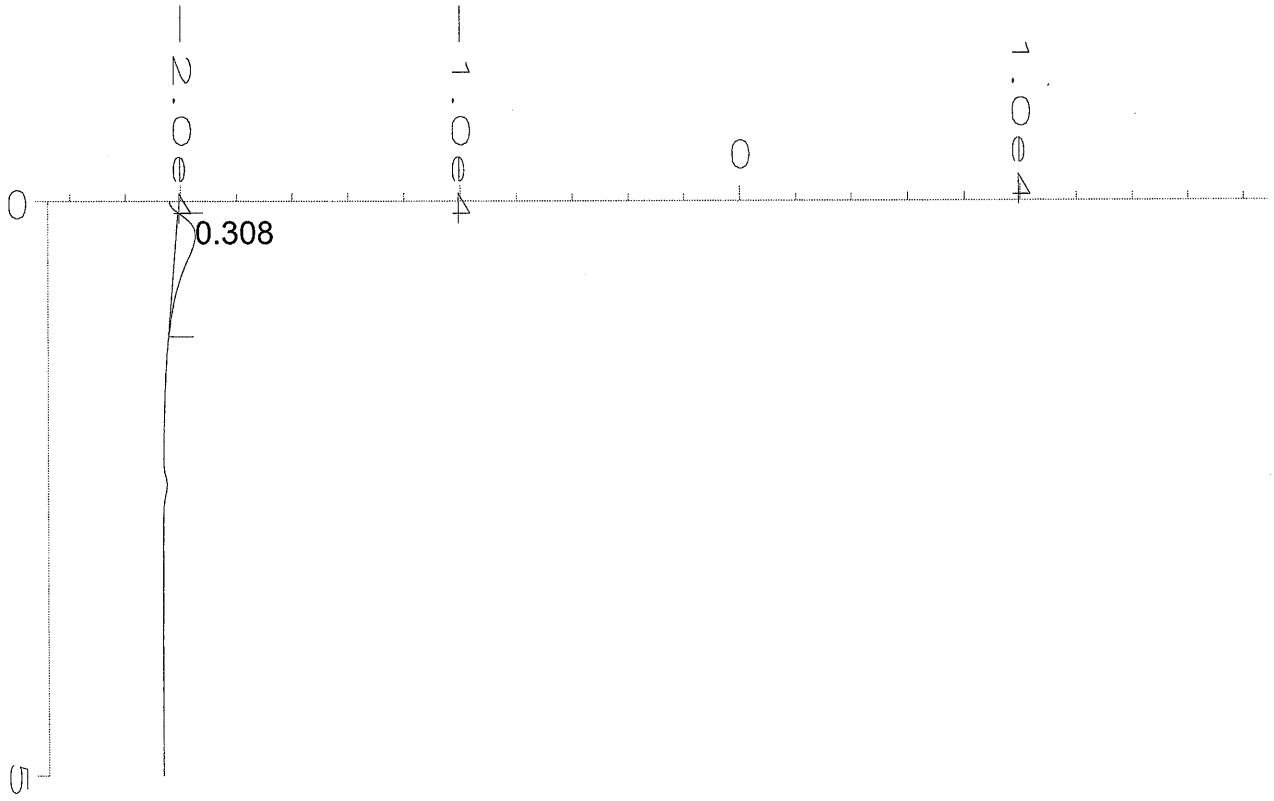
QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

SDG:	**LABQC**				**Method:**	**ASTM D3416**
Lab Id:	**B12094**					
File Name:	**B12094A**				**SF:**	**2**
Description:	**METHOD BLANK**				**Not Detected Flag:**	**ND**
Date Sampled:	**NA**	**Time:**	**NA**		**Matrix**	**AA**
Date Received:	**NA**	**Time:**	**NA**		**Type**	**TRG**
Date Analyzed:	**12/09/24**	**Time:**		**11:24**	**Instrument**	**GCL**
QCBatch	**120924-GCL**				**Volume:**	**5.0**
Type	**MB**					
Can Number	**NA**					
Can Factor	**1.00**					

CAS#	Compound	Num	STD RT	STD ppmV	Standard Area	Sample Area
74-82-8	Methane	01	2.53	103.20	**1058733**	**0**

For Data Package Print QUANT, REPORT, CALC



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCL\B12094A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : METHOD BLANK
Run Time Bar Code:
Acquired on : 09 Dec 24 11:24 AM
Report Created on: 09 Dec 24 11:29 AM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\B12094A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.308	19166	668	BB	0.348	100.0000

Total area = 19166

==========

LCS/LCD Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one LCS/LCD report for each QC Batch (DAB) in this SDG.

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QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

ASTM D3416 Methane by GC/FID
Analytical Method: **ASTM D3416**

Date: 12/06/24
QC_Batch: 120624-GCL

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
74-82-8	Methane	78		85		70	130	7	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

ASTM D3416 Methane by GC/FID

	LCS	LCD	STD			
File Name:	**QC12064A**	**QC12064B**	**C12064D**	Method:	**ASTM D3416**	
SDG:	**LABQC**	**LABQC**		Not Detected Flag:	**ND**	
LCS EAS ID:	**QC12064A**	**QC12064B**		SF:	**2**	
Time:	**10:45**	**10:37**		Instrument:	**GCL**	2
Date Analyzed:	**12/06/24**			DAB:	**1206**	3
QCBatch:	**120624-GCL**				**12064**	4
Methane Std Area	**7.50E+06**	A				
Matrix	**AA**					
Chem	**TRG**					
Description	**ST63414**					
Can Factor:	**1.00**			Unit Factor	**1000**	
Volume:	**5.00**	ml	D	A	B	

CAS#	Compound	STD CONC	STD AREA	Samp RT	LCS Area	LCD Area
74-82-8	Methane	**103.20**	**921941**	1.63	**15073**	**16499**
		ST62408	1293306			
		RSD	23.708			

QUALITY CONTROL REPORT

Date Analyzed: 12/06/24

QC_Batch: 120624-GCL

CAS#	Compound	MW	Carbon #	Spike Conc PPMV	LCS ppbv	LCS ppbv	LCS ppbv	LCS %
74-82-8	Methane	16	1	2.50	1.95	0.00	2.0	78.0

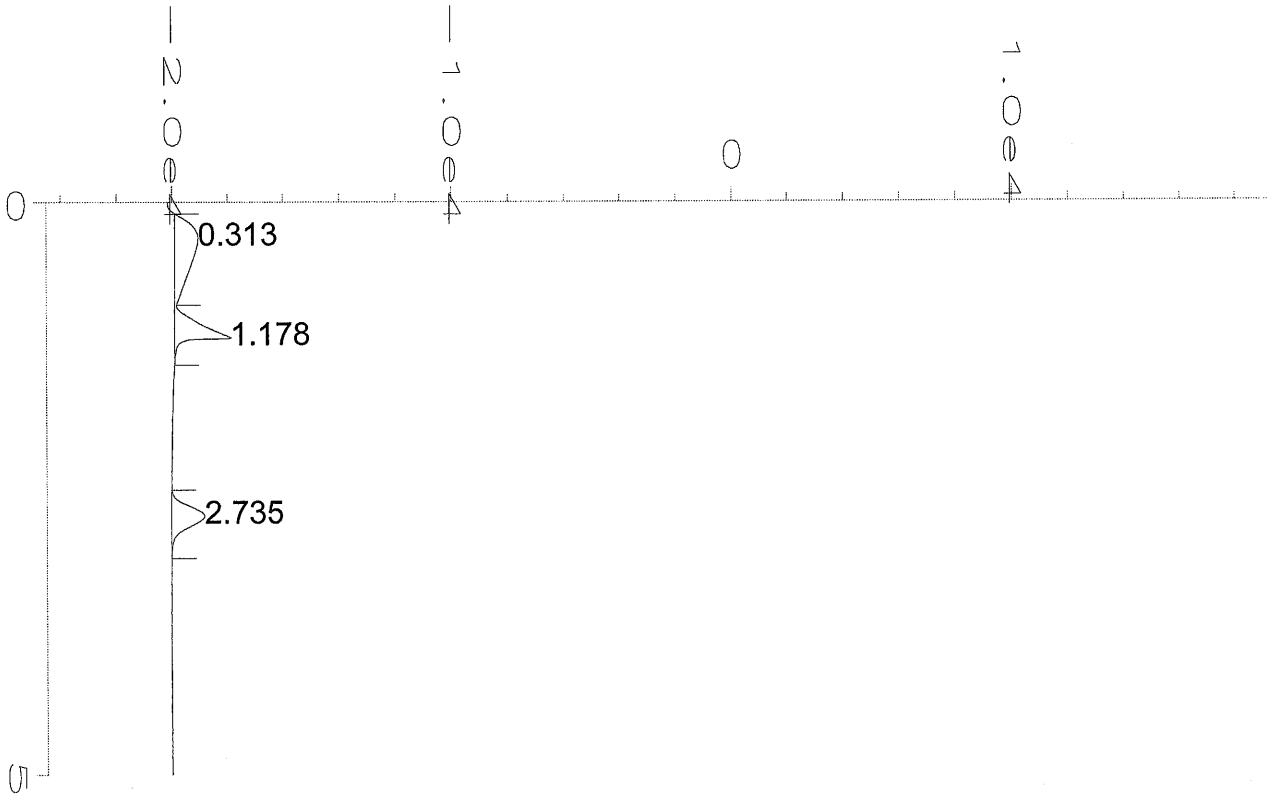
CAS#	Compound	MW	Carbon #	Spike Conc PPMV	LCD ppbv	LCD ppbv	LCD ppbv	LCD %
74-82-8	Methane	16	1	2.50	2.13	0.00	2.1	85.2

LCL %	UCL %	Flag	DUP %	CL %	Flag
70	130		7.20	25	

LCL %	UCL %	Flag
70	130	

2.5

2.88
2.55
2.79



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12064GCL\QC12064D.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ABT AIR
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 06 Dec 24 02:58 PM
Instrument Method: 3416CH4.MTH
Report Created on: 06 Dec 24 03:03 PM
Analysis Method : 3416CH4.MTH
Sample Info : OUTDOOR AIR SYRINGE DRAW

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\QC12064D.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.313	23878	840	BV	0.354	43.2992
2	1.178	16937	2026	VB	0.104	30.7122
3	2.735	14332	1192	BB	0.147	25.9886

Total area = 55147

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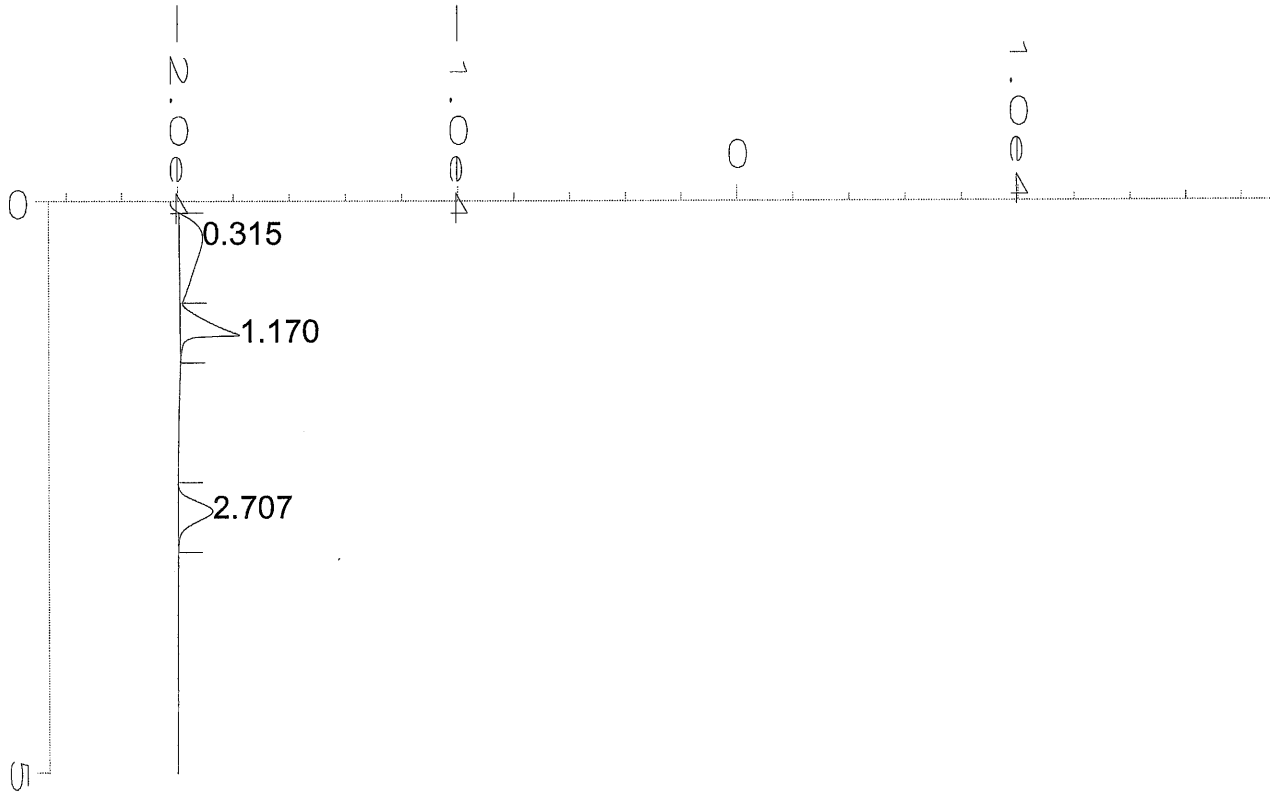

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\QC12064C.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ABT AIR
Run Time Bar Code:
Acquired on : 06 Dec 24 02:48 PM
Report Created on: 06 Dec 24 02:53 PM
Sample Info : OUTDOOR AIR SYRINGE DRAW

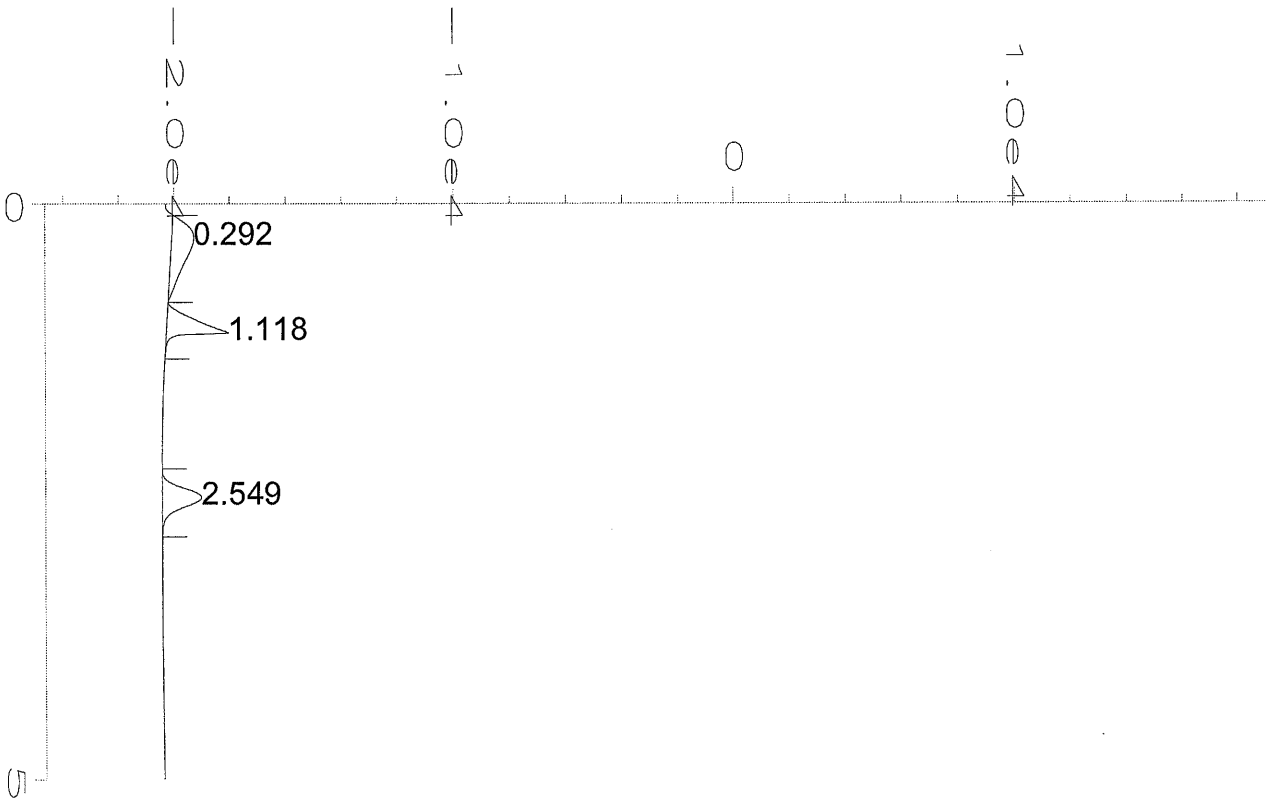
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\QC12064C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.315	24113	846	BV	0.351	42.1967
2	1.170	18086	2136	VB	0.104	31.6502
3	2.707	14945	1254	BB	0.150	26.1531

Total area = 57145

==========



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\QC12064B.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ABT AIR
Run Time Bar Code:
Acquired on : 06 Dec 24 02:40 PM
Report Created on: 06 Dec 24 02:46 PM
Sample Info : OUTDOOR AIR SYRINGE DRAW

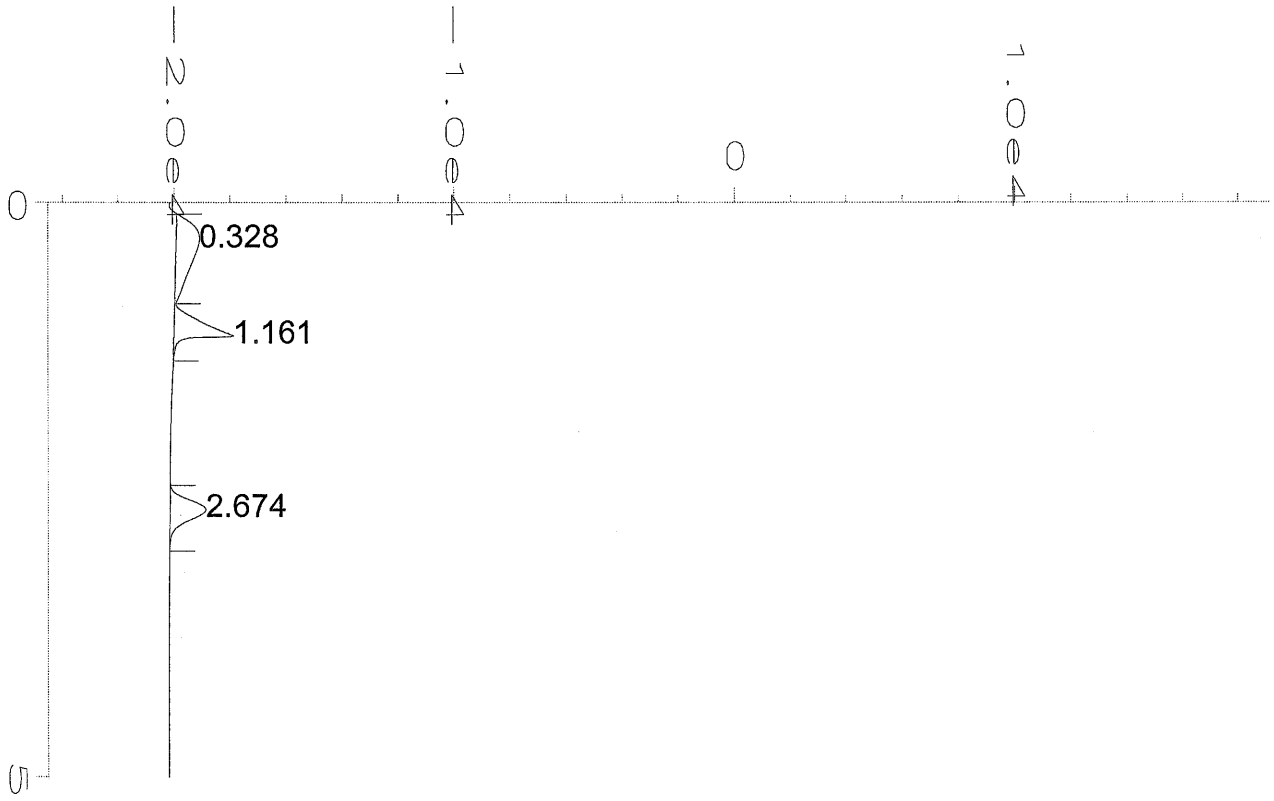
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\QC12064B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.292	19802	783	BV	0.316	37.0279
2	1.118	17178	2247	PB	0.097	32.1207
3	2.549	16499	1435	BB	0.156	30.8514

Total area = 53479

==========



==========

Area Percent Report

==========

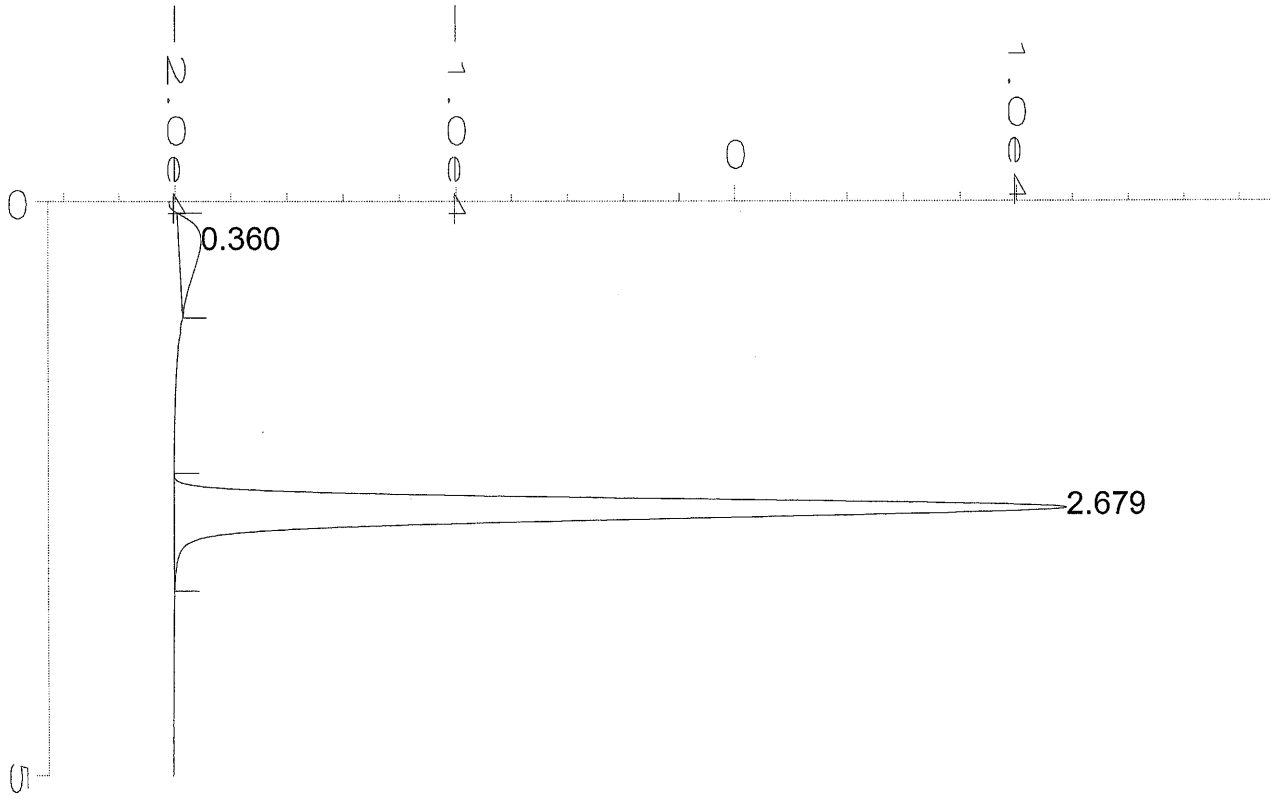
Data File Name : C:\GCCHEM\1\DATA\12064GCL\QC12064A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ABT AIR
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 06 Dec 24 02:34 PM
Instrument Method: 3416CH4.MTH
Report Created on: 06 Dec 24 02:39 PM
Analysis Method : 3416CH4.MTH
Sample Info : OUTDOOR AIR SYRINGE DRAW

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\QC12064A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.328	22378	824	BV	0.342	40.6962
2	1.161	17537	2136	VB	0.102	31.8923
3	2.674	15073	1278	BB	0.174	27.4115

Total area = 54988

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\C12064E.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63414
Run Time Bar Code:
Acquired on : 06 Dec 24 02:27 PM
Report Created on: 06 Dec 24 02:32 PM
Sample Info : 5%, 1:10 ST63414:ISP N2

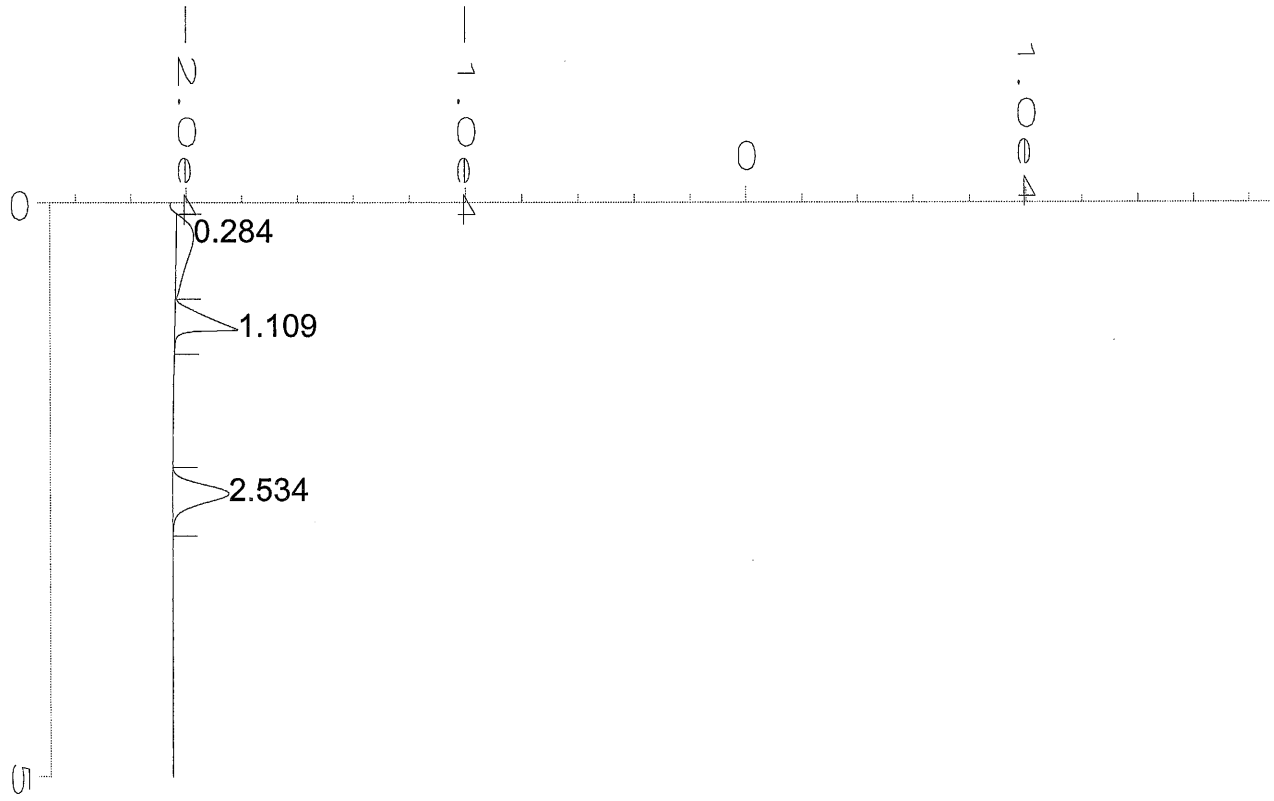
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\C12064E.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.360	23435	798	BB	0.366	5.6074
2	2.679	394494	31811	BB	0.185	94.3926

Total area = 417930

==========



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Area Percent Report

==========

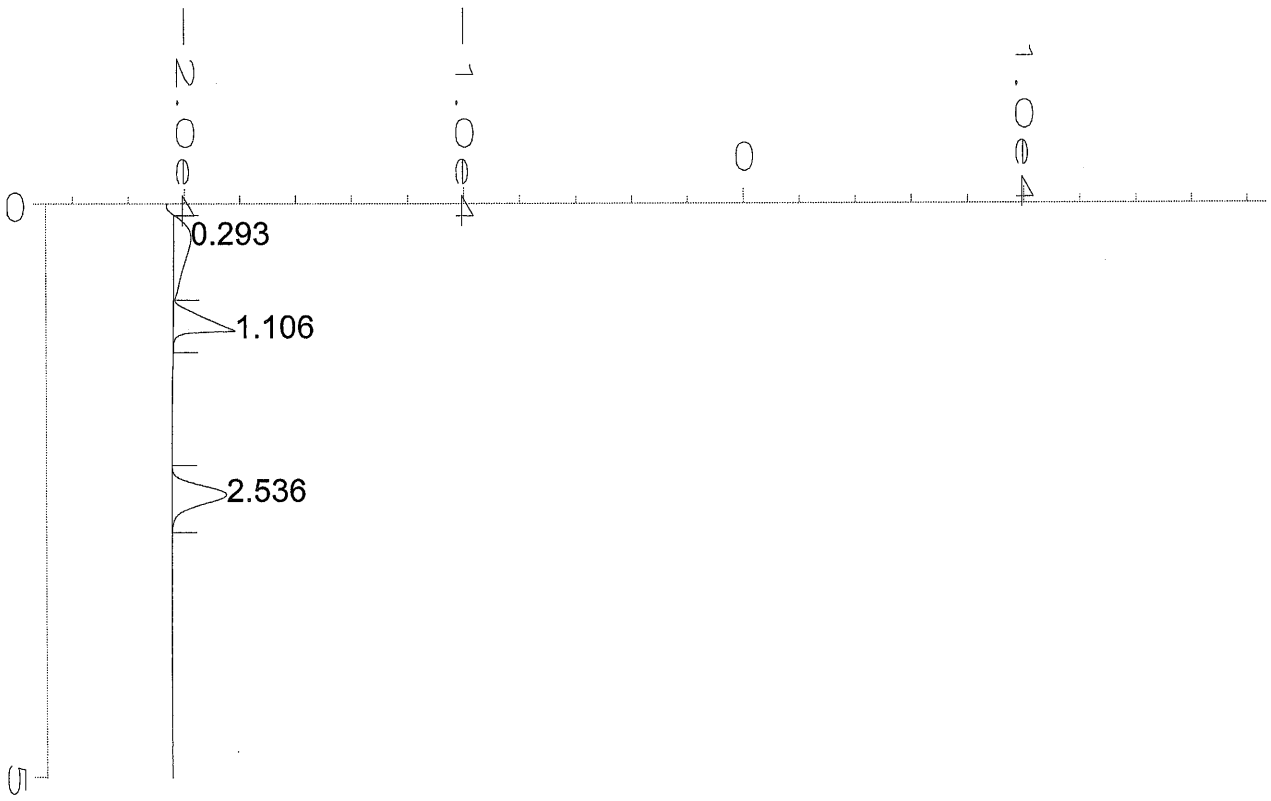
Data File Name : C:\GCCHEM\1\DATA\12094GCL\QC12094D.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ABT AIR
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 11:17 AM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 11:23 AM
Analysis Method : 3416CH4.MTH
Sample Info : AMBIENT OUTDOOR AIR SYRINGE DRAW

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\QC12094D.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.284	15530	601	BV	0.325	27.1672
2	1.109	18668	2272	VB	0.101	32.6567
3	2.534	22966	2010	BB	0.170	40.1761

Total area = 57164

==========



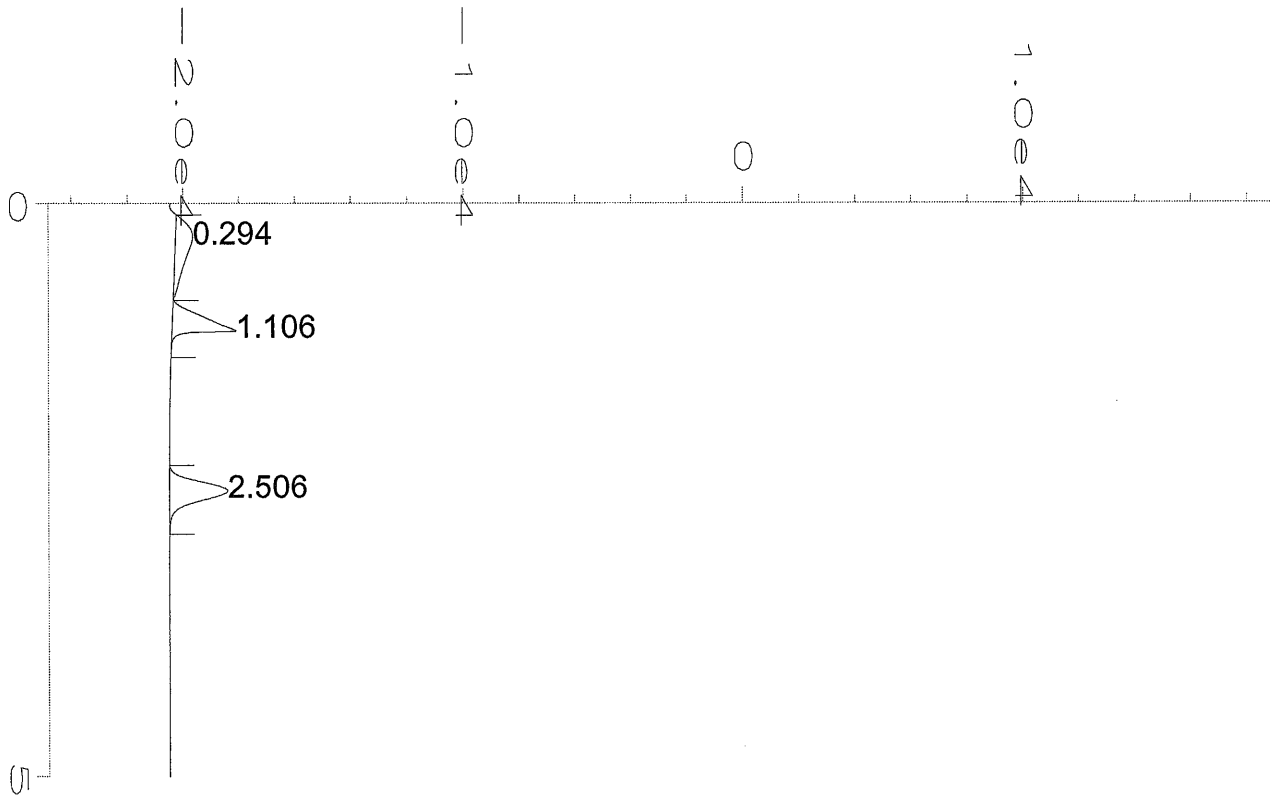

```
================================================================================
                              Area Percent Report
================================================================================

Data File Name    : C:\GCCHEM\1\DATA\12094GCL\QC12094C.D
Operator          : DA                                Page Number      : 1
Instrument        : ANALYZER1                         Vial Number      :
Sample Name       : ABT AIR                           Injection Number :
Run Time Bar Code:                                    Sequence Line    :
Acquired on       : 09 Dec 24  11:12 AM               Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24  11:17 AM                Analysis Method  : 3416CH4.MTH
Sample Info       : AMBIENT OUTDOOR AIR SYRINGE DRAW

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\QC12094C.D
    Pk#  Ret Time       Area          Height     Type   Width     Area %
   |---|----------|-------------|-------------|----|---------|----------|
      1     0.293          15442           594  BV     0.326     27.4716
      2     1.106          18233          2230  VB     0.103     32.4383
      3     2.536          22534          1967  BB     0.155     40.0901

Total area = 56210

================================================================================
```



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Area Percent Report

==========

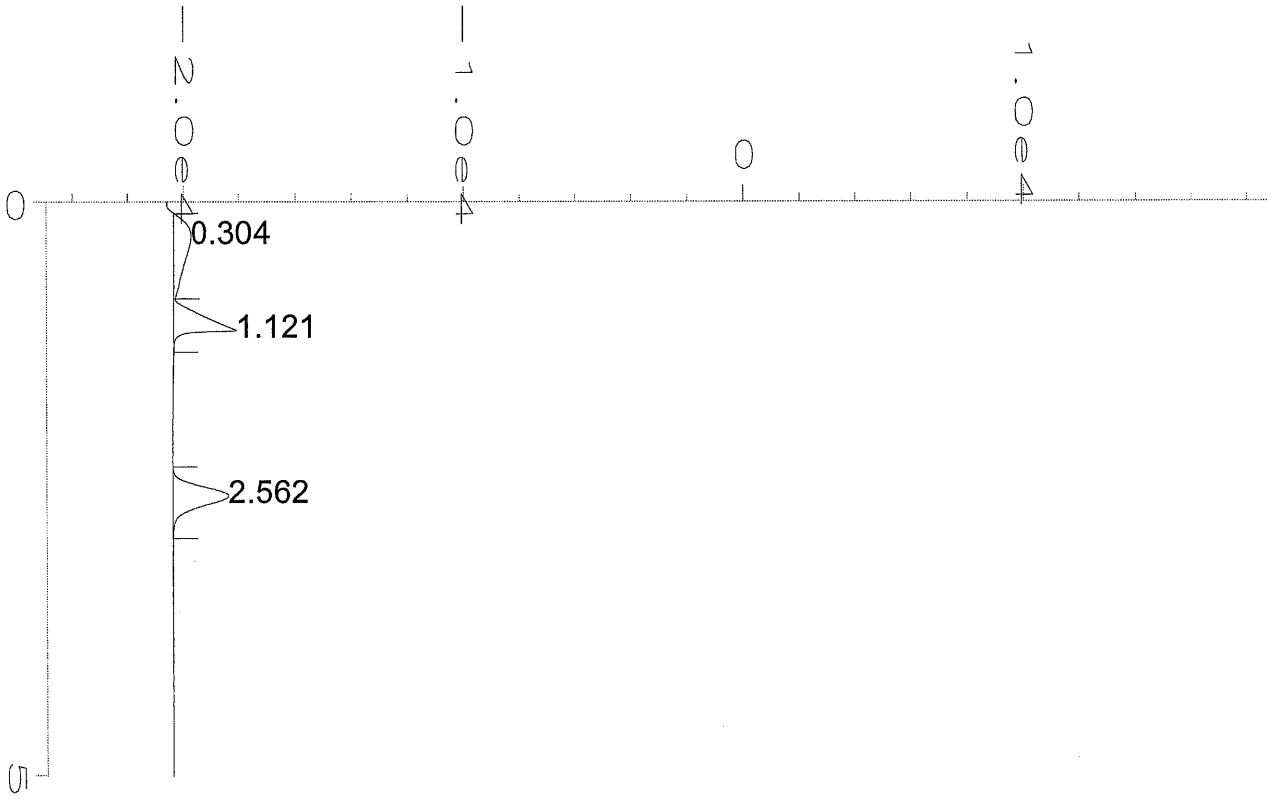
Data File Name : C:\GCCHEM\1\DATA\12094GCL\QC12094B.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ABT AIR
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 11:05 AM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 11:10 AM
Analysis Method : 3416CH4.MTH
Sample Info : AMBIENT OUTDOOR AIR SYRINGE DRAW

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\QC12094B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.294	14826	600	BV	0.308	25.7942
2	1.106	18890	2310	VB	0.106	32.8635
3	2.506	23763	2102	BB	0.165	41.3424

Total area = 57479

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\QC12094A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ABT AIR
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 10:59 AM
Instrument Method: 3416CH4.MTH
Report Created on: 09 Dec 24 11:04 AM
Analysis Method : 3416CH4.MTH
Sample Info : AMBIENT OUTDOOR AIR SYRINGE DRAW

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\QC12094A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.304	15827	599	BV	0.331	27.1579
2	1.121	19242	2252	VB	0.106	33.0180
3	2.562	23208	2006	BB	0.166	39.8241

Total area = 58276

==========

Continuing Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

CONTINUING CALIBRATION REPORT

SDG: **LABQC**
QC_Batch: **120624-GCL**
Sample Analysis Date: 12/06/24
ICAL Date: 12/06/24

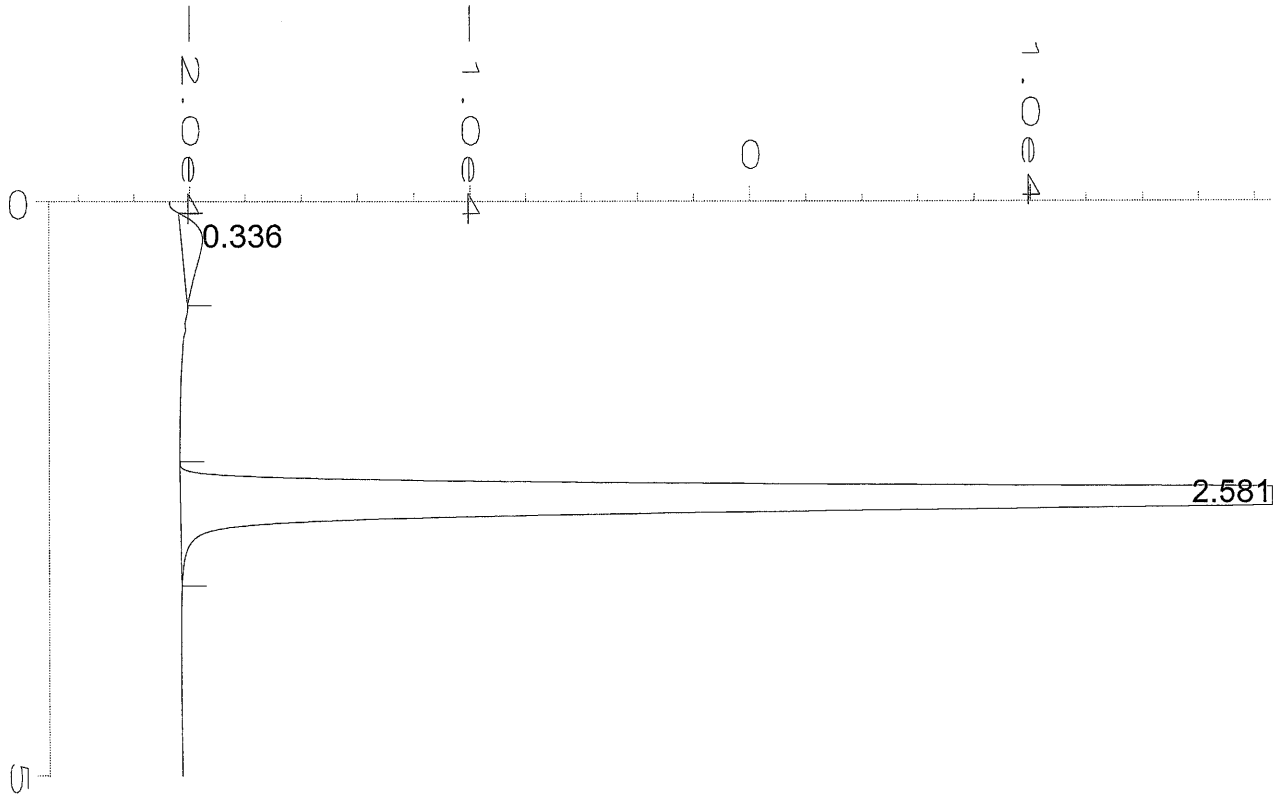
Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|$

2) CCRRF = $\left|\frac{(Astdni)}{(Cstdni)}\right|$

C03246B ST61726

Compound	Area Astdi	Cal Level Cstdi Ml	CCRRF	AvgRFn	ICal RFn C Ratio	%Dev	%Dev Limit
Methane	822005	103.200	7965	7636	22909	-4.3	30



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12064GCL\C12064D.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63414
Run Time Bar Code:
Acquired on : 06 Dec 24 02:19 PM
Report Created on: 06 Dec 24 02:24 PM
Sample Info : 10%, 1:10 ST63414:ISP N2

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12064GCL\C12064D.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.336	20976	769	BB	0.347	2.4883
2	2.581	822005	67835	BB	0.189	97.5117

Total area = 842980

==========

CONTINUING CALIBRATION REPORT

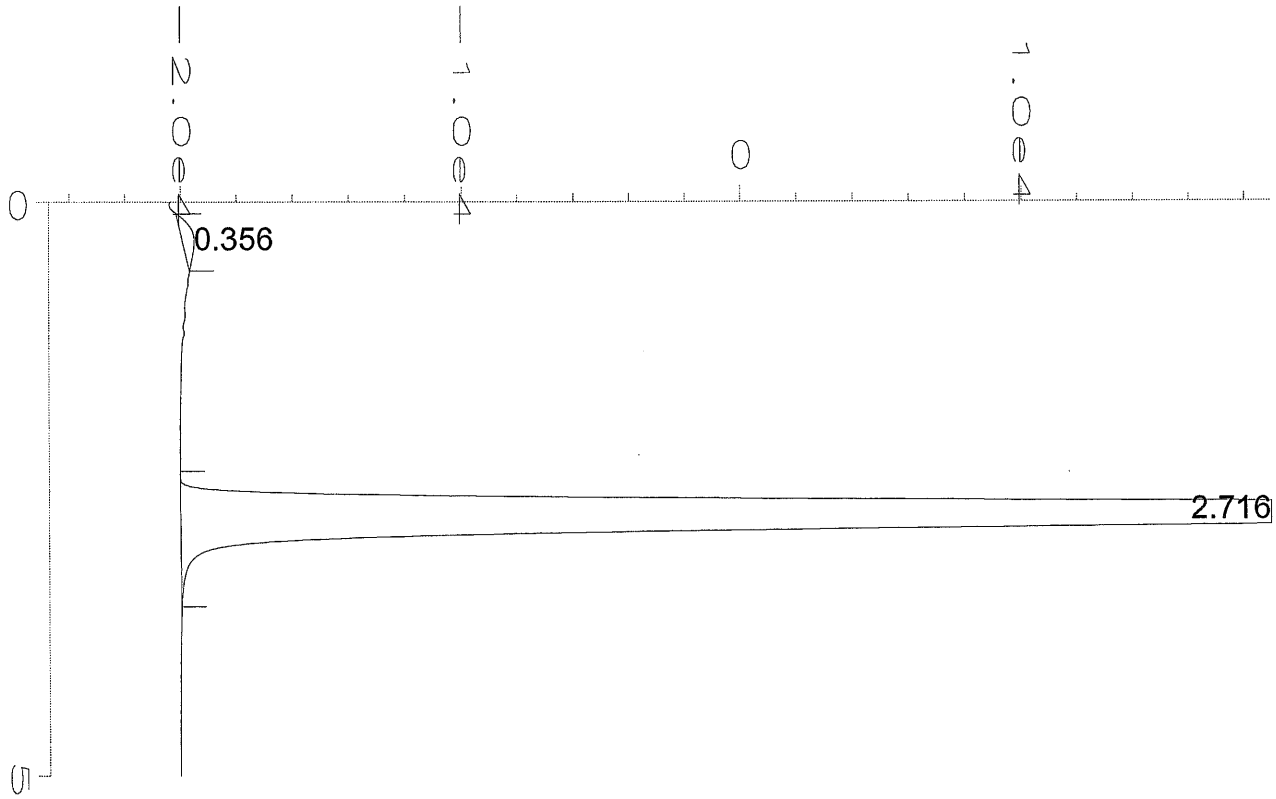
SDG: **LABQC**
QC_Batch: **120924-GCL**
Sample Analysis Date: 12/09/24
ICAL Date: 12/09/24

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|$

2) CCRRF = $\left|\frac{(Astdni)}{(Cstdni)}\right|$

	C03246B	ST61726					
	Area	Cal Level			ICal RFn		%Dev
Compound	Astdi	Cstdi Ml	CCRRF	AvgRFn	C Ratio	%Dev	Limit
Methane	1058733	103.200	10259	11704	35112	12.3	30



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCL\C12094D.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63414
Run Time Bar Code:
Acquired on : 09 Dec 24 10:46 AM
Report Created on: 09 Dec 24 10:51 AM
Sample Info : 10% 1:10 ST63414:ISP N2

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCL\C12094D.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.356	7822	382	BB	0.287	0.7334
2	2.716	1058733	85774	BB	0.192	99.2666

Total area = 1066554

==========

Initial Calibration Data Packages

Samples were analyzed using the methods listed in Section 3. For each of the methods there is an Initial Calibration Curve that meets the criteria defined in Section 2 on Quality Control for the modified method.

Index

Response Factors
Instrument Quant Report
Chromatogram

INITIAL CALIBRATION REPORT: Response Factors

ASTM D3416 Methane by GC/FID

QC_Batch: 042224-GCL
ICAL Date: **04/22/24**

Sample Calculation:

1) Avg RFn = $\text{Sum}\left|\frac{(\text{Astdni})}{(\text{Cstdni})}\right|_i$

Response Factors

Compound	RF1	RF2	RF3	RF4	RF5	AvgRFn	%RSD
Methane	13356	13138	14284	19945	15801	15305	18

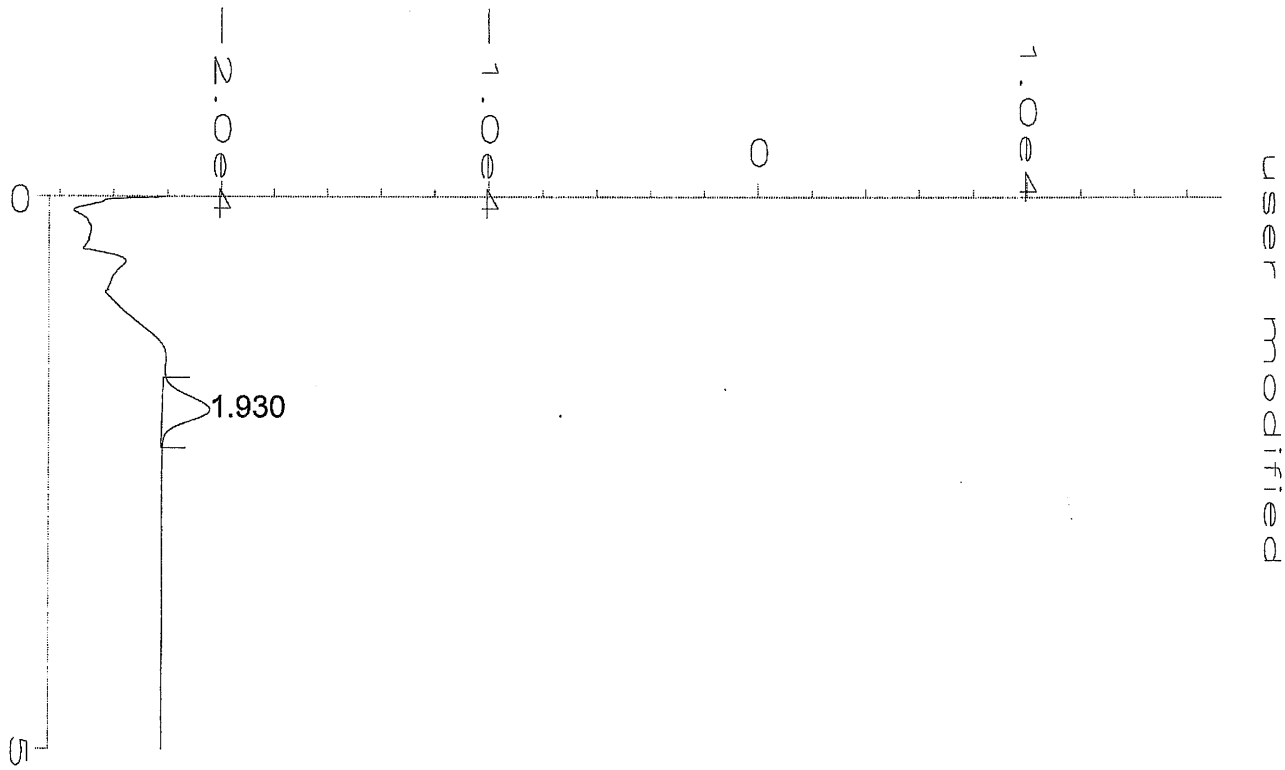
INITIAL CALIBRATION REPORT

ASTM D3416 Methane by GC/FID

QC_Batch: 042224-GCL
ICAL Date: **04/22/24**

	Calibration Amount CA, ppmv					Calibration Response, Area				
	Level 1	Level 2	Level 3	**Level 4**	Level 6	Level 1	Level 2	Level 3	Level 4	Level 6
	ST63416	ST63415	ST62407	**ST63414**	AMBIENT	C04224F	C04224E	C04224C	C04224A	QC04224A
Compound	29.8	59.6	119.27	**1032.00**	1.820	29.80	59.6	119.27	1032.00	AMBIENT
Methane	29.80	59.64	119.27	**1032.00**	1.820	397997	783566	1703621	20583700	28758
				Secondary Standard						

Secondary Standard prepared from an independent source.
Secondary Standard was included in curve
Ambient Air QC Standard was included in curve.



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04224GCP\QC04224A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63417
Run Time Bar Code:
Acquired on : 22 Apr 24 10:56 AM
Report Created on: 22 Apr 24 11:02 AM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

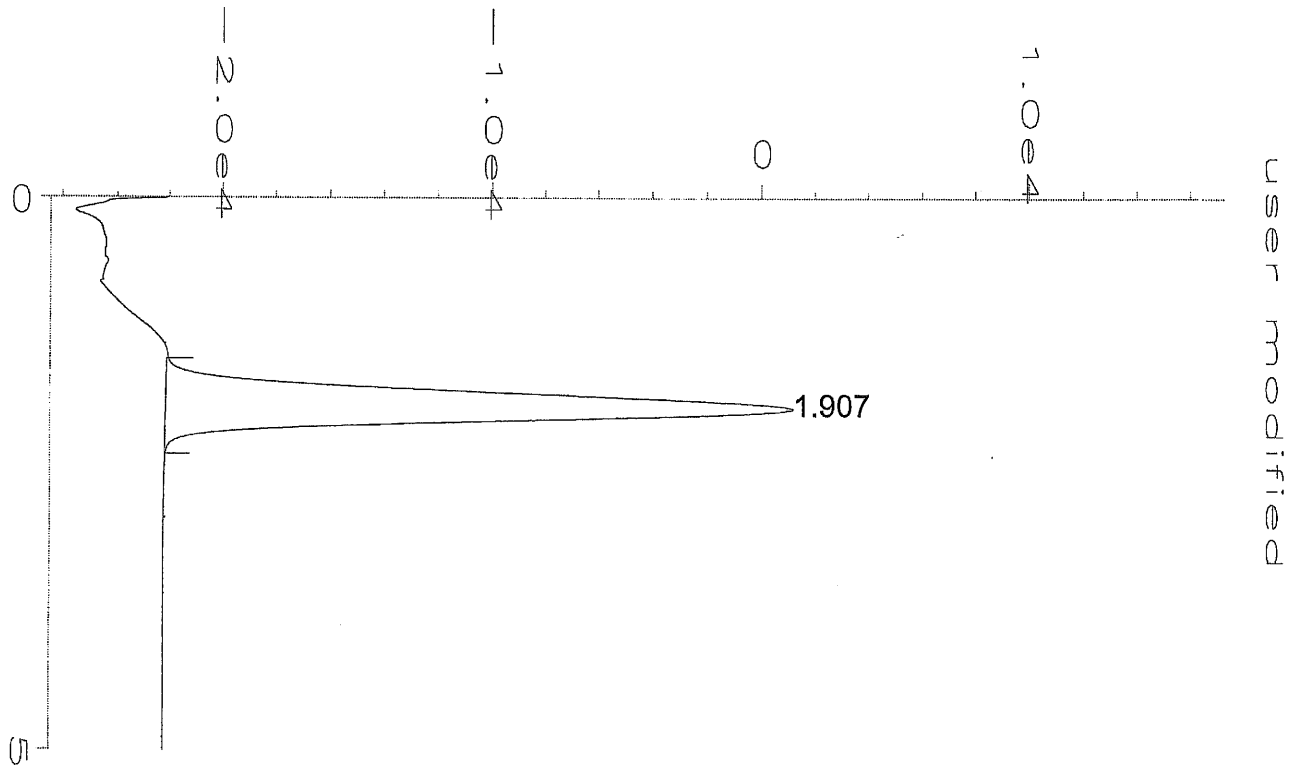
Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\QC04224A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.930	28758	1780	MM	0.269	100.0000

Total area = 28758

User Modified

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04224GCP\C04224F.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63416
Run Time Bar Code:
Acquired on : 22 Apr 24 10:47 AM
Report Created on: 22 Apr 24 10:53 AM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

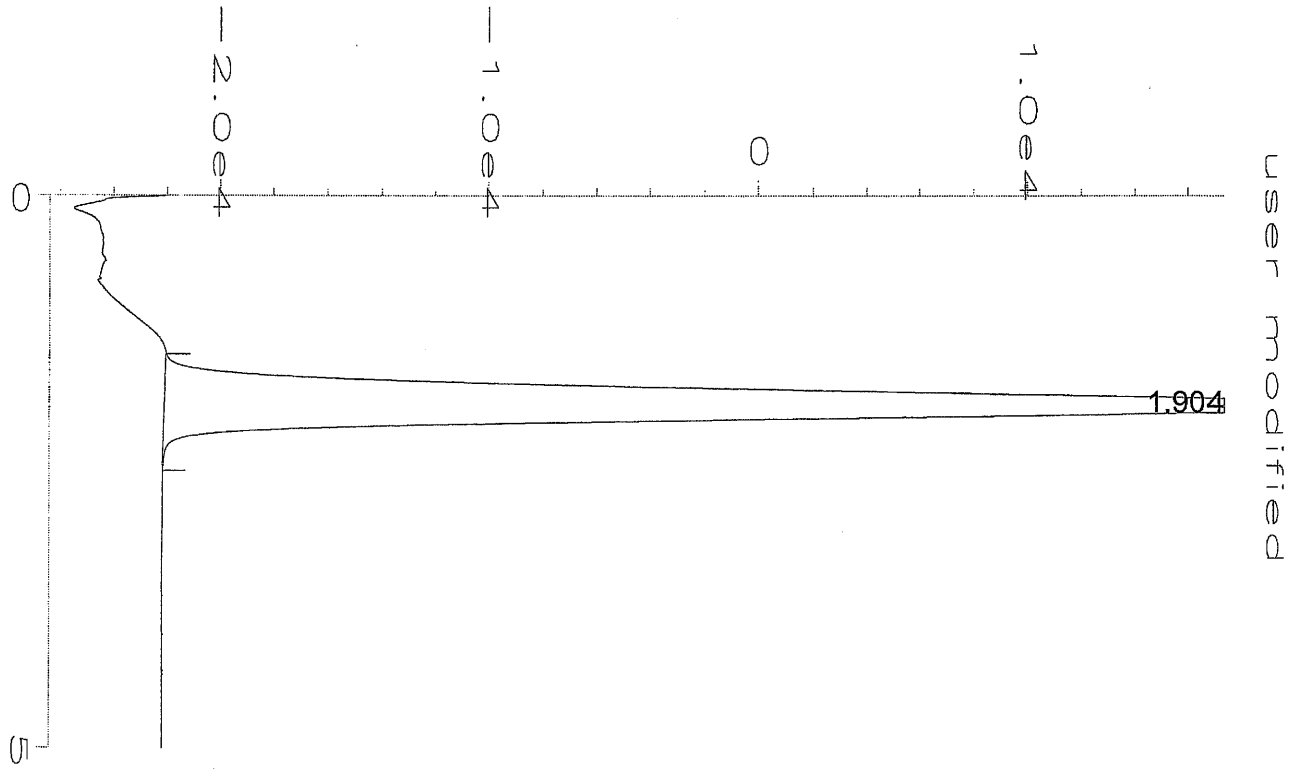
Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\C04224F.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.907	397997	23325	MM	0.284	100.0000

Total area = 397997

User Modified

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04224GCP\C04224E.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63415
Run Time Bar Code:
Acquired on : 22 Apr 24 10:36 AM
Report Created on: 22 Apr 24 10:43 AM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\C04224E.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.904	783566	46192	MM	0.283	100.0000

Total area = 783566

User Modified

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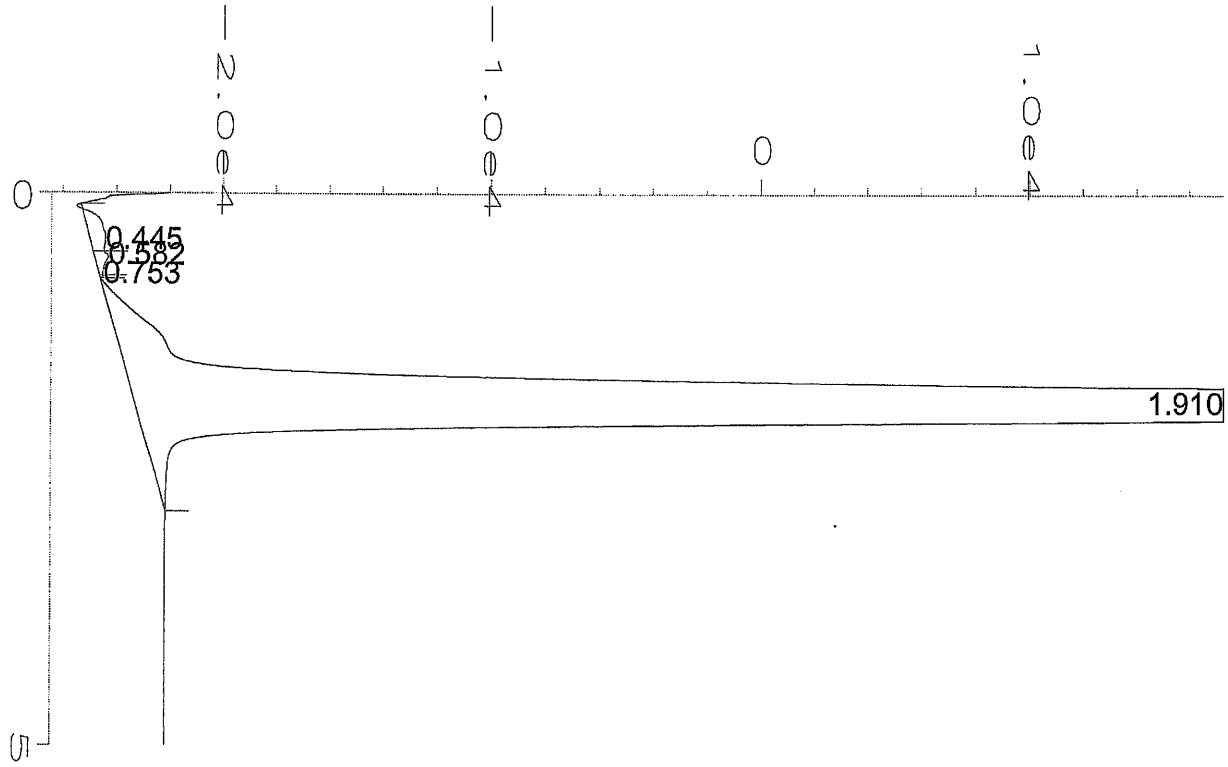

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Area Percent Report

==========

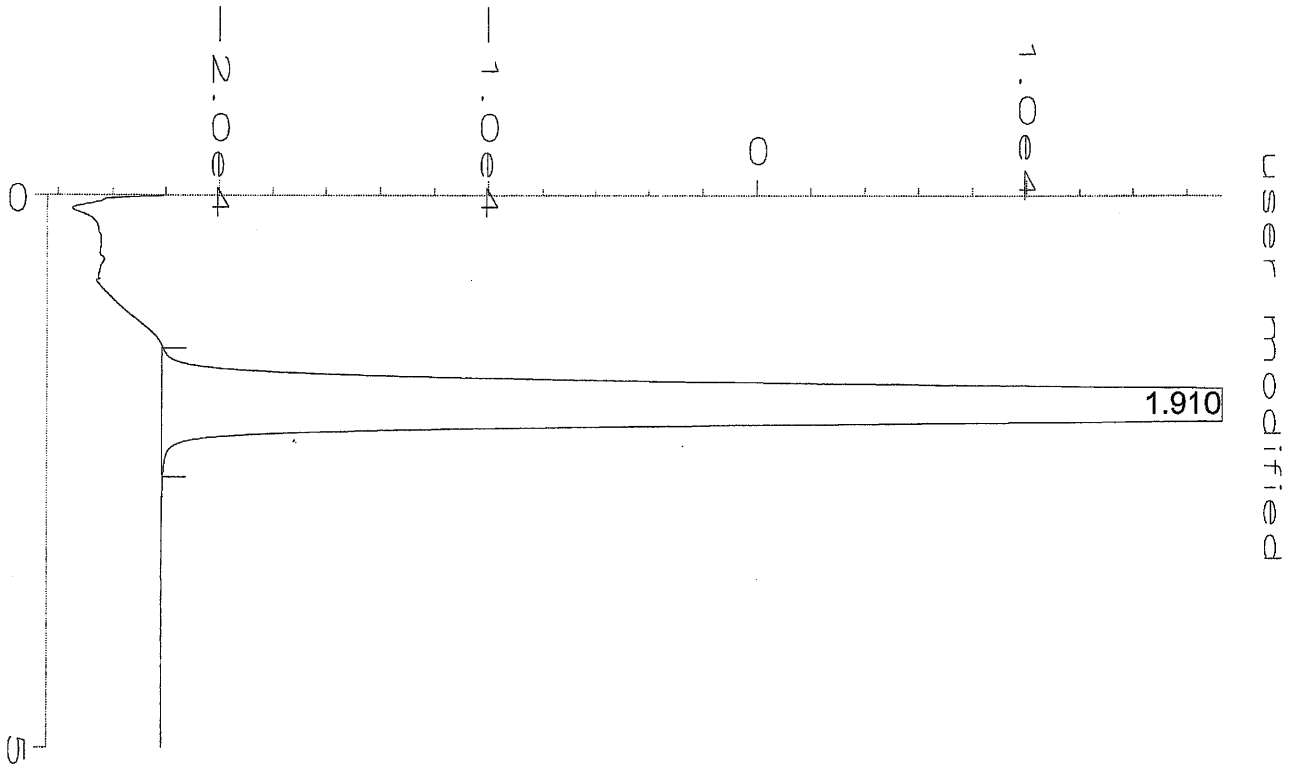
Data File Name : C:\GCCHEM\1\DATA\04224GCP\C04224C.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ST62407
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 22 Apr 24 10:19 AM
Instrument Method: 3416CH4.MTH
Report Created on: 22 Apr 24 10:24 AM
Analysis Method : 3416CH4.MTH
Sample Info : 119.27PPM CH4

Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\C04224C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.445	11130	539	BV	0.249	0.6475
2	0.582	4117	494	VV	0.107	0.2395
3	0.753	143	155	VV	0.015	0.0083
4	1.910	1703621	93802	PB	0.277	99.1048

Total area = 1719010

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04224GCP\C04224C.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST62407
Run Time Bar Code:
Acquired on : 22 Apr 24 10:19 AM
Report Created on: 22 Apr 24 10:27 AM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

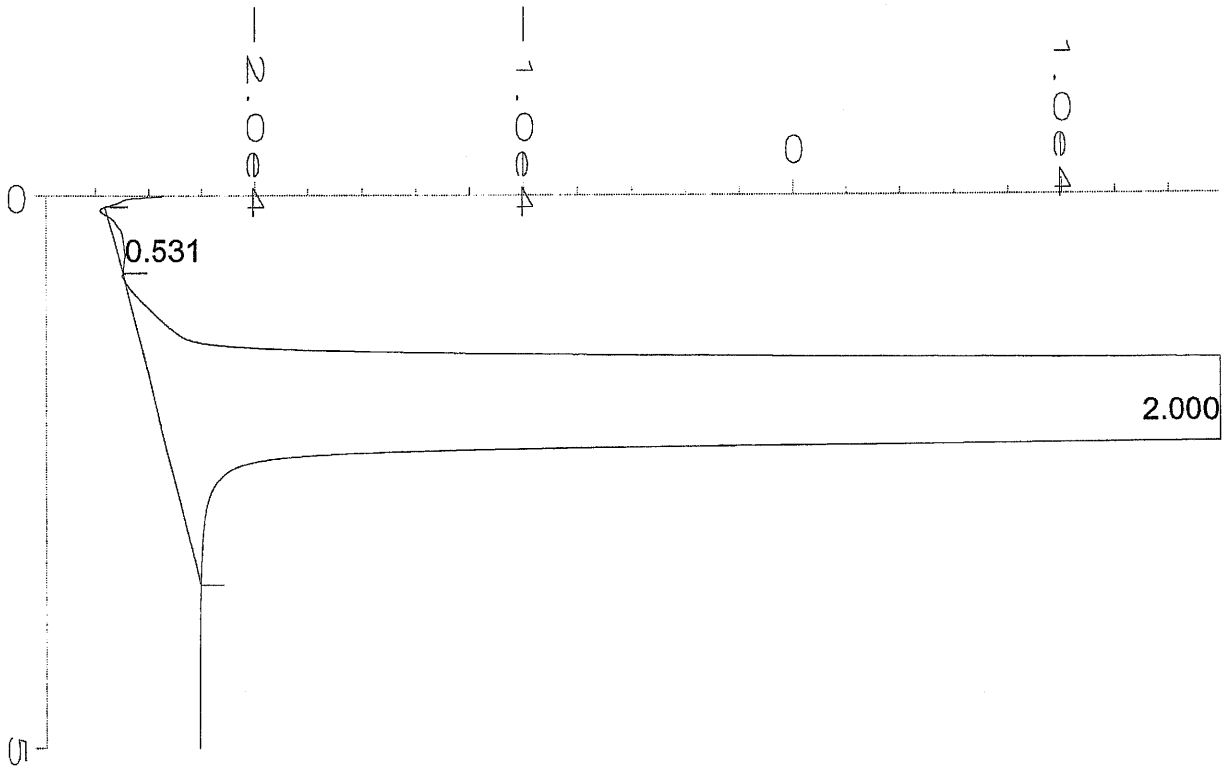
Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\C04224C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.910	1591146	92676	MM	0.286	100.0000

Total area = 1591146

User Modified

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04224GCP\C04224A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63414
Run Time Bar Code:
Acquired on : 22 Apr 24 09:57 AM
Report Created on: 22 Apr 24 10:03 AM
Sample Info : 1032PPM CH4

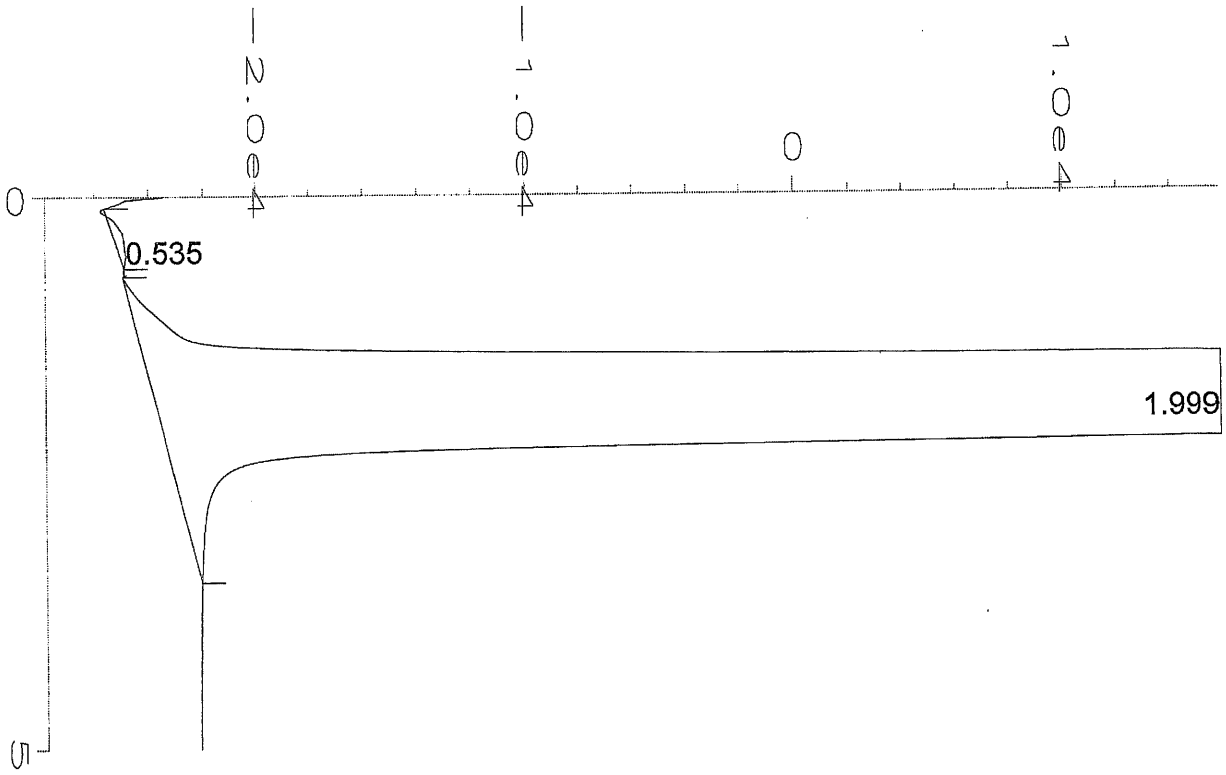
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\C04224A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.531	6555	279	BB	0.288	0.0318
2	2.000	2.05837E+007	857646	BB	0.340	99.9682

Total area = 2.05902E+007

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04224GCP\C04224B.D
Operator : DA
Instrument : ANALYZER1
Sample Name : ST63414
Run Time Bar Code:
Acquired on : 22 Apr 24 10:03 AM
Report Created on: 22 Apr 24 10:08 AM
Sample Info : 1032PPM CH4

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: 3416CH4.MTH
Analysis Method : 3416CH4.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04224GCP\C04224B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.535	6061	211	BB	0.343	0.0298
2	1.999	2.0314E+007	836893	PB	0.342	99.9702

Total area = 2.03201E+007

==========

Section 5 Standard Calibration Certificates

This section contains the Standard Calibration Certificates for the Standards and Internal Standards.

Section Contents

Standard Calibration Certificates

ST63408	50% Air 50:50 syringe dilution ST63400: ISP He	[illegible] 4/19/24
ST63409	25% Air 1:4 syringe dilution ST63400: ISP He	[illegible] 4/19/24
ST63410	25% CO_2 1:4 Syringe dilution ST61116 (100% CO_2): ISP He	[illegible] 4/19/24
ST63411	25% Methane 1:4 syringe dilution ST63324 (100% Me): ISP He	[illegible] 4/19/24
ST63412	Ambient Air 100% Ambient outdoor air syringe draw	[illegible] 4/19/24
ST63413	50% Ambient Air 1:1 syringe dilution ST63412: ISP He	[illegible] 4/19/24

ST63414 4/22/24

20 ml of ST63324 100% Methane was spiked into a Blue Scotty and pressurized to 290 psig Gas 600300.

[illegible]

STANDARD CERTIFICATE
CALIBRATION GAS STANDARD

Standard ID: ST62407 **Date Prepared: 3/5/20**

Description: Methane Standard Analyst: SH
Canister: Blue Scotty Expiration Date: 3/4/25

Component	CAS No	Concentration
Methane	74-82-8	119.27

•This Analysis is NIST Traceable by either measurement or weight•

Analyst:

The stability of gas standards cannot be guaranteed and EAS will only be liable for replacement or reanalysis if the standard changes in six months from analysis date.

Standard Preparation

	Primary	Dilution 1	Dilution 2
Standard ID:	ST60775	ST62406	ST62407
Date Prepared:		3/5/2020	03/05/20
Container ID:	Blue Scotty		Blue Scotty
Analyst:	SH	20	935
		18299	8568
		273	120
	Factor	0.001093	0.109131
	Conc ppmv	Conc ppmv	Conc ppmv
Methane	1000000	1092.9388	119.27

STANDARD PREPARATION WORKSHEET

Instructions: Enter the compound name and date then desired ppmV for final Standard. Check mass and volume to make sure they are in a measurable range.
Checked and Validated on 8/27/1999

Description: Methane Standard
Volume of Air (Est.): 935 ml

Standard	CAS
Methane	74-82-8

STANDARD CERTIFICATE

CALIBRATION GAS STANDARD

Standard ID: ST63414 **Date Prepared: 4/22/24**

Description: Methane Standard Analyst: SH

Canister: Blue Scotty Expiration Date: 4/21/29

Component	CAS No	Concentration
Methane	74-82-8	1032

•This Analysis is NIST Traceable by either measurement or weight•

Analyst:

The stability of gas standards cannot be guaranteed and EAS will only be liable for replacement or reanalysis if the standard changes in six months from analysis date.

Standard Preparation

	Primary	Dilution 1	Dilution 2
Standard ID:	ST63324	ST63414	ST63414
Date Prepared:		4/22/2024	04/22/24
Container ID:	Blue Scotty		Blue Scotty
Analyst:	SH	20	1
		19381	1
		290	
	Factor	0.001032	1.000000
	Conc ppmv	Conc ppmv	Conc ppmv
Methane	1000000	1031.9610	1031.96

STANDARD PREPARATION WORKSHEET

Instructions: Enter the compound name and date then desired ppmV for final Standard. Check mass and volume to make sure they are in a measurable range.
Checked and Validated on : 8/27/1999

Description: Methane Standard
Volume of Air (Est.): 935 ml

Standard	CAS
Methane	74-82-8

Section 6 Miscellaneous Documents

This section contains additional documents that pertain to the project.

Section Contents

Shipping and Receiving Documents
Contact Logs and Correspondence
Additional Documents for Sampling

ENVIRONMENTAL
Analytical Service, Inc.

Data Deliverable Package

Prepared For:
C.E. Schmidt
19200 Live Oak Road
Red Bluff CA 96080

EAS SDG Number: **224435**
Project Number: 17807
Report Sent:
Sample Event Date: 1/20,11/21/2024

Client Project Manager: Chuck Schmidt
Project Name: Chiquita Canyon
Project Number: Data Package GC TO-12/TO-14

This is the Laboratory Data Deliverable Package for the samples in the indicated Sample Delivery Group (SDG).

INDEX TO DATA PACKAGE:

Section 1 **Project Summary**
- Laboratory Work Order
- Sample Data
- Laboratory Case Narrative and Chain of Custody

Section 2 **Quality Control**
- Project QC Criteria
- DAB QC Reports

Section 3 **Analytical Methods**
- Analytical Method Description(s)
- Analytical Reports

Section 4 **Data Package with Quant Report and Chromatogram**
- DAB Run Logs and Preparation Log
- Sample Data Package
- Blank Data Package
- Continuing Calibration Package
- Initial Calibration Package

Section 5 **Standard Certificates**

Section 6 **SDG Documentation, Notes, Correspondence**

173 Cross Street, San Luis Obispo, California, 93401 (805) 781-3585

Section 1 Project Summary

The following pages provide detailed information about the sample receipt, log-in, and sample preparation. The Laboratory Work Order provides a cross reference between the Client ID number and the EAS Lab Number as well as a list of the analytical tests preformed. The items included in this section are listed below.

Section Contents

Laboratory Work Order

Sample Data

Laboratory Case Narrative

Chain of Custody

Laboratory Work Order

SDG Number: 224435
Client: Chuck Schmidt
C.E. Schmidt

Project Number: 17807
Received: 11/21/2024

SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-401	224435 1	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-401	224435 1	ASTM D3416 Low Level Methane	11/19/2024
T-401	224435 1	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-401	224435 1	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-401	224435 1	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-402	224435 2	ASTM D3416 Low Level Methane	11/19/2024
T-402	224435 2	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-402	224435 2	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-403	224435 3	ASTM D3416 Low Level Methane	11/19/2024
T-403	224435 3	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-403	224435 3	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-403	224435 3	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-403	224435 3	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-404	224435 4	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-404	224435 4	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-404	224435 4	ASTM D3416 Low Level Methane	11/19/2024
T-404	224435 4	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-404	224435 4	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-405	224435 5	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-405	224435 5	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-405	224435 5	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-405	224435 5	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-405	224435 5	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-406	224435 6	ASTM D3416 Low Level Methane	11/19/2024
T-406	224435 6	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-406	224435 6	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-406	224435 6	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-406	224435 6	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-407	224435 7	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-407	224435 7	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-407	224435 7	ASTM D3416 Low Level Methane	11/19/2024
T-407	224435 7	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-407	224435 7	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-408	224435 8	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-408	224435 8	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-408	224435 8	ASTM D3416 Low Level Methane	11/19/2024
T-408	224435 8	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-408	224435 8	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-409	224435 9	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D3416 Low Level Methane	11/19/2024
T-409	224435 9	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-409	224435 9	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-410	224435 10	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-410	224435 10	ASTM D3416 Low Level Methane	11/19/2024
T-410	224435 10	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-411	224435 11	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-411	224435 11	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-411	224435 11	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-411	224435 11	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-411	224435 11	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-412	224435 12	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-412	224435 12	ASTM D3416 Low Level Methane	11/19/2024
T-412	224435 12	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-413	224435 13	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-413	224435 13	ASTM D3416 Low Level Methane	11/19/2024
T-413	224435 13	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-414	224435 14	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-414	224435 14	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-414	224435 14	ASTM D3416 Low Level Methane	11/19/2024
T-414	224435 14	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-414	224435 14	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-415	224435 15	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-415	224435 15	ASTM D3416 Low Level Methane	11/19/2024
T-415	224435 15	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-416	224435 16	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-416	224435 16	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-416	224435 16	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-416	224435 16	ASTM D3416 Low Level Methane	11/19/2024
T-416	224435 16	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-417	224435 17	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-417	224435 17	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-417	224435 17	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-418	224435 18	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-418	224435 18	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-418	224435 18	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D3416 Low Level Methane	11/19/2024
T-501	224435 19	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-501	224435 19	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-501	224435 19	ASTM D3416 Low Level Methane	11/20/2024
T-501	224435 19	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-501	224435 19	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-502	224435 20	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-502	224435 20	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-502	224435 20	ASTM D3416 Low Level Methane	11/20/2024
T-502	224435 20	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-502	224435 20	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-503	224435 21	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-503	224435 21	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-503	224435 21	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-504	224435 22	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-504	224435 22	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-504	224435 22	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-505	224435 23	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-505	224435 23	ASTM D3416 Low Level Methane	11/20/2024
T-505	224435 23	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-506	224435 24	ASTM D3416 Low Level Methane	11/20/2024
T-506	224435 24	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-506	224435 24	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-507	224435 25	ASTM D3416 Low Level Methane	11/20/2024
T-507	224435 25	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-507	224435 25	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-508	224435 26	ASTM D3416 Low Level Methane	11/20/2024
T-508	224435 26	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-508	224435 26	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-508	224435 26	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-508	224435 26	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-509	224435 27	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-509	224435 27	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-509	224435 27	ASTM D3416 Low Level Methane	11/20/2024
T-509	224435 27	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-509	224435 27	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-510	224435 28	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-510	224435 28	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-510	224435 28	ASTM D3416 Low Level Methane	11/20/2024
T-510	224435 28	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-510	224435 28	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-511	224435 29	ASTM D3416 Low Level Methane	11/20/2024
T-511	224435 29	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-511	224435 29	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-511	224435 29	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-511	224435 29	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-512	224435 30	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-512	224435 30	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-512	224435 30	ASTM D3416 Low Level Methane	11/20/2024
T-512	224435 30	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-512	224435 30	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-513	224435 31	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-513	224435 31	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-513	224435 31	ASTM D3416 Low Level Methane	11/20/2024
T-513	224435 31	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-513	224435 31	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-514	224435 32	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D3416 Low Level Methane	11/20/2024
T-514	224435 32	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-514	224435 32	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-601	224435 33	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-601	224435 33	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-601	224435 33	ASTM D3416 Low Level Methane	11/21/2024
T-601	224435 33	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-601	224435 33	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-602	224435 34	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-602	224435 34	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-602	224435 34	ASTM D3416 Low Level Methane	11/21/2024
T-602	224435 34	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-602	224435 34	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-603	224435 35	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D3416 Low Level Methane	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-603	224435 35	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-603	224435 35	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-604	224435 36	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-604	224435 36	ASTM D3416 Low Level Methane	11/21/2024
T-604	224435 36	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-605	224435 37	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-605	224435 37	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-605	224435 37	ASTM D3416 Low Level Methane	11/21/2024
T-605	224435 37	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-605	224435 37	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-606	224435 38	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-606	224435 38	ASTM D3416 Low Level Methane	11/21/2024
T-606	224435 38	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-607	224435 39	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-607	224435 39	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-607	224435 39	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-607	224435 39	ASTM D3416 Low Level Methane	11/21/2024
T-607	224435 39	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-608	224435 40	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	ASTM D3416 Low Level Methane	11/21/2024
T-608	224435 40	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-608	224435 40	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-609	224435 41	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-609	224435 41	EPA TO-12 C2 to C12 CRYO	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-609	224435 41	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-610	224435 42	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-610	224435 42	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-610	224435 42	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-611	224435 43	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-611	224435 43	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-611	224435 43	ASTM D3416 Low Level Methane	11/21/2024
T-611	224435 43	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-611	224435 43	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-612	224435 44	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-612	224435 44	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-612	224435 44	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-613	224435 45	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-613	224435 45	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-613	224435 45	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-614	224435 46	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-614	224435 46	ASTM D3416 Low Level Methane	11/21/2024
T-614	224435 46	EPA TO-12 C2 to C12 CRYO	11/21/2024

Project Sample Media

SDG Number: 224435

The following sample media was used for this Sample Delivery Group (SDG). The Sample Media column identifies the type of media. For canisters, the Sample Media Batch gives the canister number followed by the cleaning batch number, which is a unique identification. The initial pressure of the canister when it is received is recorded. If the canister is not pressurized, the final pressure will be the same as the initial pressure. If the canister is pessurized the final pressure will be recorded, and the canister dilution factor is calculated as the ratio of the final to initial pressure. The results are adjusted for the can dilution factor.

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	1	T-401	636		737	921	1.25
224435	2	T-402	703		739	922	1.25
224435	3	T-403	547		727	920	1.27
224435	4	T-404	749		740	920	1.24
224435	5	T-405	837		720	921	1.28
224435	6	T-406	626		735	924	1.26
224435	7	T-407	740		698	922	1.32
224435	8	T-408	805		699	917	1.31
224435	9	T-409	631		675	919	1.36
224435	10	T-410	714		678	921	1.36
224435	11	T-411	551		722	922	1.28
224435	12	T-412	881		704	930	1.32
224435	13	T-413	766		690	924	1.34
224435	14	T-414	725		699	923	1.32
224435	15	T-415	896		704	919	1.31
224435	16	T-416	659		651	922	1.42
224435	17	T-417	899		709	920	1.30
224435	18	T-418	522		739	927	1.25
224435	19	T-501	664		721	923	1.28
224435	20	T-502	716		690	920	1.33
224435	21	T-503	751		717	921	1.28
224435	22	T-504	644		719	920	1.28
224435	23	T-505	883		684	921	1.35
224435	24	T-506	784		679	921	1.36
224435	25	T-507	712		670	924	1.38

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	26	T-508	549		669	920	1.38
224435	27	T-509	882		661	924	1.40
224435	28	T-510	860		649	921	1.42
224435	29	T-511	627		674	921	1.37
224435	30	T-512	417		676	916	1.36
224435	31	T-513	781		681	925	1.36
224435	32	T-514	506		669	926	1.38
224435	33	T-601	700		712	929	1.30
224435	34	T-602	673		714	913	1.28
224435	35	T-603	550		736	916	1.24
224435	36	T-604	738		691	922	1.33
224435	37	T-605	892		703	920	1.31
224435	38	T-606	608		666	922	1.38
224435	39	T-607	771		703	920	1.31
224435	40	T-608	531		685	925	1.35
224435	41	T-609	668		707	926	1.31
224435	42	T-610	730		674	921	1.37
224435	43	T-611	701		680	920	1.35
224435	44	T-612	514		666	927	1.39
224435	45	T-613	694		663	924	1.39
224435	46	T-614	880		668	925	1.38

Laboratory Case Narrative

EAS SDG Number: 224435 **Project Number:** 17807

Client: C.E. Schmidt

The Laboratory Case Narrative for the SDG is below. The Chain of Custody form(s) follow the Laboratory Case Narrative.

Sample Control Narrative

The samples were all received in good condition and with proper preservation.

Analytical Methods

The methods used for sample analysis are listed on the Analytyical Report header, and have been modified as described in the EAS Quality Manual..

Case Narrative

QC Narrative

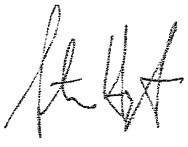
All analyses met EAS method criteria as defined in the Quality Manual, except as noted in the report or QC reports with data qualifiers.

Subcontract Narrative

No sample analysis was subcontracted for this project

Laboratory Certification

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition(s) noted above. The Laboratory Report is property of EAS and its client. The entire report has been reviewed and approved.



Date Approved:

Steven D. Hoyt, Ph.D.
Environmental Analytical Service
Laboratory Director

Section 2 Quality Control

This section contains the QC Reports for each Daily Analytical Batch (DAB) which make up the Sample Delivery Group (SDG). It also contains either the EAS or Project QC criteria that was used for the DAB. The methods used for this project have been modified from the original method. The modifications include modifications to the QC for the method. This is either because the method did not specify certain aspects of the QC, the method was originally designed for a different matrix, or additional compounds were added to the target list of the method which required modified QC. The QC modifications used by EAS follows those used by other air testing laboratories.

The Daily Analytical Batch data was checked against the QC criteria for the method. Any deviations from the QC criteria are listed on the QC Reports for each DAB, which are summarized in this section and are given in more detail in Section 4 which has the Quantitation Reports and Calculations for the Samples, Method Blank, Lab Control Spikes, as well as the Initial Calibration and Continuing Calibration. This section contains the following:

Section Contents

Project QC Critera

DAB Quality Control Reports

- Method Blank
- Laboratory Control Spike
- Laboratory Control Duplicate
- Continuing Calibration

Quality Control Report

EAS SDG Number: 224435

Project Number: 17807

QC Narrative

Samples were anlayzed in a daily analytical batch (DAB) designated by a QC batch number, and were analyzed using EAS standard laboratory QC specified in the EAS Quality Manual which may be different then the referrenced agency method. Any deviations from the EAS QC criteria are flagged in the Laboratory Control Reports or in the sample Analytical Reports.

Standard Laboratory QC Report

Unless project specific QC was requested, this Section containing the standard laboratory QC (Level 2) supplied with the Analytical Reports. Each sample is analyzed in a Daily Analytical Batch (DAB) which includes the method blank, a laboratory control spike (LCS) and a laboratory control duplicate (LCD). A Daily Analytical Batch QC report is supplied for each method requested.

Method Blank

The method blank is a laboratory generated sample which assesses the degree to which laboratory operations cause a false positive. The target analytes in the analytical reports for a daily analytical batch are "B" flagged if their concentrations are present in the Method Blank above the RL, unless the result is greater then ten times the blank value..

Laboratory Control Spike

A laboratory control spike is a well characterized matrix similar to the sample which is spiked and run in duplicate with each Daily Analytical Batch. The laboratory control spike results are reported as a percent recovery. The QC Criteria for the control spike is listed in the Laboratory Control Report. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report. The control spike contains an abbreviated list of compounds in the method, and may contain compounds not on the target list for the specified report.

Laboratory Control Duplicate

The laboratory control duplicate is a duplicate analysis of the laboratory control spike, a standard, or a sample depending on the method. The results are reported as a relative percent difference (RPD). The criteria for the duplicate is in the Laboratory Control Report for the Daily Analytical Batch. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B11224

File Name: B11224B
Description: METHOD BLANK
Canister:
QC_Batch: 112224-GCK

Date Sampled:
Date Analyzed: 11/22/24
Can Factor: 1.00
Air Volume: 200 ml

Time:
Time: 13:31

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B11254

File Name: B11254D
Description: METHOD BLANK
Canister:
QC_Batch: 112524-GCK

Date Sampled: **Time:**
Date Analyzed: 11/25/24 **Time:** 14:36
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B11264

File Name: B11264B
Description: METHOD BLANK
Canister:
QC_Batch: 112624-GCK

Date Sampled:
Date Analyzed: 11/26/24
Can Factor: 1.00
Air Volume: 200 ml

Time:
Time: 11:47

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B11274

File Name: B11274B
Description: METHOD BLANK
Canister:
QC_Batch: 112724-GCK

Date Sampled:
Date Analyzed: 11/27/24
Can Factor: 1.00
Air Volume: 200 ml

Time:
Time: 11:25

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12024

File Name: B12024B
Description: METHOD BLANK
Canister:
QC_Batch: 120224-GCK

Date Sampled:
Date Analyzed: 12/02/24
Can Factor: 1.00
Air Volume: 200 ml

Time:
Time: 11:47

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12034

File Name: B12034B
Description: METHOD BLANK
Canister:
QC_Batch: 120324-GCK

Date Sampled:
Date Analyzed: 12/03/24
Can Factor: 1.00
Air Volume: 200 ml

Time:
Time: 11:16

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12044

File Name: B12044B
Description: METHOD BLANK
Canister:
QC_Batch: 120424-GCK

Date Sampled:
Date Analyzed: 12/04/24
Can Factor: 1.00
Air Volume: 200 ml

Time:
Time: 11:31

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112224-GCK
Date: 11/22/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	92		116		70	130	24	25	
110-54-3	n-Hexane	94		116		70	130	21	25	
71-43-2	Benzene	103		119		70	130	16	25	
142-82-5	n-Heptane	102		118		70	130	16	25	
108-88-3	Toluene	101		125		70	130	24	25	
111-65-9	n-Octane	99		124		70	130	25	25	
108-38-3	m,p-xylene	102		121		70	130	19	25	
95-47-6	o-xylene	116		103		70	130	14	25	
108-67-8	1,3,5-Trimethylbenzene	106		89		70	130	17	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112524-GCK
Date: 11/25/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	106		94		70	130	13	25	
110-54-3	n-Hexane	106		94		70	130	11	25	
71-43-2	Benzene	105		95		70	130	10	25	
142-82-5	n-Heptane	106		94		70	130	12	25	
108-88-3	Toluene	109		91		70	130	17	25	
111-65-9	n-Octane	108		92		70	130	16	25	
108-38-3	m,p-xylene	103		97		70	130	5	25	
95-47-6	o-xylene	101		99		70	130	1	25	
108-67-8	1,3,5-Trimethylbenzene	95		105		70	130	10	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112624-GCK
Date: 11/26/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	99		102		70	130	3	25	
110-54-3	n-Hexane	105		98		70	130	7	25	
71-43-2	Benzene	109		102		70	130	8	25	
142-82-5	n-Heptane	102		102		70	130	1	25	
108-88-3	Toluene	103		108		70	130	5	25	
111-65-9	n-Octane	106		103		70	130	3	25	
108-38-3	m,p-xylene	110		107		70	130	3	25	
95-47-6	o-xylene	105		110		70	130	6	25	
108-67-8	1,3,5-Trimethylbenzene	107		113		70	130	7	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112724-GCK
Date: 11/26/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	107		106		70	130	1	25	
110-54-3	n-Hexane	101		101		70	130	0	25	
71-43-2	Benzene	107		104		70	130	3	25	
142-82-5	n-Heptane	99		99		70	130	0	25	
108-88-3	Toluene	98		98		70	130	0	25	
111-65-9	n-Octane	100		99		70	130	1	25	
108-38-3	m,p-xylene	107		109		70	130	2	25	
95-47-6	o-xylene	120		111		70	130	9	25	
108-67-8	1,3,5-Trimethylbenzene	125		128		70	130	3	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 120224-GCK
Date: 12/02/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	107		107		70	130	0	25	
110-54-3	n-Hexane	104		103		70	130	1	25	
71-43-2	Benzene	107		104		70	130	3	25	
142-82-5	n-Heptane	102		100		70	130	2	25	
108-88-3	Toluene	102		95		70	130	6	25	
111-65-9	n-Octane	99		96		70	130	3	25	
108-38-3	m,p-xylene	93		88		70	130	5	25	
95-47-6	o-xylene	99		87		70	130	12	25	
108-67-8	1,3,5-Trimethylbenzene	94		94		70	130	0	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 120324-GCK
Date: 12/03/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	101		99		70	130	2	25	
110-54-3	n-Hexane	103		97		70	130	7	25	
71-43-2	Benzene	103		97		70	130	6	25	
142-82-5	n-Heptane	104		96		70	130	8	25	
108-88-3	Toluene	105		95		70	130	11	25	
111-65-9	n-Octane	104		96		70	130	8	25	
108-38-3	m,p-xylene	104		96		70	130	7	25	
95-47-6	o-xylene	103		97		70	130	5	25	
108-67-8	1,3,5-Trimethylbenzene	94		106		70	130	12	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 120424-GCK
Date: 12/04/24

		LCS Recovery		LCD Recovery		Spike Limit LCL	Spike Limit UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
109-66-0	n-Pentane	102		98		70	130	4	25	
110-54-3	n-Hexane	107		93		70	130	14	25	
71-43-2	Benzene	107		93		70	130	13	25	
142-82-5	n-Heptane	106		94		70	130	11	25	
108-88-3	Toluene	111		89		70	130	22	25	
111-65-9	n-Octane	110		90		70	130	19	25	
108-38-3	m,p-xylene	111		89		70	130	22	25	
95-47-6	o-xylene	108		92		70	130	17	25	
108-67-8	1,3,5-Trimethylbenzene	101		99		70	130	2	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

Section 3 Analytical Methods

This section has information on the analytial methods and a copy of the analytical reports for the Sample Delivery Group (SDG) listed below. The reports are organized in order of the EAS Laboratory Number.

Section Contents

Analytical Method Description(s)

Analytical Reports

Analytical Reports

EAS SDG Number: 224435

Project Number: 17807

The following pages contain the certified Analytical Reports for the samples submitted in the Sample Delivery Group (SDG) and are in order of the EAS Lab ID number. All of the analytical methods used are modifications of the published methods. Procedural method modifications, QC modifications, QC Criteria modifications, target lists, definitions of detection limits, and flags are all explained in detail in the EAS Quality Manual. The Analytical Report has columns for the method detection limit (MDL), the reporting limit (RL), and the Amount. The Amount is the concentration of the compound in the sample. The report usually has the results reported with two commonly used units. The MDL, RL, and Amount are adjusted for the canister dilution factor and any dilution caused by sample matrix effects.

NELAC CERTIFICATION

EAS is accredited by the National Environmental Laboratory Accreditation (NELAC) with the Florida Department of Health, one of the NELAC certifying states. EAS is certified for the EPA TO-15, EPA TO-11 and EPA TO-4 methods. A list of accredited compounds is available on request.

DETECTION LIMITS

MDL: The MDL is lowest concentration that can be measured to be statistically above the noise level and is determined using the EPA 2016 method which uses the standard deviation of replicate measurements made over time. The method also incorporates systematic instrumentation blank levels. See Quality Manual for detailed explanation.

RL: The reporting limit (RL) is the lowest concentration that can be reliably reported for each compound that meets the QC Criteria for the method, background levels, or project specific considerations. The QC criteria level for the method blank is to be less then the RL See Quality Manual for more information.

DATA FLAGS

In the standard report, if a compound is not detected above the method detection limit, a "ND" is in the Amount column. The flag column is used for both the not detect flag and for any data flags.

B - This compound was detected in the batch method blank above the reporting limit and is greater then one tenth the amount in the sample.

E - This compound exceeds the calibration range for this sample volume.

J - The amount reported is estimated because it was below the RL and could be below the lowest calibration point, have higher uncertainty, or could be the result of system background

SIGNIFICANT FIGURES

Based on the uncertainty in the methods, the numbers on the Analytical Reports should be used with only two significant digits. Additional significant figures are reported for ease of use and to avoid rounding errors when used in further calculations.

UNITS

PPBV or PPMV: Parts-per-billion (or million) by volume is a mole (volume) ratio of the moles of analyte divided by the moles of air (gas). This is the primary unit used to report air or gas concentrations and is independent of temperature and pressure.

UG/M3 OR MG/M3: The reported result was calculated based on 1 atm pressure and a temperature of 25C. The conversion from PPBV is: UG/M3 = PPBV x MW/24.46 where 24.26 is the gas constant and MW is the Compounds Molecular Weight (sometimes called Formula Weight)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 01

File Name: 2443501A
Description: T-401
Canister: 636
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 11/22/24 **Time:** 14:07
Can Factor: 1.25
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.50	7.50	42.51	2.88	8.64	48.96	
74-86-2	Acetylene	2.50	7.50	ND	2.66	7.99	ND	ND
74-84-0	Ethane	2.50	7.50	42.66	3.08	9.25	52.63	
115-07-1	Propene	1.67	5.00	75.65	2.88	8.63	130.53	
74-98-6	Propane	1.67	5.00	33.49	3.01	9.04	60.53	
75-28-5	i-Butane	1.25	3.75	ND	2.98	8.93	ND	ND
106-98-9	1-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
106-97-8	n-Butane	1.25	3.75	89.97	2.98	8.93	214.23	
624-64-6	t-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
590-18-1	c-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
78-78-4	i-Pentane	1.00	3.00	63.78	2.96	8.88	188.73	
109-67-1	1-Pentene	1.00	3.00	12.96	2.87	8.62	37.25	
109-66-0	n-Pentane	1.00	3.00	13.75	2.95	8.86	40.64	
646-04-8	t-2-Pentene	1.00	3.00	33.59	2.87	8.62	96.50	
627-20-3	c-2-Pentene	1.00	3.00	3.65	2.87	8.62	10.48	
75-83-2	2,2-Dimethylbutane	0.83	2.50	0.92	2.94	8.83	3.25	J
287-92-3	Cyclopentane	1.00	3.00	ND	2.87	8.62	ND	ND
79-29-8	2,3-Dimethylbutane	0.83	2.50	ND	2.94	8.83	ND	ND
107-83-5	2-Methylpentane	0.83	2.50	2.03	2.94	8.83	7.18	J
96-14-0	3-Methylpentane	0.83	2.50	ND	2.94	8.83	ND	ND
110-54-3	n-Hexane	0.83	2.50	13.35	2.94	8.83	47.16	
96-37-7	Methylcyclopentane	0.83	2.50	ND	2.88	8.63	ND	ND
108-08-7	2,4-Dimethylpentane	0.71	2.14	11.49	2.93	8.80	47.18	
71-43-2	Benzene	0.83	2.50	6.93	2.67	8.00	22.20	
110-82-7	Cyclohexane	0.83	2.50	11.18	2.88	8.63	38.59	
591-76-4	2-Methylhexane	0.71	2.14	14.03	2.93	8.80	57.63	
565-59-3	2,3-Dimethylpentane	0.71	2.14	19.72	2.93	8.80	80.99	
589-34-4	3-Methylhexane	0.71	2.14	25.79	2.93	8.80	105.89	
540-84-1	2,2,4-Trimethylpentane	0.63	1.88	11.91	2.93	8.78	55.75	
142-82-5	n-Heptane	0.71	2.14	65.32	2.93	8.80	268.24	
108-87-2	Methylcyclohexane	0.71	2.14	20.76	2.87	8.62	83.55	
565-75-3	2,3,4-Trimethylpentane	0.63	1.88	14.98	2.93	8.78	70.12	
108-88-3	Toluene	0.71	2.14	323.72	2.70	8.09	1,221.93	
592-27-8	2-Methylheptane	0.63	1.88	14.54	2.93	8.78	68.05	
589-81-1	3-Methylheptane	0.63	1.88	10.07	2.93	8.78	47.11	
111-65-9	n-Octane	0.63	1.88	19.95	2.93	8.78	93.38	
100-41-4	Ethylbenzene	0.63	1.88	63.03	2.72	8.16	274.35	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.63	1.88	129.88	2.72	8.16	565.31	
100-42-5	Styrene	0.63	1.88	1.50	2.67	8.01	6.39	J
95-47-6	o-xylene	0.63	1.88	53.37	2.72	8.16	232.31	
111-84-2	n-Nonane	0.56	1.67	21.89	2.92	8.76	115.09	
98-82-8	i-Propylbenzene	0.56	1.67	6.37	2.74	8.21	31.37	
103-65-1	n-propylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.67	4.73	2.74	8.21	23.31	
622-96-8	4-Ethyltoluene	0.56	1.67	5.60	2.74	8.21	27.56	
108-67-8	1,3,5-Trimethylbenzene	0.56	1.67	6.77	2.74	8.21	33.33	
611-14-3	2-Ethyltoluene	0.56	1.67	8.43	2.74	8.21	41.54	
95-63-6	1,2,4-Trimethylbenzene	0.56	1.67	3.65	2.74	8.21	18.00	
124-18-5	n-Decane	0.50	1.50	4.38	2.92	8.75	25.53	
526-73-8	1,2,3-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.50	ND	2.75	8.25	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.50	1.61	2.75	8.25	8.87	
1120-21-4	Undecane	0.45	1.36	ND	2.91	8.74	ND	ND
112-40-3	Dodecane	0.42	1.25	ND	2.91	8.72	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.38	28.13	4,440.19	33.12	99.36	15,686.25	
TNMHC - C1	Total Non-Methane Hydrocarbons	56.25	168.75	26,641.14	36.89	110.66	17,469.60	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 02

File Name: 2443502A
Description: T-402
Canister: 703
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 11/22/24 **Time:** 14:57
Can Factor: 1.25
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.50	7.50	ND	2.88	8.64	ND	ND
74-86-2	Acetylene	2.50	7.50	ND	2.66	7.99	ND	ND
74-84-0	Ethane	2.50	7.50	3.17	3.08	9.25	3.91	J
115-07-1	Propene	1.67	5.00	ND	2.88	8.63	ND	ND
74-98-6	Propane	1.67	5.00	ND	3.01	9.04	ND	ND
75-28-5	i-Butane	1.25	3.75	ND	2.98	8.93	ND	ND
106-98-9	1-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
106-97-8	n-Butane	1.25	3.75	1.92	2.98	8.93	4.56	J
624-64-6	t-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
590-18-1	c-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
78-78-4	i-Pentane	1.00	3.00	7.67	2.96	8.88	22.70	
109-67-1	1-Pentene	1.00	3.00	1.30	2.87	8.62	3.72	J
109-66-0	n-Pentane	1.00	3.00	3.62	2.95	8.86	10.68	
646-04-8	t-2-Pentene	1.00	3.00	ND	2.87	8.62	ND	ND
627-20-3	c-2-Pentene	1.00	3.00	ND	2.87	8.62	ND	ND
75-83-2	2,2-Dimethylbutane	0.83	2.50	1.13	2.94	8.83	3.98	J
287-92-3	Cyclopentane	1.00	3.00	1.23	2.87	8.62	3.52	J
79-29-8	2,3-Dimethylbutane	0.83	2.50	ND	2.94	8.83	ND	ND
107-83-5	2-Methylpentane	0.83	2.50	4.18	2.94	8.83	14.75	
96-14-0	3-Methylpentane	0.83	2.50	11.51	2.94	8.83	40.67	
110-54-3	n-Hexane	0.83	2.50	ND	2.94	8.83	ND	ND
96-37-7	Methylcyclopentane	0.83	2.50	ND	2.88	8.63	ND	ND
108-08-7	2,4-Dimethylpentane	0.71	2.14	2.10	2.93	8.80	8.64	J
71-43-2	Benzene	0.83	2.50	ND	2.67	8.00	ND	ND
110-82-7	Cyclohexane	0.83	2.50	4.24	2.88	8.63	14.63	
591-76-4	2-Methylhexane	0.71	2.14	19.37	2.93	8.80	79.55	
565-59-3	2,3-Dimethylpentane	0.71	2.14	ND	2.93	8.80	ND	ND
589-34-4	3-Methylhexane	0.71	2.14	2.27	2.93	8.80	9.33	
540-84-1	2,2,4-Trimethylpentane	0.63	1.88	ND	2.93	8.78	ND	ND
142-82-5	n-Heptane	0.71	2.14	ND	2.93	8.80	ND	ND
108-87-2	Methylcyclohexane	0.71	2.14	7.35	2.87	8.62	29.60	
565-75-3	2,3,4-Trimethylpentane	0.63	1.88	0.89	2.93	8.78	4.19	J
108-88-3	Toluene	0.71	2.14	1.96	2.70	8.09	7.38	J
592-27-8	2-Methylheptane	0.63	1.88	ND	2.93	8.78	ND	ND
589-81-1	3-Methylheptane	0.63	1.88	ND	2.93	8.78	ND	ND
111-65-9	n-Octane	0.63	1.88	ND	2.93	8.78	ND	ND
100-41-4	Ethylbenzene	0.63	1.88	ND	2.72	8.16	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.63	1.88	ND	2.72	8.16	ND	ND
100-42-5	Styrene	0.63	1.88	1.23	2.67	8.01	5.26	J
95-47-6	o-xylene	0.63	1.88	ND	2.72	8.16	ND	ND
111-84-2	n-Nonane	0.56	1.67	ND	2.92	8.76	ND	ND
98-82-8	i-Propylbenzene	0.56	1.67	2.19	2.74	8.21	10.77	
103-65-1	n-propylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.67	ND	2.74	8.21	ND	ND
622-96-8	4-Ethyltoluene	0.56	1.67	4.56	2.74	8.21	22.47	
108-67-8	1,3,5-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
611-14-3	2-Ethyltoluene	0.56	1.67	7.46	2.74	8.21	36.74	
95-63-6	1,2,4-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
124-18-5	n-Decane	0.50	1.50	ND	2.92	8.75	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.50	ND	2.75	8.25	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.50	2.62	2.75	8.25	14.40	
1120-21-4	Undecane	0.45	1.36	ND	2.91	8.74	ND	ND
112-40-3	Dodecane	0.42	1.25	ND	2.91	8.72	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.38	28.13	1,119.53	33.12	99.36	3,955.05	
TNMHC - C1	Total Non-Methane Hydrocarbons	56.25	168.75	6,717.16	36.89	110.66	4,404.69	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 03

File Name: 2443503A
Description: T-403
Canister: 547
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 11/22/24 **Time:** 15:46
Can Factor: 1.27
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.54	7.62	ND	2.93	8.78	ND	ND
74-86-2	Acetylene	2.54	7.62	ND	2.71	8.12	ND	ND
74-84-0	Ethane	2.54	7.62	ND	3.13	9.40	ND	ND
115-07-1	Propene	1.69	5.08	ND	2.92	8.77	ND	ND
74-98-6	Propane	1.69	5.08	3.90	3.06	9.18	7.05	J
75-28-5	i-Butane	1.27	3.81	ND	3.02	9.07	ND	ND
106-98-9	1-Butene	1.27	3.81	ND	2.92	8.76	ND	ND
106-97-8	n-Butane	1.27	3.81	ND	3.02	9.07	ND	ND
624-64-6	t-2-Butene	1.27	3.81	ND	2.92	8.76	ND	ND
590-18-1	c-2-Butene	1.27	3.81	ND	2.92	8.76	ND	ND
78-78-4	i-Pentane	1.02	3.05	ND	3.01	9.02	ND	ND
109-67-1	1-Pentene	1.02	3.05	ND	2.92	8.76	ND	ND
109-66-0	n-Pentane	1.02	3.05	ND	3.00	9.01	ND	ND
646-04-8	t-2-Pentene	1.02	3.05	ND	2.92	8.76	ND	ND
627-20-3	c-2-Pentene	1.02	3.05	ND	2.92	8.76	ND	ND
75-83-2	2,2-Dimethylbutane	0.85	2.54	ND	2.99	8.97	ND	ND
287-92-3	Cyclopentane	1.02	3.05	ND	2.92	8.76	ND	ND
79-29-8	2,3-Dimethylbutane	0.85	2.54	ND	2.99	8.97	ND	ND
107-83-5	2-Methylpentane	0.85	2.54	ND	2.99	8.97	ND	ND
96-14-0	3-Methylpentane	0.85	2.54	1.05	2.99	8.97	3.70	J
110-54-3	n-Hexane	0.85	2.54	ND	2.99	8.97	ND	ND
96-37-7	Methylcyclopentane	0.85	2.54	ND	2.92	8.77	ND	ND
108-08-7	2,4-Dimethylpentane	0.73	2.18	ND	2.98	8.94	ND	ND
71-43-2	Benzene	0.85	2.54	ND	2.71	8.13	ND	ND
110-82-7	Cyclohexane	0.85	2.54	ND	2.92	8.77	ND	ND
591-76-4	2-Methylhexane	0.73	2.18	ND	2.98	8.94	ND	ND
565-59-3	2,3-Dimethylpentane	0.73	2.18	ND	2.98	8.94	ND	ND
589-34-4	3-Methylhexane	0.73	2.18	ND	2.98	8.94	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.64	1.91	ND	2.97	8.92	ND	ND
142-82-5	n-Heptane	0.73	2.18	ND	2.98	8.94	ND	ND
108-87-2	Methylcyclohexane	0.73	2.18	ND	2.92	8.76	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.64	1.91	ND	2.97	8.92	ND	ND
108-88-3	Toluene	0.73	2.18	ND	2.74	8.22	ND	ND
592-27-8	2-Methylheptane	0.64	1.91	ND	2.97	8.92	ND	ND
589-81-1	3-Methylheptane	0.64	1.91	ND	2.97	8.92	ND	ND
111-65-9	n-Octane	0.64	1.91	ND	2.97	8.92	ND	ND
100-41-4	Ethylbenzene	0.64	1.91	ND	2.76	8.29	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.64	1.91	ND	2.76	8.29	ND	ND
100-42-5	Styrene	0.64	1.91	ND	2.71	8.14	ND	ND
95-47-6	o-xylene	0.64	1.91	ND	2.76	8.29	ND	ND
111-84-2	n-Nonane	0.56	1.69	ND	2.97	8.90	ND	ND
98-82-8	i-Propylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
103-65-1	n-propylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.69	ND	2.78	8.34	ND	ND
622-96-8	4-Ethyltoluene	0.56	1.69	ND	2.78	8.34	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
611-14-3	2-Ethyltoluene	0.56	1.69	ND	2.78	8.34	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
124-18-5	n-Decane	0.51	1.52	ND	2.96	8.89	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
141-93-5	1,3-Diethylbenzene	0.51	1.52	1.35	2.79	8.38	7.41	J
105-05-5	1,4-Diethylbenzene	0.51	1.52	ND	2.79	8.38	ND	ND
1120-21-4	Undecane	0.46	1.39	ND	2.96	8.87	ND	ND
112-40-3	Dodecane	0.42	1.27	ND	2.95	8.86	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.53	28.58	16.43	33.65	100.95	58.06	J
TNMHC - C1	Total Non-Methane Hydrocarbons	57.15	171.45	98.60	37.48	112.43	64.66	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 04

File Name: 2443504A
Description: T-404
Canister: 749
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:24
Date Analyzed: 11/22/24 **Time:** 17:03
Can Factor: 1.24
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.48	7.44	ND	2.86	8.57	ND	ND
74-86-2	Acetylene	2.48	7.44	ND	2.64	7.93	ND	ND
74-84-0	Ethane	2.48	7.44	ND	3.06	9.18	ND	ND
115-07-1	Propene	1.65	4.96	ND	2.85	8.56	ND	ND
74-98-6	Propane	1.65	4.96	ND	2.99	8.96	ND	ND
75-28-5	i-Butane	1.24	3.72	ND	2.95	8.86	ND	ND
106-98-9	1-Butene	1.24	3.72	ND	2.85	8.55	ND	ND
106-97-8	n-Butane	1.24	3.72	ND	2.95	8.86	ND	ND
624-64-6	t-2-Butene	1.24	3.72	ND	2.85	8.55	ND	ND
590-18-1	c-2-Butene	1.24	3.72	ND	2.85	8.55	ND	ND
78-78-4	i-Pentane	0.99	2.98	ND	2.94	8.81	ND	ND
109-67-1	1-Pentene	0.99	2.98	3.69	2.85	8.55	10.60	
109-66-0	n-Pentane	0.99	2.98	ND	2.93	8.79	ND	ND
646-04-8	t-2-Pentene	0.99	2.98	ND	2.85	8.55	ND	ND
627-20-3	c-2-Pentene	0.99	2.98	ND	2.85	8.55	ND	ND
75-83-2	2,2-Dimethylbutane	0.83	2.48	ND	2.92	8.76	ND	ND
287-92-3	Cyclopentane	0.99	2.98	ND	2.85	8.55	ND	ND
79-29-8	2,3-Dimethylbutane	0.83	2.48	ND	2.92	8.76	ND	ND
107-83-5	2-Methylpentane	0.83	2.48	ND	2.92	8.76	ND	ND
96-14-0	3-Methylpentane	0.83	2.48	ND	2.92	8.76	ND	ND
110-54-3	n-Hexane	0.83	2.48	ND	2.92	8.76	ND	ND
96-37-7	Methylcyclopentane	0.83	2.48	ND	2.85	8.56	ND	ND
108-08-7	2,4-Dimethylpentane	0.71	2.13	ND	2.91	8.73	ND	ND
71-43-2	Benzene	0.83	2.48	ND	2.65	7.94	ND	ND
110-82-7	Cyclohexane	0.83	2.48	ND	2.85	8.56	ND	ND
591-76-4	2-Methylhexane	0.71	2.13	ND	2.91	8.73	ND	ND
565-59-3	2,3-Dimethylpentane	0.71	2.13	ND	2.91	8.73	ND	ND
589-34-4	3-Methylhexane	0.71	2.13	ND	2.91	8.73	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.62	1.86	ND	2.90	8.71	ND	ND
142-82-5	n-Heptane	0.71	2.13	1.91	2.91	8.73	7.86	J
108-87-2	Methylcyclohexane	0.71	2.13	ND	2.85	8.56	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.62	1.86	ND	2.90	8.71	ND	ND
108-88-3	Toluene	0.71	2.13	ND	2.67	8.02	ND	ND
592-27-8	2-Methylheptane	0.62	1.86	ND	2.90	8.71	ND	ND
589-81-1	3-Methylheptane	0.62	1.86	ND	2.90	8.71	ND	ND
111-65-9	n-Octane	0.62	1.86	ND	2.90	8.71	ND	ND
100-41-4	Ethylbenzene	0.62	1.86	1.23	2.70	8.10	5.35	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.62	1.86	ND	2.70	8.10	ND	ND
100-42-5	Styrene	0.62	1.86	ND	2.65	7.94	ND	ND
95-47-6	o-xylene	0.62	1.86	ND	2.70	8.10	ND	ND
111-84-2	n-Nonane	0.55	1.65	ND	2.90	8.69	ND	ND
98-82-8	i-Propylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
103-65-1	n-propylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
620-14-4	3-Ethyltoluene	0.55	1.65	ND	2.71	8.14	ND	ND
622-96-8	4-Ethyltoluene	0.55	1.65	ND	2.71	8.14	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
611-14-3	2-Ethyltoluene	0.55	1.65	ND	2.71	8.14	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
124-18-5	n-Decane	0.50	1.49	ND	2.89	8.68	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.49	ND	2.73	8.18	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.49	ND	2.73	8.18	ND	ND
1120-21-4	Undecane	0.45	1.35	ND	2.89	8.67	ND	ND
112-40-3	Dodecane	0.41	1.24	ND	2.88	8.65	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.30	27.90	12.91	32.85	98.56	45.60	J
TNMHC - C1	Total Non-Methane Hydrocarbons	55.80	167.40	77.45	36.59	109.77	50.78	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 05

File Name: 2443505A
Description: T-405
Canister: 837
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:20
Date Analyzed: 11/22/24 **Time:** 17:50
Can Factor: 1.28
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.56	7.68	ND	2.95	8.84	ND	ND
74-86-2	Acetylene	2.56	7.68	ND	2.73	8.18	ND	ND
74-84-0	Ethane	2.56	7.68	ND	3.16	9.47	ND	ND
115-07-1	Propene	1.71	5.12	ND	2.94	8.83	ND	ND
74-98-6	Propane	1.71	5.12	12.63	3.08	9.25	22.83	
75-28-5	i-Butane	1.28	3.84	ND	3.05	9.14	ND	ND
106-98-9	1-Butene	1.28	3.84	ND	2.94	8.83	ND	ND
106-97-8	n-Butane	1.28	3.84	ND	3.05	9.14	ND	ND
624-64-6	t-2-Butene	1.28	3.84	ND	2.94	8.83	ND	ND
590-18-1	c-2-Butene	1.28	3.84	ND	2.94	8.83	ND	ND
78-78-4	i-Pentane	1.02	3.07	ND	3.03	9.09	ND	ND
109-67-1	1-Pentene	1.02	3.07	ND	2.94	8.83	ND	ND
109-66-0	n-Pentane	1.02	3.07	ND	3.03	9.08	ND	ND
646-04-8	t-2-Pentene	1.02	3.07	ND	2.94	8.83	ND	ND
627-20-3	c-2-Pentene	1.02	3.07	ND	2.94	8.83	ND	ND
75-83-2	2,2-Dimethylbutane	0.85	2.56	ND	3.01	9.04	ND	ND
287-92-3	Cyclopentane	1.02	3.07	ND	2.94	8.83	ND	ND
79-29-8	2,3-Dimethylbutane	0.85	2.56	ND	3.01	9.04	ND	ND
107-83-5	2-Methylpentane	0.85	2.56	ND	3.01	9.04	ND	ND
96-14-0	3-Methylpentane	0.85	2.56	ND	3.01	9.04	ND	ND
110-54-3	n-Hexane	0.85	2.56	ND	3.01	9.04	ND	ND
96-37-7	Methylcyclopentane	0.85	2.56	ND	2.94	8.83	ND	ND
108-08-7	2,4-Dimethylpentane	0.73	2.19	ND	3.00	9.01	ND	ND
71-43-2	Benzene	0.85	2.56	ND	2.73	8.19	ND	ND
110-82-7	Cyclohexane	0.85	2.56	ND	2.94	8.83	ND	ND
591-76-4	2-Methylhexane	0.73	2.19	ND	3.00	9.01	ND	ND
565-59-3	2,3-Dimethylpentane	0.73	2.19	ND	3.00	9.01	ND	ND
589-34-4	3-Methylhexane	0.73	2.19	ND	3.00	9.01	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.64	1.92	ND	3.00	8.99	ND	ND
142-82-5	n-Heptane	0.73	2.19	ND	3.00	9.01	ND	ND
108-87-2	Methylcyclohexane	0.73	2.19	ND	2.94	8.83	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.64	1.92	ND	3.00	8.99	ND	ND
108-88-3	Toluene	0.73	2.19	ND	2.76	8.28	ND	ND
592-27-8	2-Methylheptane	0.64	1.92	ND	3.00	8.99	ND	ND
589-81-1	3-Methylheptane	0.64	1.92	ND	3.00	8.99	ND	ND
111-65-9	n-Octane	0.64	1.92	ND	3.00	8.99	ND	ND
100-41-4	Ethylbenzene	0.64	1.92	ND	2.79	8.36	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.64	1.92	ND	2.79	8.36	ND	ND
100-42-5	Styrene	0.64	1.92	ND	2.73	8.20	ND	ND
95-47-6	o-xylene	0.64	1.92	ND	2.79	8.36	ND	ND
111-84-2	n-Nonane	0.57	1.71	ND	2.99	8.97	ND	ND
98-82-8	i-Propylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
103-65-1	n-propylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
620-14-4	3-Ethyltoluene	0.57	1.71	ND	2.80	8.41	ND	ND
622-96-8	4-Ethyltoluene	0.57	1.71	ND	2.80	8.41	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
611-14-3	2-Ethyltoluene	0.57	1.71	ND	2.80	8.41	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
124-18-5	n-Decane	0.51	1.54	ND	2.99	8.96	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
141-93-5	1,3-Diethylbenzene	0.51	1.54	ND	2.82	8.45	ND	ND
105-05-5	1,4-Diethylbenzene	0.51	1.54	ND	2.82	8.45	ND	ND
1120-21-4	Undecane	0.47	1.40	ND	2.98	8.94	ND	ND
112-40-3	Dodecane	0.43	1.28	ND	2.98	8.93	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.60	28.80	14.63	33.91	101.74	51.69	J
TNMHC - C1	Total Non-Methane Hydrocarbons	57.60	172.80	87.79	37.77	113.31	57.57	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 06

File Name: 2443506A
Description: T-406
Canister: 626
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 11/22/24 **Time:** 18:37
Can Factor: 1.26
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.52	7.56	ND	2.90	8.71	ND	ND
74-86-2	Acetylene	2.52	7.56	ND	2.69	8.06	ND	ND
74-84-0	Ethane	2.52	7.56	ND	3.11	9.33	ND	ND
115-07-1	Propene	1.68	5.04	ND	2.90	8.70	ND	ND
74-98-6	Propane	1.68	5.04	ND	3.04	9.11	ND	ND
75-28-5	i-Butane	1.26	3.78	ND	3.00	9.00	ND	ND
106-98-9	1-Butene	1.26	3.78	ND	2.90	8.69	ND	ND
106-97-8	n-Butane	1.26	3.78	ND	3.00	9.00	ND	ND
624-64-6	t-2-Butene	1.26	3.78	ND	2.90	8.69	ND	ND
590-18-1	c-2-Butene	1.26	3.78	ND	2.90	8.69	ND	ND
78-78-4	i-Pentane	1.01	3.02	ND	2.98	8.95	ND	ND
109-67-1	1-Pentene	1.01	3.02	ND	2.90	8.69	ND	ND
109-66-0	n-Pentane	1.01	3.02	ND	2.98	8.94	ND	ND
646-04-8	t-2-Pentene	1.01	3.02	ND	2.90	8.69	ND	ND
627-20-3	c-2-Pentene	1.01	3.02	ND	2.90	8.69	ND	ND
75-83-2	2,2-Dimethylbutane	0.84	2.52	ND	2.97	8.90	ND	ND
287-92-3	Cyclopentane	1.01	3.02	ND	2.90	8.69	ND	ND
79-29-8	2,3-Dimethylbutane	0.84	2.52	ND	2.97	8.90	ND	ND
107-83-5	2-Methylpentane	0.84	2.52	ND	2.97	8.90	ND	ND
96-14-0	3-Methylpentane	0.84	2.52	ND	2.97	8.90	ND	ND
110-54-3	n-Hexane	0.84	2.52	ND	2.97	8.90	ND	ND
96-37-7	Methylcyclopentane	0.84	2.52	ND	2.90	8.70	ND	ND
108-08-7	2,4-Dimethylpentane	0.72	2.16	ND	2.96	8.87	ND	ND
71-43-2	Benzene	0.84	2.52	ND	2.69	8.07	ND	ND
110-82-7	Cyclohexane	0.84	2.52	ND	2.90	8.70	ND	ND
591-76-4	2-Methylhexane	0.72	2.16	ND	2.96	8.87	ND	ND
565-59-3	2,3-Dimethylpentane	0.72	2.16	ND	2.96	8.87	ND	ND
589-34-4	3-Methylhexane	0.72	2.16	ND	2.96	8.87	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.63	1.89	ND	2.95	8.85	ND	ND
142-82-5	n-Heptane	0.72	2.16	ND	2.96	8.87	ND	ND
108-87-2	Methylcyclohexane	0.72	2.16	ND	2.90	8.69	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.63	1.89	ND	2.95	8.85	ND	ND
108-88-3	Toluene	0.72	2.16	ND	2.72	8.15	ND	ND
592-27-8	2-Methylheptane	0.63	1.89	ND	2.95	8.85	ND	ND
589-81-1	3-Methylheptane	0.63	1.89	ND	2.95	8.85	ND	ND
111-65-9	n-Octane	0.63	1.89	ND	2.95	8.85	ND	ND
100-41-4	Ethylbenzene	0.63	1.89	ND	2.74	8.23	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.63	1.89	ND	2.74	8.23	ND	ND
100-42-5	Styrene	0.63	1.89	ND	2.69	8.07	ND	ND
95-47-6	o-xylene	0.63	1.89	ND	2.74	8.23	ND	ND
111-84-2	n-Nonane	0.56	1.68	ND	2.94	8.83	ND	ND
98-82-8	i-Propylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
103-65-1	n-propylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.68	ND	2.76	8.28	ND	ND
622-96-8	4-Ethyltoluene	0.56	1.68	ND	2.76	8.28	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
611-14-3	2-Ethyltoluene	0.56	1.68	ND	2.76	8.28	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
124-18-5	n-Decane	0.50	1.51	ND	2.94	8.82	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.51	ND	2.77	8.32	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.51	ND	2.77	8.32	ND	ND
1120-21-4	Undecane	0.46	1.37	ND	2.93	8.80	ND	ND
112-40-3	Dodecane	0.42	1.26	ND	2.93	8.79	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.45	28.35	ND	33.38	100.15	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	56.70	170.10	ND	37.18	111.54	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 07

File Name: 2443507A
Description: T-407
Canister: 740
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 11/22/24 **Time:** 19:25
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Canister: 805
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 11/22/24 **Time:** 20:22
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	1.46	2.30	6.90	2.51	J
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	1.17	2.38	7.14	2.79	J
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	1.07	2.33	6.98	7.49	
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	14.15	26.50	79.49	49.99	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	84.89	29.51	88.52	55.67	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Canister: 631
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 11/22/24 **Time:** 21:10
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	12.66	2.30	6.90	21.85	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	13.78	26.50	79.49	48.68	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	82.68	29.51	88.52	54.22	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Canister: 714
QC_Batch: 120324-GCK

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/03/24 **Time:** 11:51
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	189.40	2.30	6.90	326.80	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	2.53	2.30	6.90	5.81	J
78-78-4	i-Pentane	0.80	2.40	49.16	2.37	7.10	145.46	
109-67-1	1-Pentene	0.80	2.40	25.63	2.30	6.90	73.65	
109-66-0	n-Pentane	0.80	2.40	33.86	2.36	7.09	100.06	
646-04-8	t-2-Pentene	0.80	2.40	16.79	2.30	6.90	48.23	
627-20-3	c-2-Pentene	0.80	2.40	5.15	2.30	6.90	14.80	
75-83-2	2,2-Dimethylbutane	0.67	2.00	9.42	2.36	7.07	33.28	
287-92-3	Cyclopentane	0.80	2.40	24.80	2.30	6.90	71.24	
79-29-8	2,3-Dimethylbutane	0.67	2.00	28.85	2.36	7.07	101.92	
107-83-5	2-Methylpentane	0.67	2.00	35.32	2.36	7.07	124.77	
96-14-0	3-Methylpentane	0.67	2.00	13.54	2.36	7.07	47.83	
110-54-3	n-Hexane	0.67	2.00	20.40	2.36	7.07	72.08	
96-37-7	Methylcyclopentane	0.67	2.00	5.64	2.30	6.90	19.45	
108-08-7	2,4-Dimethylpentane	0.57	1.71	7.05	2.35	7.04	28.96	
71-43-2	Benzene	0.67	2.00	11.45	2.13	6.40	36.66	
110-82-7	Cyclohexane	0.67	2.00	40.44	2.30	6.90	139.56	
591-76-4	2-Methylhexane	0.57	1.71	12.13	2.35	7.04	49.81	
565-59-3	2,3-Dimethylpentane	0.57	1.71	8.50	2.35	7.04	34.90	
589-34-4	3-Methylhexane	0.57	1.71	27.90	2.35	7.04	114.56	
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	99.24	2.34	7.02	464.47	
142-82-5	n-Heptane	0.57	1.71	17.82	2.35	7.04	73.18	
108-87-2	Methylcyclohexane	0.57	1.71	63.76	2.30	6.90	256.59	
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	17.80	2.34	7.02	83.30	
108-88-3	Toluene	0.57	1.71	23.78	2.16	6.47	89.77	
592-27-8	2-Methylheptane	0.50	1.50	1.98	2.34	7.02	9.25	
589-81-1	3-Methylheptane	0.50	1.50	11.08	2.34	7.02	51.86	
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	70.92	2.18	6.53	308.66	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	183.13	2.18	6.53	797.06	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	43.65	2.18	6.53	189.99	
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	48.29	2.19	6.57	237.89	
622-96-8	4-Ethyltoluene	0.44	1.33	11.23	2.19	6.57	55.32	
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	41.58	2.19	6.57	204.83	
611-14-3	2-Ethyltoluene	0.44	1.33	160.76	2.19	6.57	791.96	
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	10.30	2.19	6.57	50.74	
124-18-5	n-Decane	0.40	1.20	2.59	2.33	7.00	15.09	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	14.75	2.20	6.60	81.15	
105-05-5	1,4-Diethylbenzene	0.40	1.20	14.82	2.20	6.60	81.49	
1120-21-4	Undecane	0.36	1.09	7.34	2.33	6.99	47.03	
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	11,235.55	26.50	79.49	39,692.82	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	67,413.33	29.51	88.52	44,205.46	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 11

File Name: 2443511B
Description: T-411
Canister: 551
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 11/25/24 **Time:** 16:05
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.46	2.47	7.40	4.27	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.53	2.41	7.23	2.77	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	4.46	2.38	7.14	10.62	
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	4.17	2.37	7.10	12.33	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	1.16	2.30	6.90	3.34	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	5.33	2.30	6.90	18.38	
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.97	2.19	6.57	4.78	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	0.63	2.19	6.57	3.08	J
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	0.77	2.19	6.57	3.79	J
611-14-3	2-Ethyltoluene	0.44	1.33	0.71	2.19	6.57	3.49	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	0.73	2.19	6.57	3.60	J
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	1.05	2.20	6.60	5.76	J
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	83.93	26.50	79.49	296.52	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	503.61	29.51	88.52	330.23	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Canister: 881
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 11/25/24 **Time:** 17:11
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	1.41	2.30	6.90	2.43	J
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.61	2.30	6.90	3.70	J
590-18-1	c-2-Butene	1.00	3.00	1.47	2.30	6.90	3.39	J
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	1.42	2.30	6.90	4.09	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	2.54	2.30	6.90	8.77	
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	1.00	2.34	7.02	4.68	J
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	1.07	2.33	7.00	6.26	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	4.52	2.19	6.57	22.26	
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	0.66	2.20	6.60	3.62	J
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	59.79	26.50	79.49	211.21	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	358.72	29.51	88.52	235.23	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 13

File Name: 2443513A
Description: T-413
Canister: 766
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 11/25/24 **Time:** 18:00
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.78	2.47	7.40	3.43	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	1.15	2.36	7.07	4.05	J
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9.52	26.50	79.49	33.63	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	57.12	29.51	88.52	37.46	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Canister: 725
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 11/25/24 **Time:** 18:50
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	2.44	2.30	6.90	5.62	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.59	2.30	6.90	3.65	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.70	2.30	6.90	4.89	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	7.68	26.50	79.49	27.13	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	46.09	29.51	88.52	30.22	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 15

File Name: 2443515A
Description: T-415
Canister: 896
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 11/25/24 **Time:** 19:47
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.41	2.30	6.90	3.24	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.74	2.30	6.90	3.99	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.31	2.30	6.90	3.75	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.44	2.20	6.60	2.42	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Canister: 659
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 11/25/24 **Time:** 20:43
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.80	2.41	7.23	3.25	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.42	2.30	6.90	3.27	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.23	2.30	6.90	2.82	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	1.24	2.36	7.09	3.68	J
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.81	2.20	6.60	4.45	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	13.69	26.50	79.49	48.36	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	82.13	29.51	88.52	53.85	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 17

File Name: 2443517A
Description: T-417
Canister: 899
QC_Batch: 112624-GCK

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 11/26/24 **Time:** 13:36
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Canister: 522
QC_Batch: 112624-GCK

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 11/26/24 **Time:** 14:28
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 19

File Name: 2443519A
Description: T-501
Canister: 664
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 11/26/24 **Time:** 15:18
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 20

File Name: 2443520B
Description: T-502
Canister: 716
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 11/26/24 **Time:** 17:53
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.37	2.47	7.40	2.93	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	21.97	2.13	6.40	70.31	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	0.85	2.35	7.04	3.49	J
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	0.68	2.34	7.02	3.17	J
108-88-3	Toluene	0.57	1.71	7.38	2.16	6.47	27.87	
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	1.84	2.34	7.02	8.63	
100-41-4	Ethylbenzene	0.50	1.50	4.23	2.18	6.53	18.40	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	5.78	2.18	6.53	25.16	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	1.39	2.18	6.53	6.06	J
111-84-2	n-Nonane	0.44	1.33	1.40	2.34	7.01	7.38	
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.46	2.19	6.57	2.24	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	1.22	2.19	6.57	6.02	J
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	1.45	2.19	6.57	7.12	
124-18-5	n-Decane	0.40	1.20	2.11	2.33	7.00	12.31	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	2.65	2.20	6.60	14.55	
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	117.77	26.50	79.49	416.07	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	706.65	29.51	88.52	463.38	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 21

File Name: 2443521A
Description: T-503
Canister: 751
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 11/26/24 **Time:** 17:05
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.26	2.47	7.40	2.79	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.13	2.30	6.90	3.25	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	1.97	2.13	6.40	6.30	J
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.52	2.34	7.02	2.42	J
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	8.49	26.50	79.49	29.98	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	50.92	29.51	88.52	33.39	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Canister: 644
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 11/26/24 **Time:** 18:53
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	1.53	2.13	6.40	4.90	J
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 23

File Name: 2443523B
Description: T-505
Canister: 883
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 11/26/24 **Time:** 20:55
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.28	2.47	7.40	4.05	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.35	2.41	7.23	2.43	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.48	2.30	6.90	3.39	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	10.93	26.50	79.49	38.60	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	65.56	29.51	88.52	42.99	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 24

File Name: 2443524A
Description: T-506
Canister: 784
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 11/27/24 **Time:** 12:02
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	45.78	26.50	79.49	161.73	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	274.68	29.51	88.52	180.12	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 25

File Name: 2443525A
Description: T-507
Canister: 712
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 11/27/24 **Time:** 12:48
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.87	2.47	7.40	4.78	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9.57	26.50	79.49	33.82	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	57.44	29.51	88.52	37.67	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Canister: 549
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 11/27/24 **Time:** 13:38
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.20	2.30	6.90	3.45	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	1.16	2.30	6.90	3.32	J
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	2.60	2.13	6.40	8.32	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9.72	26.50	79.49	34.35	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	58.34	29.51	88.52	38.26	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 27

File Name: 2443527A
Description: T-509
Canister: 882
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 11/27/24 **Time:** 14:26
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	6.07	2.13	6.40	19.44	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	0.63	2.16	6.47	2.38	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	11.07	26.50	79.49	39.12	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	66.44	29.51	88.52	43.57	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 28

File Name: 2443528A
Description: T-510
Canister: 860
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 11/27/24 **Time:** 15:21
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.37	2.30	6.90	3.16	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.67	2.34	7.02	3.12	J
100-41-4	Ethylbenzene	0.50	1.50	0.52	2.18	6.53	2.27	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	3.04	2.18	6.53	13.23	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	1.13	2.18	6.53	4.93	J
111-84-2	n-Nonane	0.44	1.33	0.78	2.34	7.01	4.11	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	14.10	26.50	79.49	49.80	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	84.59	29.51	88.52	55.47	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 29

File Name: 2443529A
Description: T-511
Canister: 627
QC_Batch: 120224-GCK

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/02/24 **Time:** 12:34
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	1.43	2.37	7.10	4.24	J
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	6.94	2.13	6.40	22.21	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	0.74	2.18	6.53	3.22	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	21.61	26.50	79.49	76.33	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	129.64	29.51	88.52	85.01	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 30

File Name: 2443530A
Description: T-512
Canister: 417
QC_Batch: 120324-GCK

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/03/24 **Time:** 12:49
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.09	2.30	6.90	3.14	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	0.94	2.30	6.90	2.70	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	0.85	2.30	6.90	2.93	J
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	0.60	2.35	7.04	2.45	J
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.30	2.16	6.47	4.90	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.83	2.34	7.02	3.89	J
100-41-4	Ethylbenzene	0.50	1.50	0.94	2.18	6.53	4.07	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	2.35	2.18	6.53	10.22	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	1.07	2.18	6.53	4.67	J
111-84-2	n-Nonane	0.44	1.33	0.58	2.34	7.01	3.07	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.77	2.19	6.57	3.81	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.80	2.33	7.00	4.65	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	1.28	2.19	6.57	6.31	J
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	94.98	26.50	79.49	335.54	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	569.87	29.51	88.52	373.69	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

SDG: 224435
Analytical Method: TO-14FID
Laboratory Number: 31

File Name: 2443531A
Description: T-513
Canister: 781
QC_Batch: 120224-GCK

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/02/24 **Time:** 13:34
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	0.58	2.35	7.04	2.38	J
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.00	2.16	6.47	3.77	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.69	2.34	7.02	3.22	J
100-41-4	Ethylbenzene	0.50	1.50	0.81	2.18	6.53	3.51	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	1.42	2.18	6.53	6.17	J
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	0.55	2.18	6.53	2.38	J
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.47	2.19	6.57	2.30	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.51	2.19	6.57	2.51	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.42	2.33	7.00	2.43	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	1.09	2.20	6.60	5.98	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	59.86	26.50	79.49	211.47	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	359.16	29.51	88.52	235.52	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Canister: 506
QC_Batch: 120224-GCK

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/02/24 **Time:** 14:31
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Canister: 700
QC_Batch: 120224-GCK

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/02/24 **Time:** 15:25
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	18.24	2.30	6.91	21.00	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	16.61	2.47	7.40	20.49	
115-07-1	Propene	1.33	4.00	12.51	2.30	6.90	21.59	
74-98-6	Propane	1.33	4.00	17.69	2.41	7.23	31.97	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	17.05	2.38	7.14	40.61	
624-64-6	t-2-Butene	1.00	3.00	1.48	2.30	6.90	3.40	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	10.43	2.37	7.10	30.86	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	2.82	2.36	7.09	8.34	
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	0.83	2.36	7.07	2.94	J
287-92-3	Cyclopentane	0.80	2.40	0.90	2.30	6.90	2.59	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	1.35	2.36	7.07	4.76	J
96-14-0	3-Methylpentane	0.67	2.00	1.51	2.36	7.07	5.33	J
110-54-3	n-Hexane	0.67	2.00	1.27	2.36	7.07	4.50	J
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	1.14	2.35	7.04	4.66	J
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.43	2.16	6.47	5.40	J
592-27-8	2-Methylheptane	0.50	1.50	1.60	2.34	7.02	7.51	
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	2.15	2.18	6.53	9.34	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	1.07	2.14	6.41	4.58	J
95-47-6	o-xylene	0.50	1.50	0.55	2.18	6.53	2.39	J
111-84-2	n-Nonane	0.44	1.33	0.71	2.34	7.01	3.72	J
98-82-8	i-Propylbenzene	0.44	1.33	0.55	2.19	6.57	2.70	J
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	0.54	2.19	6.57	2.65	J
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.61	2.19	6.57	3.00	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.59	2.20	6.60	3.25	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	286.08	26.50	79.49	1,010.67	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	1,716.50	29.51	88.52	1,125.57	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 34

File Name: 2443534A
Description: T-602
Canister: 673
QC_Batch: 120324-GCK

Date Sampled: 11/21/24 **Time:** 8:29
Date Analyzed: 12/03/24 **Time:** 13:41
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	0.00	0.00	40.56	0.00	0.00	46.71	
74-86-2	Acetylene	0.00	0.00	0.00	0.00	0.00	0.00	
74-84-0	Ethane	0.00	0.00	14.01	0.00	0.00	17.28	
115-07-1	Propene	0.00	0.00	81.83	0.00	0.00	141.18	
74-98-6	Propane	0.00	0.00	0.00	0.00	0.00	0.00	
75-28-5	i-Butane	0.00	0.00	0.00	0.00	0.00	0.00	
106-98-9	1-Butene	0.00	0.00	1.06	0.00	0.00	2.45	
106-97-8	n-Butane	0.00	0.00	0.00	0.00	0.00	0.00	
624-64-6	t-2-Butene	0.00	0.00	1.51	0.00	0.00	3.48	
590-18-1	c-2-Butene	0.00	0.00	0.00	0.00	0.00	0.00	
78-78-4	i-Pentane	0.00	0.00	6.52	0.00	0.00	19.30	
109-67-1	1-Pentene	0.00	0.00	3.59	0.00	0.00	10.32	
109-66-0	n-Pentane	0.00	0.00	4.90	0.00	0.00	14.48	
646-04-8	t-2-Pentene	0.00	0.00	0.81	0.00	0.00	2.32	
627-20-3	c-2-Pentene	0.00	0.00	0.00	0.00	0.00	0.00	
75-83-2	2,2-Dimethylbutane	0.00	0.00	1.46	0.00	0.00	5.14	
287-92-3	Cyclopentane	0.00	0.00	0.73	0.00	0.00	2.10	
79-29-8	2,3-Dimethylbutane	0.00	0.00	0.00	0.00	0.00	0.00	
107-83-5	2-Methylpentane	0.00	0.00	2.20	0.00	0.00	7.78	
96-14-0	3-Methylpentane	0.00	0.00	1.91	0.00	0.00	6.75	
110-54-3	n-Hexane	0.00	0.00	1.02	0.00	0.00	3.59	
96-37-7	Methylcyclopentane	0.00	0.00	0.00	0.00	0.00	0.00	
108-08-7	2,4-Dimethylpentane	0.00	0.00	2.26	0.00	0.00	9.29	
71-43-2	Benzene	0.00	0.00	2.18	0.00	0.00	6.98	
110-82-7	Cyclohexane	0.00	0.00	3.54	0.00	0.00	12.22	
591-76-4	2-Methylhexane	0.00	0.00	0.26	0.00	0.00	1.08	
565-59-3	2,3-Dimethylpentane	0.00	0.00	0.63	0.00	0.00	2.60	
589-34-4	3-Methylhexane	0.00	0.00	0.90	0.00	0.00	3.70	
540-84-1	2,2,4-Trimethylpentane	0.00	0.00	0.00	0.00	0.00	0.00	
142-82-5	n-Heptane	0.00	0.00	0.00	0.00	0.00	0.00	
108-87-2	Methylcyclohexane	0.00	0.00	3.76	0.00	0.00	15.14	
565-75-3	2,3,4-Trimethylpentane	0.00	0.00	0.60	0.00	0.00	2.82	
108-88-3	Toluene	0.00	0.00	2.43	0.00	0.00	9.18	
592-27-8	2-Methylheptane	0.00	0.00	0.00	0.00	0.00	0.00	
589-81-1	3-Methylheptane	0.00	0.00	0.00	0.00	0.00	0.00	
111-65-9	n-Octane	0.00	0.00	0.00	0.00	0.00	0.00	
100-41-4	Ethylbenzene	0.00	0.00	1.03	0.00	0.00	4.48	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.00	0.00	3.08	0.00	0.00	13.41	
100-42-5	Styrene	0.00	0.00	0.57	0.00	0.00	2.41	
95-47-6	o-xylene	0.00	0.00	2.88	0.00	0.00	12.55	
111-84-2	n-Nonane	0.00	0.00	0.49	0.00	0.00	2.56	
98-82-8	i-Propylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	
103-65-1	n-propylbenzene	0.00	0.00	0.78	0.00	0.00	3.82	
620-14-4	3-Ethyltoluene	0.00	0.00	0.00	0.00	0.00	0.00	
622-96-8	4-Ethyltoluene	0.00	0.00	1.08	0.00	0.00	5.34	
108-67-8	1,3,5-Trimethylbenzene	0.00	0.00	0.29	0.00	0.00	1.43	
611-14-3	2-Ethyltoluene	0.00	0.00	0.88	0.00	0.00	4.34	
95-63-6	1,2,4-Trimethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	
124-18-5	n-Decane	0.00	0.00	0.47	0.00	0.00	2.73	
526-73-8	1,2,3-Trimethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	
141-93-5	1,3-Diethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	
105-05-5	1,4-Diethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	
1120-21-4	Undecane	0.00	0.00	0.00	0.00	0.00	0.00	
112-40-3	Dodecane	0.00	0.00	0.00	0.00	0.00	0.00	
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	0.00	0.00	527.23	0.00	0.00	1,862.60	
TNMHC - C1	Total Non-Methane Hydrocarbons	0.00	0.00	3,163.40	0.00	0.00	2,074.36	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Canister: 550
QC_Batch: 120324-GCK

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/03/24 **Time:** 14:37
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	11.46	2.30	6.91	13.20	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	8.66	2.47	7.40	10.68	
115-07-1	Propene	1.33	4.00	42.06	2.30	6.90	72.58	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.36	2.30	6.90	3.12	J
106-97-8	n-Butane	1.00	3.00	14.19	2.38	7.14	33.80	
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	3.13	2.37	7.10	9.27	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	1.16	2.36	7.09	3.42	J
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	64.42	26.50	79.49	227.60	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	386.55	29.51	88.52	253.48	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Canister: 738
QC_Batch: 120324-GCK

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/03/24 **Time:** 15:38
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	8.69	2.47	7.40	10.71	
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	4.30	2.41	7.23	7.78	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	0.81	2.37	7.10	2.40	J
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	2.59	2.19	6.57	12.77	
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	28.23	26.50	79.49	99.72	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	169.36	29.51	88.52	111.06	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 37

File Name: 2443537A
Description: T-605
Canister: 892
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 9:41
Date Analyzed: 12/04/24 **Time:** 12:10
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	42.53	2.30	6.91	48.98	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	63.66	2.47	7.40	78.53	
115-07-1	Propene	1.33	4.00	379.46	2.30	6.90	654.73	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	135.80	2.38	7.14	323.36	
624-64-6	t-2-Butene	1.00	3.00	1.90	2.30	6.90	4.38	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	118.82	2.37	7.10	351.59	
109-67-1	1-Pentene	0.80	2.40	24.33	2.30	6.90	69.90	
109-66-0	n-Pentane	0.80	2.40	33.07	2.36	7.09	97.71	
646-04-8	t-2-Pentene	0.80	2.40	132.50	2.30	6.90	380.68	
627-20-3	c-2-Pentene	0.80	2.40	11.94	2.30	6.90	34.31	
75-83-2	2,2-Dimethylbutane	0.67	2.00	18.36	2.36	7.07	64.86	
287-92-3	Cyclopentane	0.80	2.40	2.91	2.30	6.90	8.37	
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	9.69	2.36	7.07	34.22	
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	2.30	2.30	6.90	7.95	
108-08-7	2,4-Dimethylpentane	0.57	1.71	22.89	2.35	7.04	94.02	
71-43-2	Benzene	0.67	2.00	28.83	2.13	6.40	92.29	
110-82-7	Cyclohexane	0.67	2.00	25.26	2.30	6.90	87.15	
591-76-4	2-Methylhexane	0.57	1.71	14.64	2.35	7.04	60.10	
565-59-3	2,3-Dimethylpentane	0.57	1.71	54.84	2.35	7.04	225.21	
589-34-4	3-Methylhexane	0.57	1.71	34.97	2.35	7.04	143.61	
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	14.53	2.34	7.02	68.02	
142-82-5	n-Heptane	0.57	1.71	90.35	2.35	7.04	371.02	
108-87-2	Methylcyclohexane	0.57	1.71	39.53	2.30	6.90	159.11	
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	20.32	2.34	7.02	95.09	
108-88-3	Toluene	0.57	1.71	479.54	2.16	6.47	1,810.07	
592-27-8	2-Methylheptane	0.50	1.50	10.70	2.34	7.02	50.06	
589-81-1	3-Methylheptane	0.50	1.50	15.07	2.34	7.02	70.54	
111-65-9	n-Octane	0.50	1.50	45.47	2.34	7.02	212.82	
100-41-4	Ethylbenzene	0.50	1.50	115.97	2.18	6.53	504.74	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	311.84	2.18	6.53	1,357.27	
100-42-5	Styrene	0.50	1.50	50.24	2.14	6.41	214.57	
95-47-6	o-xylene	0.50	1.50	111.97	2.18	6.53	487.36	
111-84-2	n-Nonane	0.44	1.33	84.56	2.34	7.01	444.62	
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	11.40	2.19	6.57	56.16	
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	4.14	2.19	6.57	20.41	
611-14-3	2-Ethyltoluene	0.44	1.33	30.91	2.19	6.57	152.29	
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	8.39	2.19	6.57	41.33	
124-18-5	n-Decane	0.40	1.20	34.97	2.33	7.00	203.95	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	8.16	2.20	6.60	44.86	
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9,690.20	26.50	79.49	34,233.43	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	58,141.23	29.51	88.52	38,125.39	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 38

File Name: 2443538A
Description: T-606
Canister: 608
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 9:58
Date Analyzed: 12/04/24 **Time:** 13:02
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	3.72	2.30	6.91	4.28	J
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.34	2.47	7.40	4.12	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	15.45	2.41	7.23	27.92	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	3.76	2.38	7.14	8.95	
624-64-6	t-2-Butene	1.00	3.00	2.23	2.30	6.90	5.14	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	6.49	2.37	7.10	19.21	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	0.89	2.30	6.90	2.56	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	2.20	2.30	6.90	7.58	
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.71	2.16	6.47	6.46	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	1.21	2.18	6.53	5.26	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	2.51	2.18	6.53	10.92	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	0.75	2.34	7.01	3.96	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	0.50	2.19	6.57	2.47	J
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.46	2.33	7.00	2.70	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	110.52	26.50	79.49	390.43	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	663.09	29.51	88.52	434.81	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 39

File Name: 2443539A
Description: T-607
Canister: 771
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 9:52
Date Analyzed: 12/04/24 **Time:** 13:53
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	5.83	2.47	7.40	7.19	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	2.00	2.41	7.23	3.61	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.58	2.30	6.90	3.64	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.87	2.30	6.90	4.30	J
590-18-1	c-2-Butene	1.00	3.00	1.68	2.30	6.90	3.87	J
78-78-4	i-Pentane	0.80	2.40	3.03	2.37	7.10	8.97	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	2.72	2.36	7.07	9.61	
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	1.84	2.30	6.90	6.36	J
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	0.67	2.16	6.47	2.52	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	0.73	2.18	6.53	3.19	J
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	1.18	2.19	6.57	5.81	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	95.01	26.50	79.49	335.65	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	570.07	29.51	88.52	373.81	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 40

File Name: 2443540A
Description: T-608
Canister: 531
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 9:47
Date Analyzed: 12/04/24 **Time:** 14:45
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.05	2.47	7.40	2.53	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.94	2.41	7.23	3.50	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.20	2.30	6.90	2.77	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.45	2.19	6.57	2.19	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	2.70	2.33	7.00	15.76	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	29.77	26.50	79.49	105.19	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	178.65	29.51	88.52	117.15	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 41

File Name: 2443541A
Description: T-609
Canister: 668
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/04/24 **Time:** 15:34
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.03	2.47	7.40	2.50	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	7.56	2.36	7.07	26.70	
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.40	2.20	6.60	2.22	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	18.31	26.50	79.49	64.67	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	109.83	29.51	88.52	72.02	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 42

File Name: 2443542A
Description: T-610
Canister: 730
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/04/24 **Time:** 16:35
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	2.45	2.30	6.90	4.22	J
74-98-6	Propane	1.33	4.00	5.46	2.41	7.23	9.86	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	3.52	2.38	7.14	8.37	
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	1.47	2.37	7.10	4.36	J
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	0.92	2.36	7.09	2.72	J
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	0.80	2.13	6.40	2.57	J
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	0.92	2.35	7.04	3.77	J
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.42	2.16	6.47	5.34	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	0.89	2.18	6.53	3.89	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	2.17	2.18	6.53	9.44	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	0.87	2.34	7.01	4.56	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	1.35	2.19	6.57	6.65	
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	0.65	2.19	6.57	3.21	J
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	87.11	26.50	79.49	307.75	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	522.67	29.51	88.52	342.73	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 43

File Name: 2443543A
Description: T-611
Canister: 701
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/04/24 **Time:** 17:23
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	2.10	2.30	6.90	4.83	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	1.82	2.36	7.07	6.44	J
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	0.61	2.18	6.53	2.67	J
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	25.69	26.50	79.49	90.76	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	154.15	29.51	88.52	101.08	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 44

File Name: 2443544A
Description: T-612
Canister: 514
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/04/24 **Time:** 18:10
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	10.95	26.50	79.49	38.67	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	65.67	29.51	88.52	43.06	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 45

File Name: 2443545A
Description: T-613
Canister: 694
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/04/24 **Time:** 19:07
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	0.70	2.13	6.40	2.23	J
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	15.51	26.50	79.49	54.79	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	93.05	29.51	88.52	61.01	J

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 46

File Name: 2443546A
Description: T-614
Canister: 880
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/04/24 **Time:** 19:55
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

224435 17807

E Schmidt, Ph., Environmental Consultant

TO- Day 1

hain of Custody Record

rm Serial Number ES F1-02106	For Information Regarding These Samples Please Contact: Dr. Charles E. Schmidt 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 E-Mail: SCHMIDTCE@aol.com	Client Address and Phone Number 3900 Kilroy Airport Way, Suite 100 Long Beach, CA 90806 562-743-7895	Laboratory Name EAS
ent Name CS iquita Canyon Landfill			Laboratory Address 173 Cross Street San Luis Obispo, CA 93401
oject Manager t Sullivan			Laboratory Phone 805-781-3585
quested Completion Date			Laboratory Contact Dr. Steve Hoyt stevehoyt@easlab.com

ation mber	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container Vial	Sample Container Can	Sample Container Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/19/2024	851		x	T - 401	636	1		x		x	x	x	x		-29	0	01
	11/19/2024	835		x	T - 402	703	1		x		x	x	x	x		-29	0	02
	11/19/2024	812		x	T - 403	547	1		x		x	x	x	x		-29	0	03
	11/19/2024	824		x	T - 404	749	1		x		x	x	x	x		-29	0	04
	11/19/2024	1020		x	T - 405	837	1		x		x	x	x	x		-29	0	05
	11/19/2024	1006		x	T - 406	626	1		x		x	x	x	x		-29	0	06
	11/19/2024	1005		x	T - 407	740	1		x		x	x	x	x		-29	0	07
	11/19/2024	1019		x	T - 408	805	1		x		x	x	x	x		-29	0	08
	11/19/2024	1145		x	T - 409	631	1		x		x	x	x	x		-29	0	09
	11/19/2024	1159		x	T - 410	714	1		x		x	x	x	x		-29	0	10
	11/19/2024	1151		x	T - 411	551	1		x		x	x	x	x		-29	0	11
	11/19/2024	1206		x	T - 412	881	1		x		x	x	x	x		-29	0	12
	11/19/2024	1337		x	T - 413	766	1		x		x	x	x	x		-29		13
	11/19/2024	1324		x	T - 414	725	1		x		x	x	x	x		-29		14
	11/19/2024	1338		x	T - 415	896	1		x		x	x	x	x		-29		15
	11/19/2024	1324		x	T - 416	659	1		x		x	x	x	x		-29		16
	11/19/2024	1329		x	T - 417	879	1		x		x	x	x	x		-29		17
	11/19/2024			x	T - 418	552	1		x		x	x	x	x		-29		18

mpler CESchmidt	Date/Time 11/21/24 1204	Relinquished by CESchmidt	Date/Time 11/21/24 1204	HAZWRAP/NEESA Y N QC Level 1 2 3
cieved by EAS	Date/Time	Relinquished by	Date/Time	COC Ana Req
cieved by	Date/Time	Relinquished by	Date/Time	Cust Seal Sample Condition
cieved by Laboratory 11/21/2024	Date/Time	Sample Shipped Via UPS FEDEX BUS	Other	
marks 13:50	Do Not Pressurize with Helium			

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D1

CE Schmidt, Ph.., Environmental Consultant

224435 17807 TO Day 2

Chain of Custody Record

Form Serial Number: CES F1-02106
Client Name: SCS / Chiquita Canyon Landfill
Project Manager: Pat Sullivan
Requested Completion Date:

For Information Regarding These Samples Please Contact:
Dr. Charles E. Schmidt
19200 Live Oak Road, Red Bluff, CA 96080
530-529-4256 Cell: 530-200-2473
E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806 562-743-7895

Laboratory Name: EAS
Laboratory Address: 173 Cross Street, San Luis Obispo, CA 93401
Laboratory Phone: 805-781-3585
Laboratory Contact: Dr. Steve Hoyt, stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (inches Hg)	Can Pressure Out (inches)	Remarks
	11/20/2024	0830		X	T - 501	1067	1		X		X	X	X	X		-27	0	19
	11/20/2024	0837		X	T - 502	746	1		X		X	X	X	X		-29	0	20
	11/20/2024	0852		X	T - 503	751	1		X		X	X	X	X		-29	0	21
	11/20/2024	0911		X	T - 504	645	1		X		X	X	X	X		-29	0	22
	11/20/2024	1055		X	T - 505	883	1		X		X	X	X	X		-29	0	23
	11/20/2024	1071		X	T - 506	754	1		X		X	X	X	X		-29	0	24
	11/20/2024	1054		X	T - 507	772	1		X		X	X	X	X		-29	0	25
	11/20/2024	1040		X	T - 508	539	1		X		X	X	X	X		-29	0	26
	11/20/2024	1220		X	T - 509	882	1		X		X	X	X	X		-29	0	27
	11/20/2024	1218		X	T - 510	660	1		X		X	X	X	X		-29	0	28
	11/20/2024	1231		X	T - 511	621	1		X		X	X	X	X		-29	0	29
	11/20/2024	1241		X	T - 512	707	1		X		X	X	X	X		-29		30
	11/20/2024	1228		X	T - 513	821	1		X		X	X	X	X		-27		31
	11/20/2024	1245		X	T - 514	506	1		X		X	X	X	X		-29	0	32

132 of 1034

Sampler: CE Schmidt	Date/Time: 11/21/24 1204	Relinquished by: [signature]	Date/Time: 11/21/24 1204
Recieved by: DAS	Date/Time:	Relinquished by:	Date/Time:
Recieved by:	Date/Time:	Relinquished by:	Date/Time:
Recieved by Laboratory: [signature] 11/21/2024	Date/Time:	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Anu Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D2

1132

GE Schmidt, Ph.D., Environmental Consultant

Chain of Custody Record

229435

178807

TO Day 3

Form Serial Number
CES F1-02106

Client Name
SCS

Chiquita Canyon Landfill

Project Manager
Pat Sullivan

Requested Completion Date

For Information Regarding These Samples
Please Contact:

Dr. Charles E. Schmidt
19200 Live Oak Road, Red Bluff, CA 96080
530-529-4256 Cell: 530-200-2473
E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806 562-743-7895

Laboratory Name
EAS

Laboratory Address
173 Cross Street
San Luis Obispo, CA 93401

Laboratory Phone
805-781-3585

Laboratory Contact
Dr. Steve Hoyt
stevehoyt@easlab.com

ation mber	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)	Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/21/2024	0910		X	T - 601	100	1		X		X	X	X	X	-29	0	33
	11/21/2024	0929		X	T - 602	613	1		X		X	X	X	X	-29	0	34
	11/21/2024	0941		X	T - 603	550	1		X		X	X	X	X	-29	0	35
	11/21/2024	0958		X	T - 604	738	1		X		X	X	X	X	-29	0	36
	11/21/2024	1011		X	T - 605	532	1		X		X	X	X	X	-29	0	37
	11/21/2024	1058		X	T - 606	023	1		X		X	X	X	X	-29	0	38
	11/21/2024	1052		X	T - 607	711	1		X		X	X	X	X	-29	0	39
	11/21/2024	1117		X	T - 608	531	1		X		X	X	X	X	-29	0	40
	11/21/2024	1138		X	T - 609	668	1		X		X	X	X	X	-29		41
	11/21/2024	1111		X	T - 610	730	1		X		X	X	X	X	-29		42
38	11/21/2024	1155		X	T - 611	101	1		X		X	X	X	X	-29		43
	11/21/2024	1120		X	T - 612	541	1		X		X	X	X	X	-29		44
	11/21/2024	1125		X	T - 613	614	1		X		X	X	X	X	-29		45
	11/21/2024	1138		X	T - 614	830	1		X		X	X	X	X	-29		46

Relinquished by: CESchmidt — Date/Time: 11/21/24 1204

Received by: EAS

Relinquished by

Received by Laboratory: 11/21/2024 13:30

Date/Time

Relinquished by

Date/Time

Relinquished by

Date/Time

Sample Shipped Via
UPS FEDEX BUS Other

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

Do Not Pressurize with Helium

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D3

Section 4 Data Package

This section contains the Data Packages for the samples, blanks, and calibration. Each package has the analytical report, quantitation report, calculation sheet, instrument quantation report, and chromatograms.

Items provided in Data Package:

DAB Run Logs and Preparation Logs

Sample Packages

Blank Package for each Daily Analytical Batch

Quality Control Reports, LCS,LCD for each Daily Analytical Batch

Continuing Calibration Package for Each Daily Analytical Batch

Initial Calibration Data

Tune Data (if required)

DAB Run Logs and Preparation Logs

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
This section contains the DAB Log Sheets and Preparation Logs.

Index

DAB Run Logs
Preparation Logs
Other Log Sheets

DAILY ANALYTICAL BATCH FORM

DAB 112224 . GCh

ANALYST REPORT

Method GC/SHIM7 Chemist RA

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

RA
Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224935

Lab ID 1-9

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

RA
Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

☐ Reviewed

Data Review Chemist Certification

Daily Analytical Batch

DAB: 112224-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
112224-GCK	01	GCK	STD			C11224A		ST62344		1	TR		GC1SHO			
112224-GCK	02	GCK	STD			C11224B		ST62344		1	TR		GC1SHO			
112224-GCK	03	GCK	STD			C11224C		ST62344		1	TR		GC1SHO			
112224-GCK	04	GCK	SPK			QC11224A		ST62529		1	TR		GC1SHO			
112224-GCK	05	GCK	SPK			QC11224B		ST62529		1	TR		GC1SHO			
112224-GCK	06	GCK	SPK			QC11224C		ST62529		1	TR		GC1SHO			
112224-GCK	07	GCK	SPK			QC11224D		ST62529		1	TR		GC1SHO			
112224-GCK	08	GCK	BLK			B11224A		HUMID BLANK		200	TR		GC1SHO			
112224-GCK	09	GCK	BLK			B11224B		METHOD BLANK		200	TR		GC1SHO			
112224-GCK	10	GCK	SA	224435	01	2443501A	636	T-401	SCHMIDT	200	TR		KTO3DHC			
112224-GCK	11	GCK	SA	224435	02	2443502A	703	T-402	SCHMIDT	200	TR		KTO3DHC			
112224-GCK	12	GCK	SA	224435	03	2443503A	547	T-403	SCHMIDT	200	DA		KTO3DHC			
112224-GCK	13	GCK	SA	224435	04	2443504A	749	T-404	SCHMIDT	200	LR		KTO3DHC			
112224-GCK	14	GCK	SA	224435	05	2443505A	837	T-405	SCHMIDT	200	LR		KTO3DHC			
112224-GCK	15	GCK	SA	224435	06	2443506A	626	T-406	SCHMIDT	200	LR		KTO3DHC			
112224-GCK	16	GCK	SA	224435	07	2443507A	740	T-407	SCHMIDT	200	LR		KTO3DHC			
112224-GCK	17	GCK	SA	224435	08	2443508A	805	T-408	SCHMIDT	200	LR		KTO3DHC			
112224-GCK	18	GCK	SA	224435	09	2443509A	631	T-409	SCHMIDT	200	LR		KTO3DHC			

REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB 112524 - GCK

ANALYST REPORT

Method KT03DHC Chemist TR

	NA	Passed	Out
Instrument Tune	☒	☐	☐
GC/MS BFBTune	☒	☐	☐
Continuing Calibration	☐	☒	☐
Instrument Blank	☐	☒	☐
LCS	☐	☒	☐
LCD	☐	☒	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 11-16

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

Daily Analytical Batch

DAB: 112524-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
112524-GCK	01	GCK	STD			C11254A		ST62344		1	TR		GC1SHO			
112524-GCK	02	GCK	SPK			QC11254A		ST62344		1	TR		GC1SHO			
112524-GCK	03	GCK	SPK			QC11254B		ST62344		1	TR		GC1SHO			
112524-GCK	04	GCK	SPK			QC11254C		ST62344		1	TR		GC1SHO			
112524-GCK	05	GCK	BLK			B11254A		HUMID BLANK		200	TR		GC1SHO			
112524-GCK	06	GCK	BLK			B11254B		METHOD BLANK		200	TR		GC1SHO			
112524-GCK	07	GCK	SA	224435	10	2443510A	714	T-410	SCHMIDT	200	TR		KTO3DHC	NG		
112524-GCK	08	GCK	SA	224435	11	2443511A	551	T-411	SCHMIDT	200	TR		KTO3DHC	NG		
112524-GCK	09	GCK	BLK			B11254C		HUMID BLANK		200	TR		GC1SHO			
112524-GCK	10	GCK	BLK			B11254D		METHOD BLANK		200	TR		GC1SHO			
112524-GCK	11	GCK	SA	224435	10	2443510B	714	T-410	SCHMIDT	200	TR	*	GC1SHO	REDAN		
112524-GCK	12	GCK	SA	224435	11	2443511B	551	T-411	SCHMIDT	200	SS	NC	KTO3DHC	CM		
112524-GCK	13	GCK	SA	224435	12	2443512A	881	T-412	SCHMIDT	200	SS		KTO3DHC			
112524-GCK	14	GCK	SA	224435	13	2443513A	766	T-413	SCHMIDT	200	SS		KTO3DHC			
112524-GCK	15	GCK	SA	224435	14	2443514A	725	T-414	SCHMIDT	250	SS		KTO3DHC			
112524-GCK	16	GCK	SA	224435	15	2443515A	896	T-415	SCHMIDT	200	SS		KTO3DHC			
112524-GCK	17	GCK	SA	224435	16	2443516A	659	T-416	SCHMIDT	200	SS		KTO3DHC			

REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB 112624 - GCK

ANALYST REPORT

Method GCISHORY Chemist [signature]

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

[signature]
Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 17-23

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

[signature]
Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

Daily Analytical Batch

DAB: 112624-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
112624-GCK	01	GCK	STD			C11264A		ST62344		1	TR		GC1SHO			
112624-GCK	02	GCK	SPK			QC11264A		ST62529		1	TR		GC1SHO			
112624-GCK	03	GCK	SPK			QC11264B		ST62529		1	TR		GC1SHO			
112624-GCK	04	GCK	SPK			QC11264C		ST62529		1	TR		GC1SHO			
112624-GCK	05	GCK	BLK			B11264A		HUMID BLANK		200	TR		GC1SHO			
112624-GCK	05	GCK	BLK			B11264B		METHOD BLANK		200	TR		GC1SHO			
112624-GCK	06	GCK	SA	224435	16	2443516A	659	T-416	SCHMIDT	200	TR		KTO3DHC			
112624-GCK	07	GCK	SA	224435	17	2443517A	899	T-417	SCHMIDT	200	TR		KTO3DHC			
112624-GCK	08	GCK	SA	224435	18	2443518A	552	T-418	SCHMIDT	200	TR		KTO3DHC			
112624-GCK	09	GCK	SA	224435	19	2443519A	664	T-501	SCHMIDT	200	TR		KTO3DHC			
112624-GCK	10	GCK	SA	224435	20	2443520A	716	T-502	SCHMIDT	200	DA		KTO3DHC	SGNL OUT?		
112624-GCK	11	GCK	SA	224435	21	2443521A	751	T-503	SCHMIDT	200	SS		KTO3DHC			
112624-GCK	12	GCK	SA	224435	20	2443520A	716	T-502	SCHMIDT	200	SS		KTO3DHC			
112624-GCK	13	GCK	SA	224435	22	2443522A	644	T-504	SCHMIDT	200	SS		KTO3DHC			
112624-GCK	14	GCK	SA	224435	23	2443523A	883	T-505	SCHMIDT	200	SS		KTO3DHC	SGNL OUT		
112624-GCK	15	GCK	SA	224435	23	2443523B	883	T-505	SCHMIDT	200	SS		KTO3DHC			

REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB M2724 - GCK

ANALYST REPORT

Method GCISHORT Chemist RT

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

RT
Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 274435

Lab ID 24-28

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

RT
Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

☐ Reviewed

Data Review Chemist Certification

Daily Analytical Batch

DAB: 112724-MSA

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
112724-MSA	01	GCK	STD			C11274A		ST62344		1	TR		GC1SHO			
112724-MSA	02	GCK	SPK			QC11274A		ST62529		1	TR		GC1SHO			
112724-MSA	03	GCK	SPK			QC11274B		ST62529		1	TR		GC1SHO			
112724-MSA	04	GCK	SPK			QC11274C		ST62529		1	TR		GC1SHO			
112724-MSA	05	GCK	BLK			B11274A		HUMID BLANK		200	TR		GC1SHO			
112724-MSA	06	GCK	BLK			B11274B		METHOD BLANK		200	TR		GC1SHO			
112724-MSA	07	GCK	SA	224435	24	2443524A		T-506	SCHMIDT	200	TR		KTO3DHC			
112724-MSA	08	GCK	SA	224435	25	2443525A		T-507	SCHMIDT	200	TR		KTO3DHC			
112724-MSA	09	GCK	SA	224435	26	2443526A		T-508	SCHMIDT	200	TR		KTO3DHC			
112724-MSA	10	GCK	SA	224435	27	2443527A		T-509	SCHMIDT	200	DA		KTO3DHC			
112724-MSA	11	GCK	SA	224435	28	2443528A		T-510	SCHMIDT	200	DA		KTO3DHC			

REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB 12024 - GCK

ANALYST REPORT

Method GCMSHMY Chemist

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 29, 31-37

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

Daily Analytical Batch

DAB: 120224-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120224-GCK	01	GCK	STD			C12024A		ST62344		1	TR		GC1SHO			
120224-GCK	02	GCK	STD			C12024B		ST62344		1	TR		GC1SHO			
120224-GCK	03	GCK	SPK			QC12024A		ST62529		1	TR		GC1SHO			
120224-GCK	04	GCK	SPK			QC12024B		ST62529		1	TR		GC1SHO			
120224-GCK	05	GCK	BLK			B12024A		HUMID BLANK		200	TR		GC1SHO			
120224-GCK	06	GCK	BLK			B12024B		METHOD BLANK		200	TR		GC1SHO			
120224-GCK	07	GCK	SA	224435	29	2443529A	627	SCHMIDT		200	TR		KTO3DHC			
120224-GCK	08	GCK	SA	224435	31	2443531A	781	SCHMIDT		200	TR		KTO3DHC			
120224-GCK	09	GCK	SA	224435	32	2443532A	506	SCHMIDT		200	TR		KTO3DHC			
120224-GCK	10	GCK	SA	224435	33	2443533A	700	SCHMIDT		200	TR		KTO3DHC			

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REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB 120324 - GCK

ANALYST REPORT

Method GCISHORT Chemist DA

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 10, 30, 34-76

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

FORM DAB.v14

Daily Analytical Batch

DAB: 120324-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120324-GCK	01	GCK	STD			C12034A		ST62344		1	TR		GC1SHO			
120324-GCK	02	GCK	SPK			QC12034A		ST62529		1	TR		GC1SHO			
120324-GCK	03	GCK	SPK			QC12034B		ST62529		1	TR		GC1SHO			
120324-GCK	04	GCK	SPK			QC12034C		ST62529		1	TR		GC1SHO			
120324-GCK	05	GCK	BLK			B12034A		HUMID BLANK		200	TR		GC1SHO			
120324-GCK	06	GCK	BLK			B12034B		METHOD BLANK		200	TR		GC1SHO			
120324-GCK	07	GCK	SA	224435	10	2443510A	714	T-410	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	08	GCK	SA	224435	30	2443530A	417	T-512	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	09	GCK	SA	224435	34	2443534A	673	T-602	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	10	GCK	SA	224435	35	2443535A	550	T-603	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	11	GCK	SA	224435	36	2443536A	738	T-604	SCHMIDT	200	DA		KTO3DHC			

REVIEWED

DAILY ANALYTICAL BATCH FORM

DAB 120424 - GCK

ANALYST REPORT

Method GCISHORT Chemist RS

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 37-46

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

Daily Analytical Batch

DAB: 120424-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120424-GCK	01	GCK	STD			C12044A		ST62344		1	TR		GC1SHO			
120424-GCK	02	GCK	SPK			QC12044A		ST62529		1	TR		GC1SHO			
120424-GCK	03	GCK	SPK			QC12044B		ST62529		1	TR		GC1SHO			
120424-GCK	04	GCK	SPK			QC12044C		ST62529		1	TR		GC1SHO			
120424-GCK	05	GCK	BLK			B12044A		HUMID BLANK		200	TR		GC1SHO			
120424-GCK	06	GCK	BLK			B12044B		METHOD BLANK		200	TR		GC1SHO			
120324-GCK	07	GCK	SA	224435	37	2443537A	892	T-605	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	08	GCK	SA	224435	38	2443538A	608	T-606	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	09	GCK	SA	224435	39	2443539A	771	T-607	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	10	GCK	SA	224435	40	2443540A	531	T-608	SCHMIDT	200	TR		KTO3DHC			
120324-GCK	11	GCK	SA	224435	41	2443541A	668	T-609	SCHMIDT	200	DA		KTO3DHC			
120324-GCK	12	GCK	SA	224435	42	2443542A	730	T-610	SCHMIDT	200	LR		KTO3DHC			
120324-GCK	13	GCK	SA	224435	43	2443543A	701	T-611	SCHMIDT	200	LR		KTO3DHC			
120324-GCK	14	GCK	SA	224435	44	2443544A	514	T-612	SCHMIDT	200	LR		KTO3DHC			
120324-GCK	15	GCK	SA	224435	45	2443545A	694	T-613	SCHMIDT	200	LR		KTO3DHC			
120324-GCK	16	GCK	SA	224435	46	2443546A	880	T-614	SCHMIDT	200	LR		KTO3DHC			

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REVIEWED

Sample Data Packages

SDG Number 224435

Lab Id Number 1

Client ID T-401

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 1

Client: C.E. Schmidt
Client ID: T-401
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 636
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:51
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCK\11224K\2443501A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-401
Run Time Bar Code:
Acquired on : 22 Nov 24 02:07 PM
Report Created on: 03 Jan 25 12:03 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11224K\2443501A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.040	404	363	BV	0.019	0.0027
2	0.072	338	340	VV	0.017	0.0022
3	0.141	715	452	PV	0.023	0.0047
4	0.163	542	469	VV	0.019	0.0036
5	0.206	1224	647	VV	0.026	0.0080
6	0.250	885	513	VV	0.029	0.0058
7	0.270	842	559	VV	0.022	0.0055
8	0.308	1170	576	VV	0.030	0.0077
9	0.366	1316	667	VV	0.027	0.0086
10	0.409	1893	662	VV	0.037	0.0124
11	0.519	4180	726	VV	0.072	0.0274
12	0.586	2819	913	VV	0.044	0.0185
13	0.654	1841	744	VV	0.032	0.0121
14	0.733	2913	767	VV	0.051	0.0191
15	0.786	1646	801	VV	0.031	0.0108
16	0.850	2268	836	VV	0.038	0.0149
17	0.894	2310	1052	VV	0.031	0.0151
18	0.927	1847	912	VV	0.034	0.0121
19	0.989	3064	915	VV	0.044	0.0201
20	1.043	1414	969	VV	0.022	0.0093
21	1.072	1385	1051	VV	0.022	0.0091
22	1.089	1752	857	VV	0.034	0.0115
23	1.160	2461	773	VV	0.046	0.0161
24	1.238	2332	756	VV	0.041	0.0153
25	1.287	695	719	VV	0.016	0.0046
26	1.328	2080	783	VV	0.041	0.0136
27	1.368	2342	971	VV	0.032	0.0154
28	1.425	2231	791	VV	0.047	0.0146
29	1.479	1086	686	VV	0.026	0.0071
30	1.538	3452	785	VV	0.061	0.0226
31	1.661	3276	811	VV	0.062	0.0215
32	1.713	1593	681	VV	0.039	0.0104
33	1.766	785	541	VV	0.024	0.0051
34	1.805	1673	540	VV	0.045	0.0110
35	1.844	1169	647	VV	0.030	0.0077
36	1.891	1115	659	VV	0.030	0.0073
37	1.957	2736	647	VV	0.070	0.0179
38	2.027	1014	596	VV	0.028	0.0067
39	2.059	1171	596	VV	0.033	0.0077
40	2.107	1789	537	VV	0.044	0.0117
41	2.204	210	280	VV	0.012	0.0014
42	2.277	1777	479	VV	0.049	0.0117
43	2.321	735	398	VV	0.031	0.0048
44	2.353	1001	481	VV	0.033	0.0066
45	2.410	774	516	VV	0.025	0.0051
46	2.437	1226	604	VV	0.028	0.0080
47	2.481	864	397	VV	0.036	0.0057
48	2.545	1352	448	VV	0.041	0.0089
49	2.609	446	342	VV	0.022	0.0029
50	2.685	768	325	VV	0.039	0.0050
51	2.714	416	390	VV	0.018	0.0027
52	2.729	238	268	VV	0.015	0.0016
53	2.798	1028	316	VV	0.042	0.0067
54	2.874	947	314	VV	0.040	0.0062
55	2.949	1408	618	VV	0.038	0.0092
56	3.003	3539	766	VV	0.058	0.0232

57	3.057	2358	885	VV	0.044	0.0155
58	3.117	1227	778	VV	0.026	0.0080
59	3.155	3310	1039	VV	0.044	0.0217
60	3.203	3040	930	VV	0.055	0.0199
61	3.304	1799	852	VV	0.030	0.0118
62	3.326	1638	800	VV	0.034	0.0107
63	3.407	3495	913	VV	0.051	0.0229
64	3.456	1177	751	VV	0.023	0.0077
65	3.522	2645	881	VV	0.041	0.0173
66	3.561	3339	979	VV	0.044	0.0219
67	3.622	721	625	VV	0.019	0.0047
68	3.657	1024	686	VV	0.025	0.0067
69	3.682	1974	683	VV	0.048	0.0129
70	3.743	1332	664	VV	0.030	0.0087
71	3.793	1439	608	VV	0.039	0.0094
72	3.890	972	541	VV	0.030	0.0064
73	4.045	49610	16049	VV	0.043	0.3253
74	4.175	49233	25925	VV	0.029	0.3228
75	4.541	239	174	VV	0.020	0.0016
76	4.583	5396	2130	VV	0.036	0.0354
77	4.851	43946	18964	PV	0.034	0.2882
78	4.972	1731	594	VV	0.049	0.0114
79	5.110	130004	60474	VV	0.032	0.8524
80	5.222	59722	24821	VV	0.037	0.3916
81	5.732	410	149	VV	0.042	0.0027
82	6.047	9116	1359	PV	0.087	0.0598
83	7.014	294357	131122	BV	0.035	1.9301
84	7.233	435	195	VV	0.030	0.0029
85	7.269	124	123	VV	0.017	0.0008
86	7.290	156	129	VV	0.020	0.0010
87	8.000	49550	11175	BV	0.060	0.3249
88	8.349	205331	80141	VV	0.040	1.3464
89	8.631	1180	191	VB	0.080	0.0077
90	8.901	12411	2662	BV	0.065	0.0814
91	9.468	9824	1931	BV	0.070	0.0644
92	10.770	9982	2363	BB	0.061	0.0655
93	11.236	6892	1931	BV	0.056	0.0452
94	11.312	11830	1847	VV	0.084	0.0776
95	11.463	180564	68832	VV	0.041	1.1840
96	11.666	1419625	211192	VV	0.092	9.3085
97	12.099	34541	11446	VV	0.046	0.2265
98	12.197	20834	5255	VV	0.057	0.1366
99	12.391	37598	12708	VV	0.045	0.2465
100	12.545	39689	14473	VV	0.042	0.2602
101	12.640	42593	11789	VV	0.052	0.2793
102	12.730	27713	6559	VV	0.059	0.1817
103	12.852	97852	22162	VV	0.063	0.6416
104	13.181	11876	2003	VV	0.084	0.0779
105	13.351	16735	4351	VV	0.056	0.1097
106	13.715	7327	925	VV	0.105	0.0480
107	13.885	5446	1488	VV	0.054	0.0357
108	13.965	3083	516	VV	0.080	0.0202
109	14.515	937	300	BB	0.048	0.0061
110	14.716	857	197	BV	0.062	0.0056
111	14.894	92149	31950	PV	0.045	0.6042
112	15.005	2626	704	VV	0.055	0.0172
113	15.183	7039	1756	VV	0.058	0.0462
114	15.425	12736	3567	VV	0.053	0.0835
115	15.610	1510166	271239	VV	0.082	9.9022
116	15.894	14494	2300	VV	0.085	0.0950
117	16.106	10366	3272	VV	0.053	0.0680
118	16.154	44249	9577	VV	0.064	0.2901
119	16.278	45627	10125	VV	0.063	0.2992
120	16.443	8658	1822	VV	0.067	0.0568
121	16.528	9208	1330	VV	0.092	0.0604
122	16.824	73571	17260	VV	0.063	0.4824
123	17.095	1298	414	VV	0.046	0.0085
124	17.202	45924	12055	VV	0.058	0.3011
125	17.301	7599	1817	VV	0.059	0.0498
126	17.503	3133	617	VV	0.072	0.0205
127	17.817	4260	787	PV	0.082	0.0279

128	17.984	24004	6294	VV	0.058	0.1574
129	18.132	4906	1201	VV	0.060	0.0322
130	18.266	38319	11970	VV	0.050	0.2513
131	18.372	10061	2396	VV	0.063	0.0660
132	18.507	55947	19391	VV	0.044	0.3668
133	18.573	78463	17967	VV	0.064	0.5145
134	18.782	102454	32968	VV	0.048	0.6718
135	18.912	4160	986	VV	0.061	0.0273
136	19.022	8271	2212	VV	0.055	0.0542
137	19.154	77495	20453	VV	0.054	0.5081
138	19.211	54311	15964	VV	0.050	0.3561
139	19.518	272913	82104	VV	0.051	1.7895
140	19.661	9573	1833	VV	0.073	0.0628
141	19.876	16527	4036	VV	0.060	0.1084
142	20.029	2608	665	VV	0.059	0.0171
143	20.232	82621	20166	VV	0.061	0.5417
144	20.408	71966	14442	VV	0.072	0.4719
145	20.552	39210	9295	VV	0.062	0.2571
146	20.790	12234	3057	VV	0.061	0.0802
147	21.067	68333	17619	VV	0.059	0.4481
148	21.259	1282414	317131	VV	0.063	8.4088
149	21.462	65981	10696	VV	0.083	0.4326
150	21.604	8327	3004	VV	0.041	0.0546
151	21.682	45852	10395	VV	0.064	0.3007
152	21.883	72026	16800	VV	0.063	0.4723
153	21.993	50141	13422	VV	0.056	0.3288
154	22.132	24389	3683	VV	0.089	0.1599
155	22.247	21274	3211	VV	0.090	0.1395
156	22.387	90465	26253	VV	0.053	0.5932
157	22.460	29112	8459	VV	0.051	0.1909
158	22.555	10483	3199	VV	0.048	0.0687
159	22.636	37778	8508	VV	0.066	0.2477
160	22.894	31278	7013	VV	0.065	0.2051
161	23.055	79830	23551	VV	0.053	0.5234
162	23.216	24010	5542	VV	0.064	0.1574
163	23.321	23200	6511	VV	0.054	0.1521
164	23.509	986121	211080	VV	0.070	6.4660
165	23.883	285456	70890	VV	0.062	1.8717
166	23.973	56965	16906	VV	0.050	0.3735
167	24.111	588024	127966	VV	0.071	3.8557
168	24.321	52425	11894	VF	0.065	0.3438
169	24.456	6768	2491	MF	0.045	0.0444
170	24.480	209	1892	FM	0.002	0.0014
171	24.607	103334	21742	FV	0.071	0.6776
172	24.718	241713	46942	VV	0.076	1.5849
173	24.867	61021	14244	VV	0.063	0.4001
174	25.004	111661	21878	VV	0.073	0.7322
175	25.212	9014	2212	VV	0.063	0.0591
176	25.378	98766	16341	VV	0.093	0.6476
177	25.532	32535	6720	VV	0.072	0.2133
178	25.726	60138	11817	VV	0.075	0.3943
179	25.835	55247	12071	VV	0.069	0.3623
180	25.940	78542	13088	VV	0.085	0.5150
181	26.127	3000351	602753	VV	0.077	19.6733
182	26.304	24159	5154	VF	0.070	0.1584
183	26.364	5073	4474	MF	0.019	0.0333
184	26.420	28485	14275	FF	0.033	0.1868
185	26.485	293441	63831	FM	0.077	1.9241
186	26.652	34504	8131	FV	0.062	0.2262
187	26.744	43002	9057	VF	0.071	0.2820
188	27.119	388148	80397	MF	0.080	2.5451
189	27.219	18607	8084	FF	0.038	0.1220
190	27.242	27304	6967	FM	0.065	0.1790
191	27.390	24801	5289	FV	0.068	0.1626
192	27.482	36244	8358	VV	0.064	0.2376
193	27.591	20730	2867	VV	0.098	0.1359
194	27.815	114818	26500	VV	0.067	0.7529
195	27.934	55932	11575	VV	0.073	0.3667
196	28.179	424076	96327	VV	0.068	2.7807
197	28.359	9141	2017	VV	0.067	0.0599
198	28.473	11121	1884	VV	0.084	0.0729

199	28.802	15022	1065	VV	0.184	0.0985
200	29.122	2996	629	VV	0.074	0.0196
201	29.483	4191	669	BV	0.091	0.0275

Total area = 1.52509E+007

User Modified

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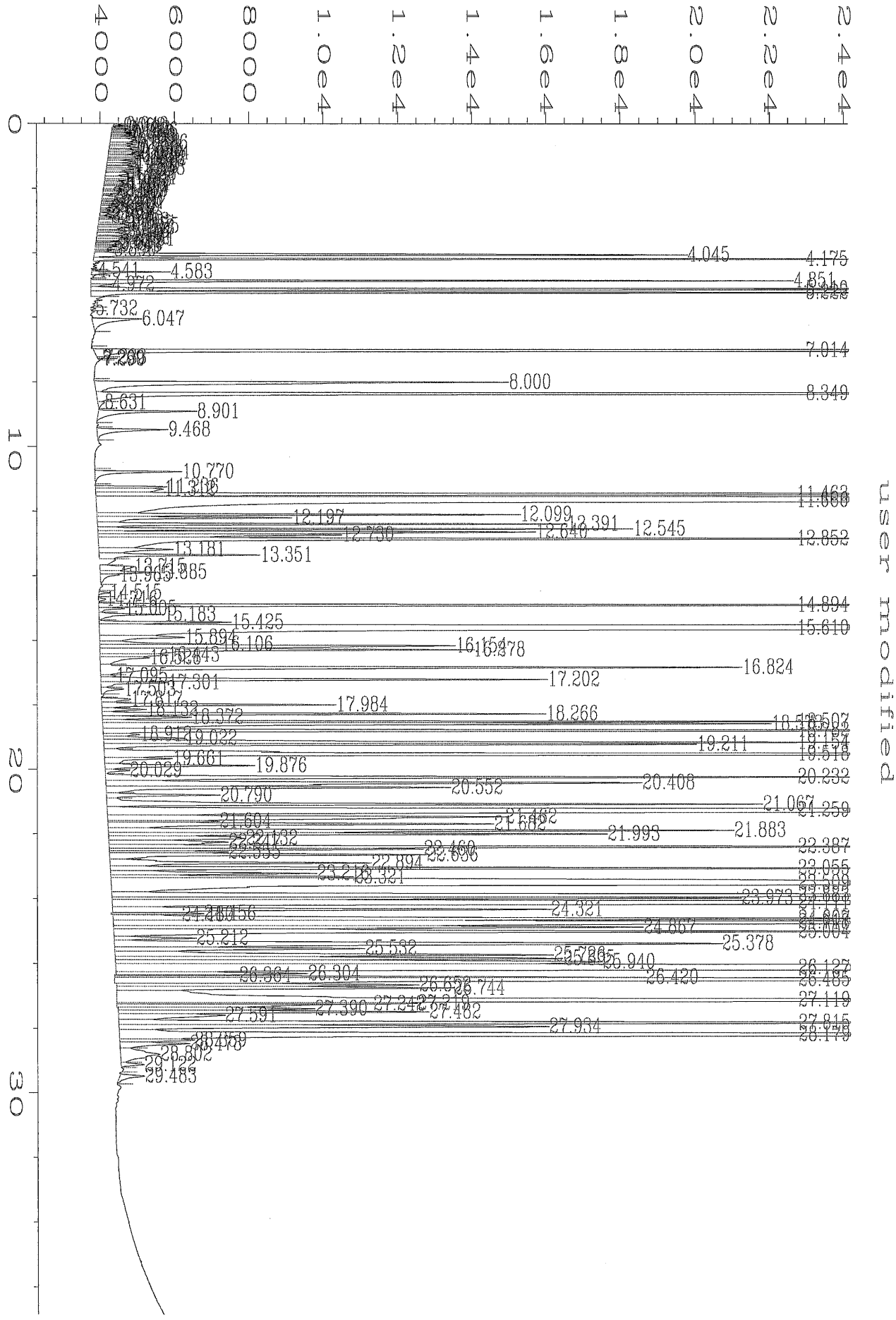
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **01**
File Name: **2443501A**
Sample ID: **T-401**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **636**
Can Factor: **1.25**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:51** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **14:07** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**	48096	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**	48266	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**	128377	I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**	56830	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31						133	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**	203565	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**	180390	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**	36667	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**	38899	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**	95000	I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**	10313	I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**	3122	I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**	2578	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**	6898	I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62		0				164	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**	45311	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**	45493	I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**	23536	I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**	37958	I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**	55569	I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**	78097	I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**	102102	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**	53903	I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	**19.52**	258640	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**	82203	I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**	67801	I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	**21.26**	1281831	I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**	65793	I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**	45550	I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**	90285	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**	285246	I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**	587758	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54	**24.45**	6768	I	I	H	879	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**	241536	I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**	111432	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**	32420	I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07		0				-148	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**	24089	I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**	28485	I	I	H	959	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**	34449	I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**	42927	I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.22**	18607	I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**	24760	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**	9120	I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					15069900		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					15069900		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					15069900		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.25	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.25		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	85.03	42.51	48.96	85.03	42.51	48.96	48.96	48.96
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	85.33	42.66	52.63	85.33	42.66	52.63	52.63	52.63
Propene	42.1	3	226.95	75.65	130.53	226.95	75.65	130.53	130.53	130.53
Propane	44.1	3	100.47	33.49	60.53	100.47	33.49	60.53	60.53	60.53
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	359.87	89.97	214.23	359.87	89.97	214.23	214.23	214.23
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	318.90	63.78	188.73	318.90	63.78	188.73	188.73	188.73
1-Pentene	70.1	5	64.82	12.96	37.25	64.82	12.96	37.25	37.25	37.25
n-Pentane	72.1	5	68.77	13.75	40.64	68.77	13.75	40.64	40.64	40.64
t-2-Pentene	70.1	5	167.94	33.59	96.50	167.94	33.59	96.50	96.50	96.50
c-2-Pentene	70.1	5	18.23	3.65	10.48	18.23	3.65	10.48	10.48	10.48
2,2-Dimethylbutane	86.2	6	5.52	0.92	3.25	5.52	0.92	3.25	3.25	3.25
Cyclopentane	70.1	5	4.56	0.91	2.62	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	12.19	2.03	7.18	12.19	2.03	7.18	7.18	7.18
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	80.10	**13.35**	47.16	80.10	13.35	47.16	47.16	47.16
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	80.42	11.49	47.18	80.42	11.49	47.18	47.18	47.18
Benzene	78.1	6	41.61	6.93	22.20	41.61	6.93	22.20	22.20	22.20
Cyclohexane	84.2	6	67.10	11.18	38.59	67.10	11.18	38.59	38.59	38.59
2-Methylhexane	100.2	7	98.24	14.03	57.63	98.24	14.03	57.63	57.63	57.63
2,3-Dimethylpentane	100.2	7	138.06	19.72	80.99	138.06	19.72	80.99	80.99	80.99
3-Methylhexane	100.2	7	180.50	25.79	105.89	180.50	25.79	105.89	105.89	105.89
2,2,4-Trimethylpentane	114.2	8	95.29	11.91	55.75	95.29	11.91	55.75	55.75	55.75
n-Heptane	100.2	7	457.23	65.32	268.24	457.23	65.32	268.24	268.24	268.24
Methylcyclohexane	98.2	7	145.32	20.76	83.55	145.32	20.76	83.55	83.55	83.55
2,3,4-Trimethylpentane	114.2	8	119.86	14.98	70.12	119.86	14.98	70.12	70.12	70.12
Toluene	92.1	7	2266.07	323.72	1221.93	2,266.07	323.72	1,221.93	1,221.93	1,221.93
2-Methylheptane	114.2	8	116.31	14.54	68.05	116.31	14.54	68.05	68.05	68.05
3-Methylheptane	114.2	8	80.53	10.07	47.11	80.53	10.07	47.11	47.11	47.11
n-Octane	114.2	8	159.61	19.95	93.38	159.61	19.95	93.38	93.38	93.38
Ethylbenzene	106.2	8	504.27	63.03	274.35	504.27	63.03	274.35	274.35	274.35

m,p-xylene	106.2	8	1039.06	129.88	565.31	1,039.06	129.88	565.31	565.31	565.31
Styrene	104.2	8	11.96	1.50	6.39	11.96	1.50	6.39	6.39	6.39
o-xylene	106.2	8	427.00	53.37	232.31	427.00	53.37	232.31	232.31	232.31
n-Nonane	128.3	9	196.99	21.89	115.09	196.99	21.89	115.09	115.09	115.09
i-Propylbenzene	120.2	9	57.31	6.37	31.37	57.31	6.37	31.37	31.37	31.37
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	42.59	4.73	23.31	42.59	4.73	23.31	23.31	23.31
4-Ethyltoluene	120.2	9	50.36	5.60	27.56	50.36	5.60	27.56	27.56	27.56
1,3,5-Trimethylbenzene	120.2	9	60.90	6.77	33.33	60.90	6.77	33.33	33.33	33.33
2-Ethyltoluene	120.2	9	75.89	8.43	41.54	75.89	8.43	41.54	41.54	41.54
1,2,4-Trimethylbenzene	120.2	9	32.89	3.65	18.00	32.89	3.65	18.00	18.00	18.00
n-Decane	142.3	10	43.77	4.38	25.53	43.77	4.38	25.53	25.53	25.53
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	16.12	1.61	8.87	16.12	1.61	8.87	8.87	8.87
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	26641.14	4440.2	15686.2	26,641.14	4,440.19	15,686.25	15,686.25	15,686.25
Total Non-Methane Hydrocarbons	16	1.0	26641.14	26641.1	17469.6	26,641.14	26,641.14	17,469.60	17,469.60	17,469.60

SDG: **224435**
Laboratory Number: **01**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.50	2.88	5.00	7.50	8.64	15.0		=		Y
4.000	2.00	2.50	2.66	5.00	7.50	7.99	15.0	U	ND		Y
4.000	2.00	2.50	3.08	5.00	7.50	9.25	15.0		=		Y
4.000	1.33	1.67	2.88	5.00	5.00	8.63	15.0		=		Y
4.000	1.33	1.67	3.01	5.00	5.00	9.04	15.0		=		Y
4.000	1.00	1.25	2.98	5.00	3.75	8.93	15.0	U	ND		Y
4.000	1.00	1.25	2.87	5.00	3.75	8.62	15.0	U	ND		Y
4.000	1.00	1.25	2.98	5.00	3.75	8.93	15.0		=		Y
4.000	1.00	1.25	2.87	5.00	3.75	8.62	15.0	U	ND		Y
4.000	1.00	1.25	2.87	5.00	3.75	8.62	15.0	U	ND		Y
4.000	0.80	1.00	2.96	5.00	3.00	8.88	15.0		=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0		=		Y
4.000	0.80	1.00	2.95	5.00	3.00	8.86	15.0		=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0		=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0		=		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	J	=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0	U	ND		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	U	ND		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	J	=		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	U	ND		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0		=		Y
4.000	0.67	0.83	2.88	5.00	2.50	8.63	15.0	U	ND		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.67	0.83	2.67	5.00	2.50	8.00	15.0		=		Y
4.000	0.67	0.83	2.88	5.00	2.50	8.63	15.0		=		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0		=		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.57	0.71	2.87	5.00	2.14	8.62	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0		=		Y
4.000	0.57	0.71	2.70	5.00	2.14	8.09	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0		=		Y
4.000	0.50	0.63	2.72	5.00	1.88	8.16	15.0		=		Y

4.000	0.50	0.63	2.72	5.00	1.88	8.16	15.0		=	Y
4.000	0.50	0.63	2.67	5.00	1.88	8.01	15.0	J	=	Y
4.000	0.50	0.63	2.72	5.00	1.88	8.16	15.0		=	Y
4.000	0.44	0.56	2.92	5.00	1.67	8.76	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.40	0.50	2.92	5.00	1.50	8.75	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.40	0.50	2.75	5.00	1.50	8.25	15.0	U	ND	Y
4.000	0.40	0.50	2.75	5.00	1.50	8.25	15.0		=	Y
4.000	0.36	0.45	2.91	5.00	1.36	8.74	15.0	U	ND	Y
4.000	0.33	0.42	2.91	5.00	1.25	8.72	15.0	U	ND	Y
										Y
45.00	7.5	9.38	33.12	56.25	28.1	99.4	168.8		=	Y
45.00	45.0	56.25	36.89	56.25	168.8	110.7	168.8		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					85.0		85.03		
					0.0			0.00	
85.3						85.33			
					226.9		226.95		
100.5						100.47			
	0.0					0.00			
					0.0		0.00		
359.9						359.87			
					0.0		0.00		
					0.0		0.00		
	318.9					318.90			
					64.8		64.82		
68.8						68.77			
					167.9		167.94		
					18.2		18.23		
	5.5					5.52			
				4.6					4.56
	0.0					0.00			
	12.2					12.19			
	0.0					0.00			
80.1						80.10			
				0.0					0.00
	80.4					80.42			
		41.6							
				67.1		67.10			
	98.2					98.24			
	138.1					138.06			
	180.5					180.50			
	95.3					95.29			
457.2						457.23			
				145.3					145.32
	119.9					119.86			
		2266.1							
	116.3					116.31			
	80.5					80.53			
159.6						159.61			
		504.3							

		1039.1							
		12.0							
		427.0							
197.0						196.99			
		57.3							
		0.0							
		42.6							
		50.4							
		60.9							
		75.9							
		32.9							
43.8						43.77			
		0.0							
		0.0							
		16.1							
0.0						0.00			
0.0						0.00			
1552.1	1245.8	4626.0	217.0	563.0	0.0	2865.1	563.0	0.0	149.9

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

41.61

2266.07

504.27

				1039.06	
				11.96	
				427.00	
				57.31	
				0.00	
				42.59	
				50.36	
				60.90	
				75.89	
				32.89	
				0.00	
				0.00	
				16.12	
0.0	0.0	0.0	0.0	4626.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 01

File Name: 2443501A
Description: T-401
Canister: 636
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 11/22/24 **Time:** 14:07
Can Factor: 1.25
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.50	7.50	42.51	2.88	8.64	48.96	
74-86-2	Acetylene	2.50	7.50	ND	2.66	7.99	ND	ND
74-84-0	Ethane	2.50	7.50	42.66	3.08	9.25	52.63	
115-07-1	Propene	1.67	5.00	75.65	2.88	8.63	130.53	
74-98-6	Propane	1.67	5.00	33.49	3.01	9.04	60.53	
75-28-5	i-Butane	1.25	3.75	ND	2.98	8.93	ND	ND
106-98-9	1-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
106-97-8	n-Butane	1.25	3.75	89.97	2.98	8.93	214.23	
624-64-6	t-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
590-18-1	c-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
78-78-4	i-Pentane	1.00	3.00	63.78	2.96	8.88	188.73	
109-67-1	1-Pentene	1.00	3.00	12.96	2.87	8.62	37.25	
109-66-0	n-Pentane	1.00	3.00	13.75	2.95	8.86	40.64	
646-04-8	t-2-Pentene	1.00	3.00	33.59	2.87	8.62	96.50	
627-20-3	c-2-Pentene	1.00	3.00	3.65	2.87	8.62	10.48	
75-83-2	2,2-Dimethylbutane	0.83	2.50	0.92	2.94	8.83	3.25	J
287-92-3	Cyclopentane	1.00	3.00	ND	2.87	8.62	ND	ND
79-29-8	2,3-Dimethylbutane	0.83	2.50	ND	2.94	8.83	ND	ND
107-83-5	2-Methylpentane	0.83	2.50	2.03	2.94	8.83	7.18	J
96-14-0	3-Methylpentane	0.83	2.50	ND	2.94	8.83	ND	ND
110-54-3	n-Hexane	0.83	2.50	13.35	2.94	8.83	47.16	
96-37-7	Methylcyclopentane	0.83	2.50	ND	2.88	8.63	ND	ND
108-08-7	2,4-Dimethylpentane	0.71	2.14	11.49	2.93	8.80	47.18	
71-43-2	Benzene	0.83	2.50	6.93	2.67	8.00	22.20	
110-82-7	Cyclohexane	0.83	2.50	11.18	2.88	8.63	38.59	
591-76-4	2-Methylhexane	0.71	2.14	14.03	2.93	8.80	57.63	
565-59-3	2,3-Dimethylpentane	0.71	2.14	19.72	2.93	8.80	80.99	
589-34-4	3-Methylhexane	0.71	2.14	25.79	2.93	8.80	105.89	
540-84-1	2,2,4-Trimethylpentane	0.63	1.88	11.91	2.93	8.78	55.75	
142-82-5	n-Heptane	0.71	2.14	65.32	2.93	8.80	268.24	
108-87-2	Methylcyclohexane	0.71	2.14	20.76	2.87	8.62	83.55	
565-75-3	2,3,4-Trimethylpentane	0.63	1.88	14.98	2.93	8.78	70.12	
108-88-3	Toluene	0.71	2.14	323.72	2.70	8.09	1,221.93	
592-27-8	2-Methylheptane	0.63	1.88	14.54	2.93	8.78	68.05	
589-81-1	3-Methylheptane	0.63	1.88	10.07	2.93	8.78	47.11	
111-65-9	n-Octane	0.63	1.88	19.95	2.93	8.78	93.38	
100-41-4	Ethylbenzene	0.63	1.88	63.03	2.72	8.16	274.35	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.63	1.88	129.88	2.72	8.16	565.31	
100-42-5	Styrene	0.63	1.88	1.50	2.67	8.01	6.39	J
95-47-6	o-xylene	0.63	1.88	53.37	2.72	8.16	232.31	
111-84-2	n-Nonane	0.56	1.67	21.89	2.92	8.76	115.09	
98-82-8	i-Propylbenzene	0.56	1.67	6.37	2.74	8.21	31.37	
103-65-1	n-propylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.67	4.73	2.74	8.21	23.31	
622-96-8	4-Ethyltoluene	0.56	1.67	5.60	2.74	8.21	27.56	
108-67-8	1,3,5-Trimethylbenzene	0.56	1.67	6.77	2.74	8.21	33.33	
611-14-3	2-Ethyltoluene	0.56	1.67	8.43	2.74	8.21	41.54	
95-63-6	1,2,4-Trimethylbenzene	0.56	1.67	3.65	2.74	8.21	18.00	
124-18-5	n-Decane	0.50	1.50	4.38	2.92	8.75	25.53	
526-73-8	1,2,3-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.50	ND	2.75	8.25	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.50	1.61	2.75	8.25	8.87	
1120-21-4	Undecane	0.45	1.36	ND	2.91	8.74	ND	ND
112-40-3	Dodecane	0.42	1.25	ND	2.91	8.72	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.38	28.13	4,440.19	33.12	99.36	15,686.25	
TNMHC - C1	Total Non-Methane Hydrocarbons	56.25	168.75	26,641.14	36.89	110.66	17,469.60	

Sample Data Packages

SDG Number 224435

Lab Id Number 2

Client ID T-402

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 2

Client: C.E. Schmidt
Client ID: T-402
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 703
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Initial :
Final:
Factor:

Date:

Sampled: 11/19/2024 Time: 8:35
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11224K\2443502A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-402
Run Time Bar Code:
Acquired on : 22 Nov 24 02:57 PM
Report Created on: 22 Nov 24 03:34 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443502A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.245	1431	570	PV	0.034	0.0377
2	3.277	1687	432	VV	0.065	0.0444
3	3.478	808	507	VV	0.022	0.0213
4	3.575	1867	519	VV	0.046	0.0491
5	4.059	1387	696	VV	0.037	0.0365
6	4.160	3586	1512	VV	0.035	0.0944
7	4.552	13413	4653	PV	0.041	0.3530
8	4.851	12705	4370	PV	0.043	0.3344
9	5.046	4546	3538	PV	0.021	0.1196
10	5.093	123933	56608	VV	0.034	3.2617
11	5.202	120608	55548	VV	0.033	3.1742
12	6.017	11269	1741	BV	0.084	0.2966
13	6.458	12356	1188	PB	0.128	0.3252
14	7.031	8974	3348	BV	0.040	0.2362
15	7.261	1596	540	PV	0.043	0.0420
16	8.401	4334	1007	BV	0.063	0.1141
17	8.665	4881	1156	PB	0.055	0.1285
18	9.303	7232	934	BV	0.103	0.1903
19	9.497	1233	284	VB	0.057	0.0325
20	9.857	2669	428	BB	0.087	0.0703
21	11.139	32024	3930	BV	0.107	0.8428
22	11.303	18326	2784	VV	0.087	0.4823
23	11.475	21694	5878	VV	0.053	0.5709
24	11.586	393131	99277	VV	0.062	10.3465
25	12.106	1696	500	VV	0.049	0.0446
26	12.397	3665	1288	BV	0.044	0.0965
27	12.546	10226	4203	PV	0.039	0.2691
28	12.604	46588	10276	VV	0.062	1.2261
29	12.730	20606	4001	VV	0.071	0.5423
30	12.864	29380	3665	VV	0.106	0.7732
31	13.353	6201	1258	VV	0.068	0.1632
32	13.682	2287	574	VV	0.061	0.0602
33	13.731	2484	540	VV	0.077	0.0654
34	13.878	3821	1093	VV	0.052	0.1006
35	14.893	1507	491	VV	0.048	0.0397

36	14.999	3465	1128	VV	0.047	0.0912
37	15.174	14170	4130	VV	0.051	0.3729
38	15.422	23948	5644	VV	0.067	0.6303
39	15.542	448188	125726	VV	0.057	11.7955
40	15.661	39071	7156	VV	0.074	1.0283
41	15.888	14315	2522	VV	0.077	0.3767
42	16.139	98036	23534	VV	0.060	2.5801
43	16.273	38150	6901	VV	0.075	1.0040
44	16.851	19994	4232	VV	0.069	0.5262
45	17.038	5741	1462	VV	0.057	0.1511
46	17.168	8327	1968	VV	0.061	0.2192
47	17.302	2670	679	VV	0.060	0.0703
48	17.780	6409	1282	PV	0.071	0.1687
49	17.975	35770	9806	VV	0.056	0.9414
50	18.125	3197	937	VV	0.052	0.0841
51	18.263	14387	4624	PV	0.049	0.3786
52	18.361	9207	2422	VV	0.057	0.2423
53	18.546	76701	15375	PV	0.070	2.0186
54	18.774	9001	2047	VV	0.064	0.2369
55	19.019	7054	1677	VV	0.062	0.1856
56	19.108	3644	1066	VV	0.050	0.0959
57	19.191	2641	836	VV	0.048	0.0695
58	20.231	29122	7716	BV	0.057	0.7664
59	20.411	35958	9069	PV	0.062	0.9464
60	20.558	2096	534	VB	0.056	0.0552
61	21.083	4049	1300	BV	0.048	0.1066
62	21.280	7742	1273	PV	0.086	0.2038
63	22.400	18094	4548	BB	0.060	0.4762
64	22.884	5842	1892	BV	0.048	0.1538
65	23.070	8228	2015	PV	0.062	0.2165
66	23.228	5021	1340	VV	0.057	0.1321
67	23.487	192755	50490	VV	0.059	5.0730
68	23.973	17801	3165	VV	0.079	0.4685
69	24.109	172392	33005	VV	0.081	4.5371
70	24.330	20179	5304	VV	0.059	0.5311
71	24.462	1636	451	VV	0.055	0.0430
72	24.549	5569	1631	VV	0.051	0.1466
73	24.623	6798	1739	VV	0.058	0.1789
74	24.734	49740	9656	VV	0.077	1.3091
75	24.874	8252	1964	VV	0.062	0.2172
76	25.004	106265	28443	VV	0.058	2.7967
77	25.216	2157	599	VV	0.057	0.0568
78	25.348	11932	2078	VV	0.080	0.3140
79	25.509	11129	2661	VV	0.062	0.2929
80	25.676	15734	3468	VV	0.066	0.4141
81	25.763	8583	2084	VV	0.060	0.2259
82	25.901	51610	10695	VV	0.070	1.3583
83	26.075	76906	11919	VV	0.090	2.0240
84	26.427	23218	5738	VV	0.062	0.6111
85	26.539	47578	9788	VV	0.081	1.2522
86	26.586	35098	9836	VV	0.051	0.9237

87	26.651	34708	8802	VV	0.057	0.9135
88	26.760	37971	8655	VV	0.066	0.9993
89	27.024	38075	4483	VV	0.115	1.0021
90	27.150	70251	18337	VV	0.057	1.8489
91	27.236	29513	5518	VV	0.075	0.7767
92	27.397	90787	22365	VV	0.062	2.3894
93	27.494	61619	15876	VV	0.059	1.6217
94	27.823	48927	10477	VV	0.071	1.2877
95	27.951	79412	14995	VV	0.081	2.0900
96	28.189	420439	93038	VV	0.069	11.0652
97	28.365	14812	3210	VV	0.069	0.3898
98	28.487	16781	2718	VV	0.087	0.4416
99	28.812	27925	3995	VV	0.097	0.7349
100	28.925	8609	1880	VV	0.065	0.2266
101	28.992	7184	1614	VV	0.074	0.1891
102	29.342	4567	693	VV	0.094	0.1202
103	29.490	6024	1057	VV	0.088	0.1585
104	29.647	2318	545	VV	0.068	0.0610

Total area = 3799644

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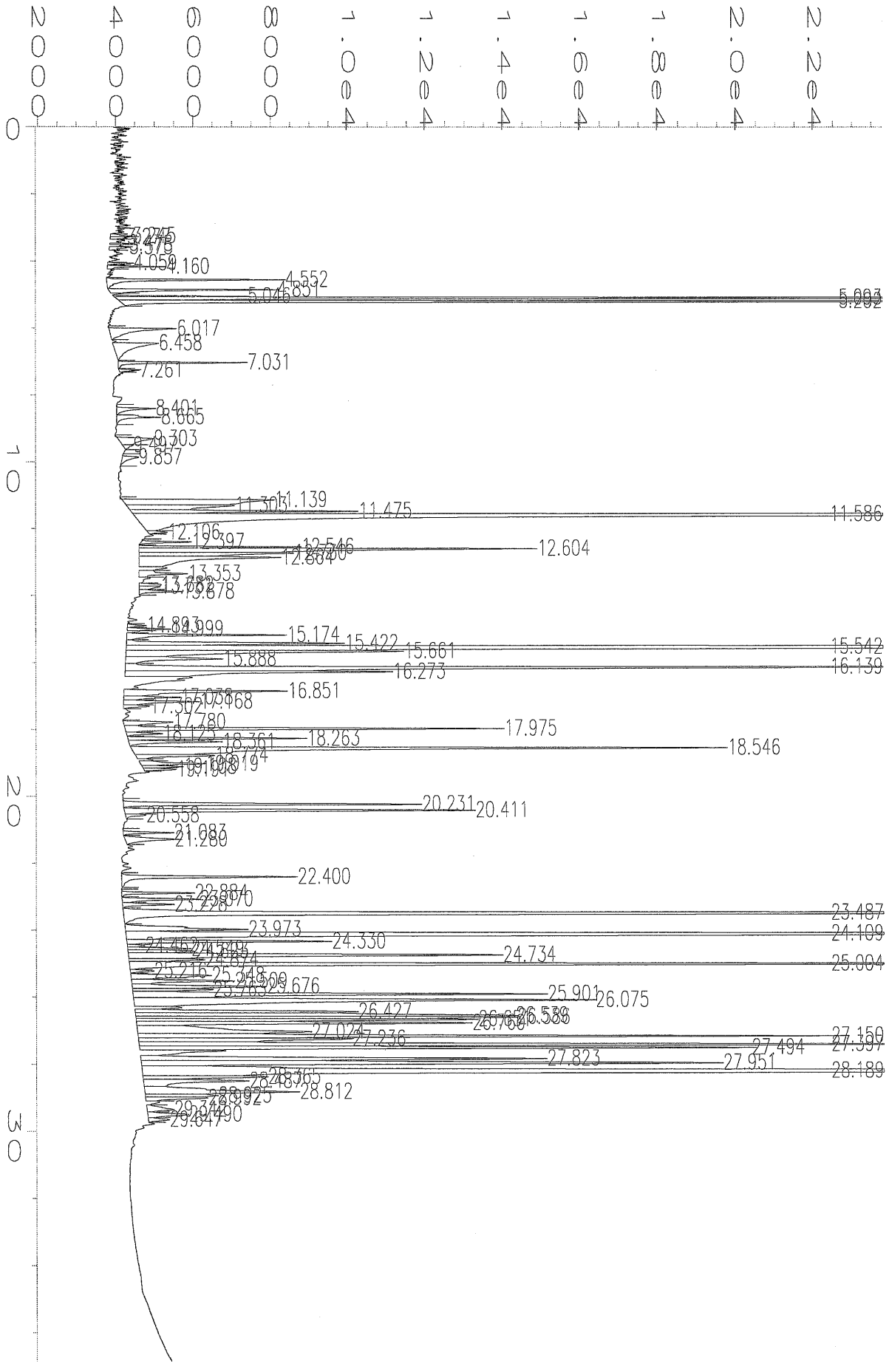
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **02**
File Name: **2443502A**
Sample ID: **T-402**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **703**
Can Factor: **1.25**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:35** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **14:57** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.05	**4.06**	1387	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.09			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.16**	3586	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**		I	I	H	290	290
74-98-6	Propane	P	5.20	**5.20**	**5.20**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.60**						137	351
106-98-9	1-Butene	P	7.29	7.29	**7.26**	1596	I	I	H	364	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.40**	4334	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.81						197	410
590-18-1	c-2-Butene	P	9.63	9.69						197	431
78-78-4	i-Pentane	P	11.37	11.44	**11.48**	21694	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**	3665	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**	10226	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.86**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.88**	3821	I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**14.99**	3465	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						163	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.17**	14170	I	I	H	570	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.66**	39071	I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.27**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.96						96	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.15	**17.17**	8327	I	I	H	628	626
71-43-2	Benzene	P	17.87	**17.97**	**17.96**		I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**	14387	I	O	M	662	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**	76701	I	I	H	670	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						96	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**	9001	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**	2641	I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.50	**19.50**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**	29122	I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**	4049	I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.21**	**21.28**	7742	I	O	M	761	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.97**		I	O	M	860	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.56	**24.55**	5569	I	I	H	883	881
95-47-6	o-xylene	P	24.57	24.73	**24.73**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.03	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.51**	11129	I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.08**		I	I	H	945	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**	23218	I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**	37971	I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.42	**27.40**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-29	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26						-29	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**	14812	I	I	H	1037	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					3799644		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					3799644		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					3799644		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.25	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.25		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	2.45	1.23	1.41	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	6.34	3.17	3.91	6.34	3.17	3.91	3.91	3.91
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.82	0.71	1.62	ND	ND	ND	0	
n-Butane	58.1	4	7.66	1.92	4.56	7.66	1.92	4.56	4.56	4.56
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	38.35	7.67	22.70	38.35	7.67	22.70	22.70	22.70
1-Pentene	70.1	5	6.48	1.30	3.72	6.48	1.30	3.72	3.72	3.72
n-Pentane	72.1	5	18.08	3.62	10.68	18.08	3.62	10.68	10.68	10.68
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	6.75	1.13	3.98	6.75	1.13	3.98	3.98	3.98
Cyclopentane	70.1	5	6.13	1.23	3.52	6.13	1.23	3.52	3.52	3.52
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	25.05	4.18	14.75	25.05	4.18	14.75	14.75	14.75
3-Methylpentane	86.2	6	69.07	11.51	40.67	69.07	11.51	40.67	40.67	40.67
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	14.72	2.10	8.64	14.72	2.10	8.64	8.64	8.64
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	25.43	4.24	14.63	25.43	4.24	14.63	14.63	14.63
2-Methylhexane	100.2	7	135.59	19.37	79.55	135.59	19.37	79.55	79.55	79.55
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	15.91	2.27	9.33	15.91	2.27	9.33	9.33	9.33
2,2,4-Trimethylpentane	114.2	8	4.67	0.58	2.73	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	51.48	7.35	29.60	51.48	7.35	29.60	29.60	29.60
2,3,4-Trimethylpentane	114.2	8	7.16	0.89	4.19	7.16	0.89	4.19	4.19	4.19
Toluene	92.1	7	13.69	1.96	7.38	13.69	1.96	7.38	7.38	7.38
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	9.85	1.23	5.26	9.85	1.23	5.26	5.26	5.26
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	19.67	2.19	10.77	19.67	2.19	10.77	10.77	10.77
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	41.05	4.56	22.47	41.05	4.56	22.47	22.47	22.47
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	67.13	7.46	36.74	67.13	7.46	36.74	36.74	36.74
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	26.19	2.62	14.40	26.19	2.62	14.40	14.40	14.40
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	6717.16	1119.5	3955.0	6,717.16	1,119.53	3,955.05	3,955.05	3,955.05
Total Non-Methane Hydrocarbons	16	1.0	6717.16	6717.2	4404.7	6,717.16	6,717.16	4,404.69	4,404.69	4,404.69

SDG: **224435**
Laboratory Number: **02**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.50	2.88	5.00	7.50	8.64	15.0	U	ND		Y
4.000	2.00	2.50	2.66	5.00	7.50	7.99	15.0	U	ND		Y
4.000	2.00	2.50	3.08	5.00	7.50	9.25	15.0	J	=		Y
4.000	1.33	1.67	2.88	5.00	5.00	8.63	15.0	U	ND		Y
4.000	1.33	1.67	3.01	5.00	5.00	9.04	15.0	U	ND		Y
4.000	1.00	1.25	2.98	5.00	3.75	8.93	15.0	U	ND		Y
4.000	1.00	1.25	2.87	5.00	3.75	8.62	15.0	U	ND		Y
4.000	1.00	1.25	2.98	5.00	3.75	8.93	15.0	J	=		Y
4.000	1.00	1.25	2.87	5.00	3.75	8.62	15.0	U	ND		Y
4.000	1.00	1.25	2.87	5.00	3.75	8.62	15.0	U	ND		Y
4.000	0.80	1.00	2.96	5.00	3.00	8.88	15.0		=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0	J	=		Y
4.000	0.80	1.00	2.95	5.00	3.00	8.86	15.0		=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0	U	ND		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0	U	ND		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	J	=		Y
4.000	0.80	1.00	2.87	5.00	3.00	8.62	15.0	J	=		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	U	ND		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0		=		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0		=		Y
4.000	0.67	0.83	2.94	5.00	2.50	8.83	15.0	U	ND		Y
4.000	0.67	0.83	2.88	5.00	2.50	8.63	15.0	U	ND		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0	J	=		Y
4.000	0.67	0.83	2.67	5.00	2.50	8.00	15.0	U	ND		Y
4.000	0.67	0.83	2.88	5.00	2.50	8.63	15.0		=		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0	U	ND		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0	U	ND		Y
4.000	0.57	0.71	2.93	5.00	2.14	8.80	15.0	U	ND		Y
4.000	0.57	0.71	2.87	5.00	2.14	8.62	15.0		=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0	J	=		Y
4.000	0.57	0.71	2.70	5.00	2.14	8.09	15.0	J	=		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0	U	ND		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0	U	ND		Y
4.000	0.50	0.63	2.93	5.00	1.88	8.78	15.0	U	ND		Y
4.000	0.50	0.63	2.72	5.00	1.88	8.16	15.0	U	ND		Y

4.000	0.50	0.63	2.72	5.00	1.88	8.16	15.0	U	ND	Y
4.000	0.50	0.63	2.67	5.00	1.88	8.01	15.0	J	=	Y
4.000	0.50	0.63	2.72	5.00	1.88	8.16	15.0	U	ND	Y
4.000	0.44	0.56	2.92	5.00	1.67	8.76	15.0	U	ND	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0		=	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.40	0.50	2.92	5.00	1.50	8.75	15.0	U	ND	Y
4.000	0.44	0.56	2.74	5.00	1.67	8.21	15.0	U	ND	Y
4.000	0.40	0.50	2.75	5.00	1.50	8.25	15.0	U	ND	Y
4.000	0.40	0.50	2.75	5.00	1.50	8.25	15.0		=	Y
4.000	0.36	0.45	2.91	5.00	1.36	8.74	15.0	U	ND	Y
4.000	0.33	0.42	2.91	5.00	1.25	8.72	15.0	U	ND	Y
										Y
45.00	7.5	9.38	33.12	56.25	28.1	99.4	168.8		=	Y
45.00	45.0	56.25	36.89	56.25	168.8	110.7	168.8		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					2.5		2.45		
					0.0			0.00	
6.3						6.34			
					0.0		0.00		
0.0						0.00			
	0.0					0.00			
					2.8		2.82		
7.7						7.66			
					0.0		0.00		
					0.0		0.00		
	38.4					38.35			
					6.5		6.48		
18.1						18.08			
					0.0		0.00		
					0.0		0.00		
	6.8					6.75			
				6.1					6.13
	0.0					0.00			
	25.1					25.05			
	69.1					69.07			
0.0						0.00			
				0.0					0.00
	14.7					14.72			
			0.0						
				25.4		25.43			
	135.6					135.59			
	0.0					0.00			
	15.9					15.91			
	4.7					4.67			
0.0						0.00			
				51.5					51.48
	7.2					7.16			
			13.7						
	0.0					0.00			
	0.0					0.00			
0.0						0.00			
			0.0						

		0.0							
		9.8							
		0.0							
0.0						0.00			
		19.7							
		0.0							
		0.0							
		41.0							
		0.0							
		67.1							
		0.0							
0.0						0.00			
		0.0							
		0.0							
		26.2							
0.0						0.00			
0.0						0.00			
32.1	317.3	177.6	83.0	11.8	0.0	374.8	11.8	0.0	57.6

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

13.69

0.00

0.00
9.85
0.00

19.67
0.00
0.00
41.05
0.00
67.13
0.00

0.00
0.00
26.19

0.0	0.0	0.0	0.0	177.6	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 02

File Name: 2443502A
Description: T-402
Canister: 703
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 11/22/24 **Time:** 14:57
Can Factor: 1.25
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.50	7.50	ND	2.88	8.64	ND	ND
74-86-2	Acetylene	2.50	7.50	ND	2.66	7.99	ND	ND
74-84-0	Ethane	2.50	7.50	3.17	3.08	9.25	3.91	J
115-07-1	Propene	1.67	5.00	ND	2.88	8.63	ND	ND
74-98-6	Propane	1.67	5.00	ND	3.01	9.04	ND	ND
75-28-5	i-Butane	1.25	3.75	ND	2.98	8.93	ND	ND
106-98-9	1-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
106-97-8	n-Butane	1.25	3.75	1.92	2.98	8.93	4.56	J
624-64-6	t-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
590-18-1	c-2-Butene	1.25	3.75	ND	2.87	8.62	ND	ND
78-78-4	i-Pentane	1.00	3.00	7.67	2.96	8.88	22.70	
109-67-1	1-Pentene	1.00	3.00	1.30	2.87	8.62	3.72	J
109-66-0	n-Pentane	1.00	3.00	3.62	2.95	8.86	10.68	
646-04-8	t-2-Pentene	1.00	3.00	ND	2.87	8.62	ND	ND
627-20-3	c-2-Pentene	1.00	3.00	ND	2.87	8.62	ND	ND
75-83-2	2,2-Dimethylbutane	0.83	2.50	1.13	2.94	8.83	3.98	J
287-92-3	Cyclopentane	1.00	3.00	1.23	2.87	8.62	3.52	J
79-29-8	2,3-Dimethylbutane	0.83	2.50	ND	2.94	8.83	ND	ND
107-83-5	2-Methylpentane	0.83	2.50	4.18	2.94	8.83	14.75	
96-14-0	3-Methylpentane	0.83	2.50	11.51	2.94	8.83	40.67	
110-54-3	n-Hexane	0.83	2.50	ND	2.94	8.83	ND	ND
96-37-7	Methylcyclopentane	0.83	2.50	ND	2.88	8.63	ND	ND
108-08-7	2,4-Dimethylpentane	0.71	2.14	2.10	2.93	8.80	8.64	J
71-43-2	Benzene	0.83	2.50	ND	2.67	8.00	ND	ND
110-82-7	Cyclohexane	0.83	2.50	4.24	2.88	8.63	14.63	
591-76-4	2-Methylhexane	0.71	2.14	19.37	2.93	8.80	79.55	
565-59-3	2,3-Dimethylpentane	0.71	2.14	ND	2.93	8.80	ND	ND
589-34-4	3-Methylhexane	0.71	2.14	2.27	2.93	8.80	9.33	
540-84-1	2,2,4-Trimethylpentane	0.63	1.88	ND	2.93	8.78	ND	ND
142-82-5	n-Heptane	0.71	2.14	ND	2.93	8.80	ND	ND
108-87-2	Methylcyclohexane	0.71	2.14	7.35	2.87	8.62	29.60	
565-75-3	2,3,4-Trimethylpentane	0.63	1.88	0.89	2.93	8.78	4.19	J
108-88-3	Toluene	0.71	2.14	1.96	2.70	8.09	7.38	J
592-27-8	2-Methylheptane	0.63	1.88	ND	2.93	8.78	ND	ND
589-81-1	3-Methylheptane	0.63	1.88	ND	2.93	8.78	ND	ND
111-65-9	n-Octane	0.63	1.88	ND	2.93	8.78	ND	ND
100-41-4	Ethylbenzene	0.63	1.88	ND	2.72	8.16	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.63	1.88	ND	2.72	8.16	ND	ND
100-42-5	Styrene	0.63	1.88	1.23	2.67	8.01	5.26	J
95-47-6	o-xylene	0.63	1.88	ND	2.72	8.16	ND	ND
111-84-2	n-Nonane	0.56	1.67	ND	2.92	8.76	ND	ND
98-82-8	i-Propylbenzene	0.56	1.67	2.19	2.74	8.21	10.77	
103-65-1	n-propylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.67	ND	2.74	8.21	ND	ND
622-96-8	4-Ethyltoluene	0.56	1.67	4.56	2.74	8.21	22.47	
108-67-8	1,3,5-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
611-14-3	2-Ethyltoluene	0.56	1.67	7.46	2.74	8.21	36.74	
95-63-6	1,2,4-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
124-18-5	n-Decane	0.50	1.50	ND	2.92	8.75	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.56	1.67	ND	2.74	8.21	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.50	ND	2.75	8.25	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.50	2.62	2.75	8.25	14.40	
1120-21-4	Undecane	0.45	1.36	ND	2.91	8.74	ND	ND
112-40-3	Dodecane	0.42	1.25	ND	2.91	8.72	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.38	28.13	1,119.53	33.12	99.36	3,955.05	
TNMHC - C1	Total Non-Methane Hydrocarbons	56.25	168.75	6,717.16	36.89	110.66	4,404.69	

Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCK\11224K\2443502A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-402
Run Time Bar Code:
Acquired on : 22 Nov 24 02:57 PM
Report Created on: 03 Jan 25 12:08 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11224K\2443502A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.036	603	388	BV	0.032	0.0152
2	0.081	535	388	VV	0.023	0.0134
3	0.127	987	345	VV	0.048	0.0248
4	0.230	583	331	PV	0.025	0.0146
5	0.266	564	417	VV	0.021	0.0142
6	0.299	160	203	VV	0.013	0.0040
7	0.374	438	249	VV	0.025	0.0110
8	0.416	447	271	PV	0.024	0.0112
9	0.444	1232	458	VV	0.045	0.0310
10	0.544	295	340	PV	0.014	0.0074
11	0.570	392	326	VV	0.019	0.0098
12	0.600	503	319	VV	0.024	0.0126
13	0.668	343	261	VV	0.020	0.0086
14	0.692	332	257	VV	0.022	0.0083
15	0.821	934	304	VV	0.041	0.0235
16	0.912	1440	566	VV	0.035	0.0362
17	0.979	1340	394	VV	0.046	0.0337
18	1.061	443	380	VV	0.023	0.0111
19	1.103	902	438	VV	0.029	0.0227
20	1.143	306	309	VV	0.016	0.0077
21	1.172	764	283	VV	0.038	0.0192
22	1.226	867	471	VV	0.025	0.0218
23	1.284	753	358	VV	0.029	0.0189
24	1.396	943	356	VV	0.044	0.0237
25	1.442	630	427	VV	0.022	0.0158
26	1.497	637	348	VV	0.031	0.0160
27	1.522	496	322	VV	0.026	0.0125
28	1.569	786	287	VV	0.036	0.0198
29	1.618	613	367	VV	0.028	0.0154
30	1.650	538	366	VV	0.023	0.0135
31	1.680	591	380	VV	0.026	0.0148
32	1.717	823	410	VV	0.029	0.0207
33	1.759	433	258	VV	0.028	0.0109
34	1.806	396	279	VV	0.021	0.0099
35	1.844	809	363	VV	0.031	0.0203
36	1.907	903	475	VV	0.032	0.0227
37	1.938	712	449	VV	0.026	0.0179
38	1.967	1299	329	VV	0.066	0.0326
39	2.044	1050	450	VV	0.039	0.0264
40	2.091	209	305	VV	0.011	0.0052
41	2.107	395	315	VV	0.019	0.0099
42	2.132	500	331	VV	0.024	0.0126
43	2.162	927	462	VV	0.029	0.0233
44	2.210	372	356	VV	0.020	0.0094
45	2.282	1704	439	VV	0.056	0.0428
46	2.370	1555	511	VV	0.043	0.0391
47	2.422	389	257	VV	0.025	0.0098
48	2.454	787	576	VV	0.023	0.0198
49	2.472	741	542	VV	0.021	0.0186
50	2.516	1062	536	VV	0.031	0.0267
51	2.561	1384	527	VV	0.040	0.0348
52	2.614	476	377	VV	0.021	0.0120
53	2.682	1582	505	VV	0.042	0.0398
54	2.720	670	495	VV	0.023	0.0168
55	2.773	1349	427	VV	0.043	0.0339
56	2.824	593	430	VV	0.023	0.0149

57	2.854	419	395	VV	0.018	0.0105
58	2.871	382	381	VV	0.017	0.0096
59	2.930	1877	596	VV	0.054	0.0472
60	3.006	924	604	VV	0.025	0.0232
61	3.040	816	434	VV	0.027	0.0205
62	3.078	985	406	VV	0.040	0.0248
63	3.132	519	416	VV	0.019	0.0130
64	3.160	527	372	VV	0.023	0.0133
65	3.245	1806	647	VV	0.038	0.0454
66	3.277	2040	507	VV	0.067	0.0513
67	3.365	573	462	VV	0.021	0.0144
68	3.389	880	458	VV	0.032	0.0221
69	3.438	790	357	VV	0.031	0.0199
70	3.478	955	570	VV	0.023	0.0240
71	3.575	2202	576	VV	0.049	0.0553
72	3.684	454	316	VV	0.024	0.0114
73	3.707	282	247	VV	0.019	0.0071
74	3.741	578	305	VV	0.026	0.0145
75	3.781	689	395	VV	0.029	0.0173
76	3.847	346	285	VV	0.020	0.0087
77	3.920	344	229	VV	0.025	0.0086
78	3.952	814	342	VV	0.038	0.0205
79	4.059	1488	723	VV	0.038	0.0374
80	4.096	245	256	VV	0.016	0.0062
81	4.160	3722	1532	VV	0.036	0.0935
82	4.552	12521	4642	PV	0.039	0.3146
83	4.697	383	135	VB	0.047	0.0096
84	4.851	12359	4323	BV	0.042	0.3105
85	4.960	609	307	VV	0.033	0.0153
86	5.046	4546	3538	PV	0.021	0.1142
87	5.093	123933	56608	VV	0.034	3.1140
88	5.202	120608	55548	VV	0.033	3.0305
89	6.017	11625	1752	BV	0.086	0.2921
90	6.397	371	125	VV	0.042	0.0093
91	6.458	13972	1213	VV	0.141	0.3511
92	7.031	9779	3412	VV	0.042	0.2457
93	7.261	1834	581	VV	0.046	0.0461
94	7.347	317	131	VV	0.034	0.0080
95	8.084	1435	193	BB	0.113	0.0360
96	8.402	4479	1007	BV	0.064	0.1125
97	8.665	5359	1172	VV	0.060	0.1346
98	9.303	8411	979	BV	0.114	0.2113
99	9.500	4365	429	VV	0.170	0.1097
100	9.858	4071	528	VB	0.107	0.1023
101	11.140	32267	3926	BV	0.108	0.8108
102	11.304	18106	2783	VV	0.089	0.4549
103	11.475	21644	5877	VV	0.054	0.5438
104	11.586	393090	99252	VV	0.062	9.8769
105	12.106	1686	499	VV	0.051	0.0424
106	12.397	3667	1287	BV	0.045	0.0921
107	12.546	10105	4206	PV	0.038	0.2539
108	12.605	47188	10271	VV	0.063	1.1857
109	12.729	20439	4036	VV	0.070	0.5136
110	12.864	30848	3718	VV	0.109	0.7751
111	13.181	4495	816	VV	0.075	0.1129
112	13.353	7601	1379	VV	0.076	0.1910
113	13.682	6739	733	VV	0.124	0.1693
114	13.878	5872	1287	VV	0.065	0.1475
115	14.724	901	245	PV	0.063	0.0226
116	14.893	1508	491	VV	0.047	0.0379
117	14.999	4450	1129	VV	0.057	0.1118
118	15.174	14190	4131	VV	0.051	0.3566
119	15.422	24129	5645	VV	0.067	0.6063
120	15.542	448162	125812	VV	0.057	11.2607
121	15.661	38889	7156	VV	0.074	0.9771
122	15.888	14346	2522	VV	0.078	0.3605
123	16.140	97954	23501	VV	0.061	2.4612
124	16.273	38352	6903	VV	0.076	0.9636
125	16.441	7634	1742	VV	0.063	0.1918
126	16.520	10733	1550	VV	0.092	0.2697
127	16.851	20006	4282	VV	0.068	0.5027

128	17.038	5710	1462	VV	0.057	0.1435
129	17.168	8373	1968	VV	0.062	0.2104
130	17.303	2644	679	VV	0.062	0.0664
131	17.474	1081	185	VV	0.080	0.0272
132	17.780	6608	1293	PV	0.073	0.1660
133	17.975	36361	9859	VV	0.056	0.9136
134	18.125	3812	1021	VV	0.056	0.0958
135	18.263	15218	4737	VV	0.051	0.3824
136	18.362	10717	2551	VV	0.062	0.2693
137	18.546	79886	15535	VV	0.072	2.0072
138	18.773	11421	2340	VV	0.070	0.2870
139	18.912	2595	735	VV	0.059	0.0652
140	19.019	10264	2085	VV	0.070	0.2579
141	19.108	5926	1517	VV	0.057	0.1489
142	19.191	5287	1326	VV	0.058	0.1328
143	19.527	2514	327	VV	0.104	0.0632
144	20.231	29197	7720	BV	0.058	0.7336
145	20.411	35958	9069	PV	0.061	0.9035
146	20.558	2104	531	VB	0.058	0.0529
147	21.083	4030	1299	BV	0.049	0.1013
148	21.280	8274	1301	PV	0.090	0.2079
149	21.485	754	193	VV	0.058	0.0189
150	21.585	932	226	VV	0.061	0.0234
151	22.009	790	193	BV	0.060	0.0199
152	22.139	1371	266	VV	0.077	0.0344
153	22.400	18501	4560	PB	0.061	0.4649
154	22.884	5884	1897	BV	0.049	0.1478
155	23.070	8256	2018	PV	0.062	0.2074
156	23.228	5086	1346	VV	0.058	0.1278
157	23.487	193191	50503	VV	0.059	4.8542
158	23.973	18113	3190	VV	0.079	0.4551
159	24.109	172830	33034	VV	0.082	4.3426
160	24.330	20494	5339	VV	0.059	0.5149
161	24.462	1818	489	VV	0.056	0.0457
162	24.549	5776	1671	VV	0.052	0.1451
163	24.623	6997	1781	VV	0.059	0.1758
164	24.734	50227	9701	VV	0.078	1.2620
165	24.874	8506	2013	VV	0.062	0.2137
166	25.004	107018	28495	VV	0.058	2.6890
167	25.216	2548	656	VV	0.060	0.0640
168	25.348	12582	2139	VV	0.082	0.3161
169	25.509	11697	2726	VV	0.064	0.2939
170	25.676	16292	3537	VV	0.067	0.4094
171	25.763	8948	2155	VV	0.060	0.2248
172	25.901	52447	10770	VV	0.071	1.3178
173	26.075	78203	11999	VV	0.091	1.9650
174	26.300	5340	1296	VV	0.063	0.1342
175	26.427	23772	5826	VV	0.062	0.5973
176	26.539	48149	9879	VV	0.081	1.2098
177	26.586	35456	9928	VV	0.051	0.8909
178	26.651	35194	8897	VV	0.057	0.8843
179	26.760	38721	8752	VV	0.066	0.9729
180	27.024	39529	4587	VV	0.117	0.9932
181	27.150	71067	18444	VV	0.058	1.7857
182	27.236	30281	5627	VV	0.076	0.7609
183	27.397	91670	22478	VV	0.062	2.3033
184	27.494	62433	15992	VV	0.059	1.5687
185	27.588	14092	2344	VV	0.100	0.3541
186	27.823	50026	10602	VV	0.071	1.2570
187	27.951	80629	15122	VV	0.081	2.0259
188	28.189	422787	93172	VV	0.069	10.6231
189	28.365	15669	3348	VV	0.070	0.3937
190	28.487	18638	2859	VV	0.091	0.4683
191	28.812	30004	4144	VV	0.100	0.7539
192	28.925	9378	2033	VV	0.066	0.2356
193	28.992	8263	1768	VV	0.070	0.2076
194	29.342	6580	856	VV	0.107	0.1653
195	29.490	7815	1224	VV	0.096	0.1964
196	29.647	3690	716	VV	0.078	0.0927
197	29.768	1295	317	VV	0.062	0.0325

Total area = 3979875

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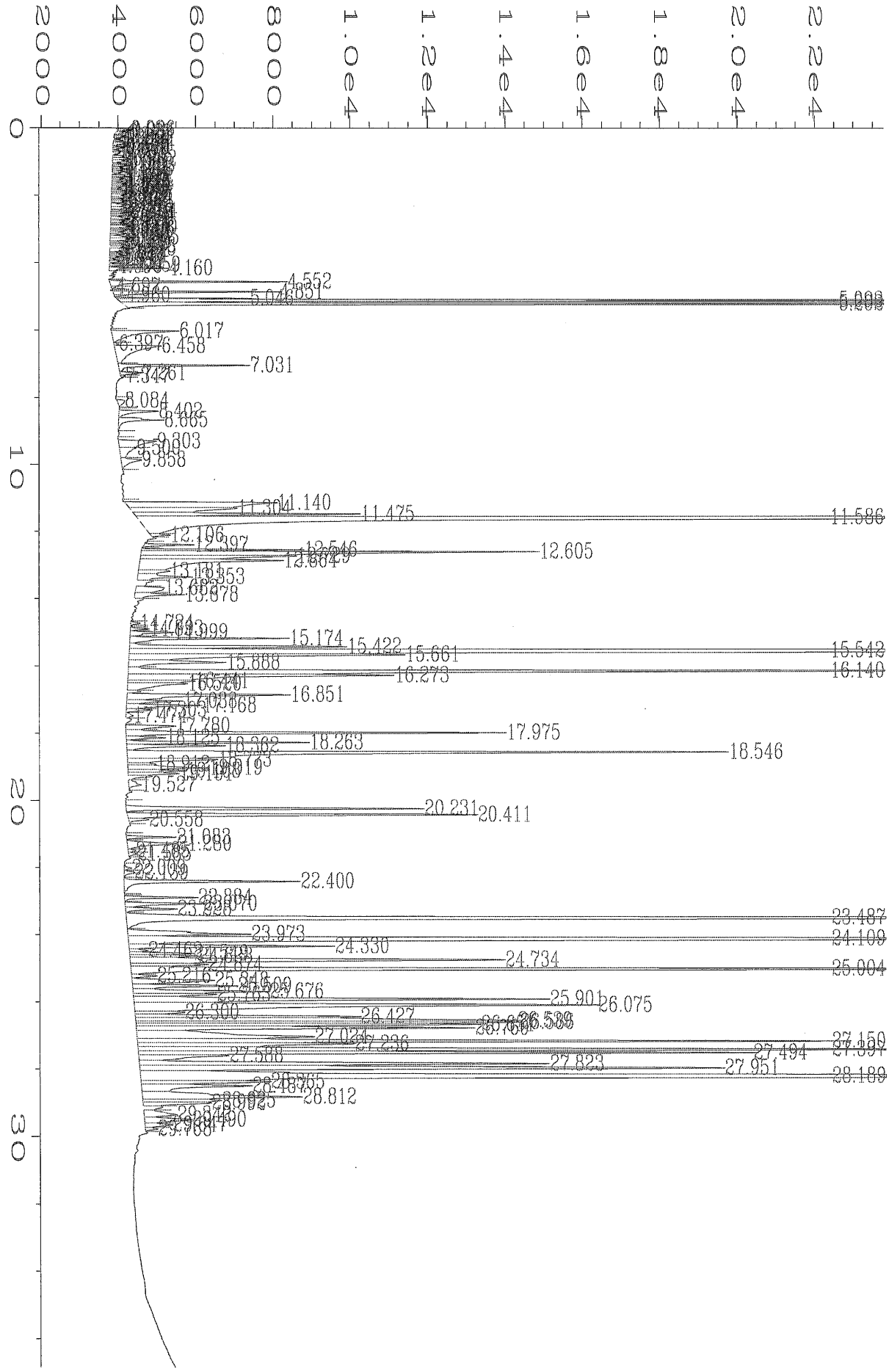

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Sample Data Packages

SDG Number 224435

Lab Id Number 3

Client ID T-403

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 3

Client: C.E. Schmidt
Client ID: T-403
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 547
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:12
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:

Area Percent Report

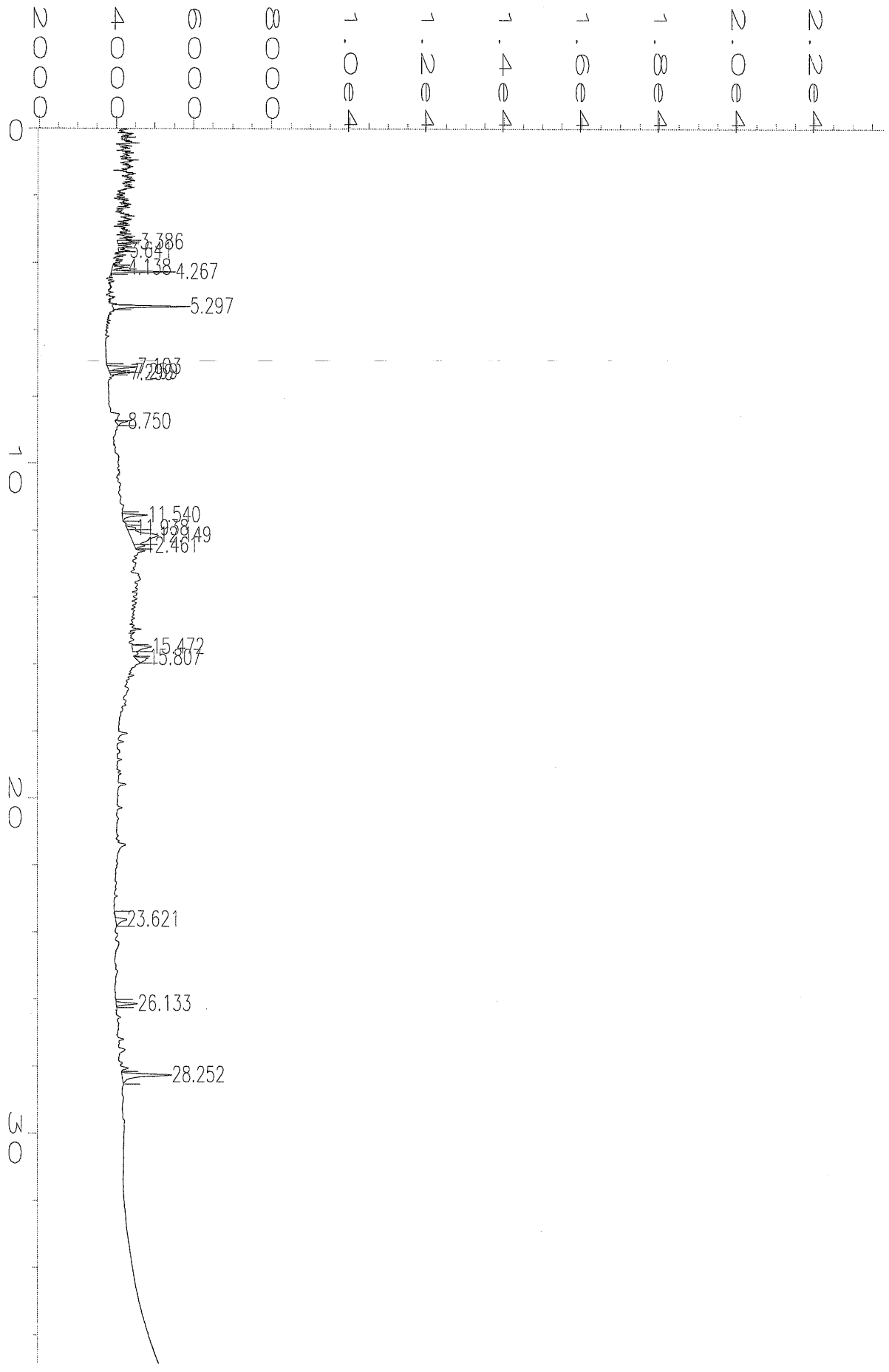
Data File Name : C:\HPCHEM\1\DATA\11224K\2443503A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-403
Run Time Bar Code:
Acquired on : 22 Nov 24 03:46 PM
Report Created on: 22 Nov 24 04:23 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443503A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.386	1881	584	VV	0.042	3.4260
2	3.641	957	294	VV	0.044	1.7426
3	4.138	1477	409	PV	0.047	2.6898
4	4.267	3793	1660	VV	0.036	6.9091
5	5.297	6516	2004	VV	0.049	11.8694
6	7.103	3249	782	BV	0.062	5.9180
7	7.259	1182	538	VV	0.032	2.1527
8	7.290	1175	515	VV	0.038	2.1396
9	8.750	1020	322	PB	0.042	1.8573
10	11.540	2578	661	BB	0.057	4.6960
11	11.938	1089	240	BV	0.063	1.9829
12	12.149	11447	749	VV	0.189	20.8511
13	12.461	1333	280	VV	0.065	2.4278
14	15.472	3503	509	PV	0.099	6.3805
15	15.807	2067	347	PB	0.080	3.7652
16	23.621	1823	286	BB	0.086	3.3212
17	26.133	2314	565	BB	0.062	4.2146
18	28.252	7497	1290	VB	0.085	13.6560

Total area = 54897



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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **03**
File Name: **2443503A**
Sample ID: **T-403**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **547**
Can Factor: **1.27**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: ND TO-15FID
SF: 2 TO-3
Instrument: GCK EPA 18M
Time: **8:12** Matrix AA
Time: **13:00** Chem TRG
Time: **15:46** MDL Fac: 1.0
Unit Factor 1000 1000 for ppb 1 for ppm
Hexane Area: 310466
Hexane Concentration: 18.05
Standard Volume: 1.00
Standard ID: ST62344

RT Win	C2-C	C5-C12
RT	0.3	0.1
RTI	3	3

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.03	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.07			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.14	1477	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**		I	O	M	282	290
74-98-6	Propane	P	5.20	**5.20**	5.30	6516	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.70**						129	351
106-98-9	1-Butene	P	7.29	7.39	**7.29**	1175	I	I	H	364	367
106-97-8	n-Butane	P	8.34	**8.34**	8.40		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.81						193	410
590-18-1	c-2-Butene	P	9.63	9.69						193	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.39**		O	O	L	498	495
109-66-0	n-Pentane	P	12.48	**12.46**	12.46	1333	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**	3503	I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	16.15		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						118	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	630	626
71-43-2	Benzene	P	17.87	**17.85**	17.96		O	O	L	654	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	663	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	I	H	672	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						118	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	678	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	691	690
142-82-5	n-Heptane	P	19.41	19.50	19.50		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.21**	21.28		I	O	M	761	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.97**		I	O	M	860	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	883	881
95-47-6	o-xylene	P	24.57	24.73	**24.73**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.03	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**	2314	I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.42	**27.40**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-29	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**	7497	I	I	H	1032	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	I	H	1037	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					54897		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					54897		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					54897		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.27	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.27		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	2.65	1.33	1.64	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	11.70	3.90	7.05	11.70	3.90	7.05	7.05	7.05
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.11	0.53	1.21	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	2.39	0.48	1.41	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	6.29	1.05	3.70	6.29	1.05	3.70	3.70	3.70
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	4.16	0.46	2.27	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	13.47	1.35	7.41	13.47	1.35	7.41	7.41	7.41
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	98.60	16.4	58.1	98.60	16.43	58.06	58.06	58.06
Total Non-Methane Hydrocarbons	16	1.0	98.60	98.6	64.7	98.60	98.60	64.66	64.66	64.66

SDG: **224435**
Laboratory Number: **03**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.54	2.93	5.08	7.62	8.78	15.2	U	ND		Y
4.000	2.00	2.54	2.71	5.08	7.62	8.12	15.2	U	ND		Y
4.000	2.00	2.54	3.13	5.08	7.62	9.40	15.2	U	ND		Y
4.000	1.33	1.69	2.92	5.08	5.08	8.77	15.2	U	ND		Y
4.000	1.33	1.69	3.06	5.08	5.08	9.18	15.2	J	=		Y
4.000	1.00	1.27	3.02	5.08	3.81	9.07	15.2	U	ND		Y
4.000	1.00	1.27	2.92	5.08	3.81	8.76	15.2	U	ND		Y
4.000	1.00	1.27	3.02	5.08	3.81	9.07	15.2	U	ND		Y
4.000	1.00	1.27	2.92	5.08	3.81	8.76	15.2	U	ND		Y
4.000	1.00	1.27	2.92	5.08	3.81	8.76	15.2	U	ND		Y
4.000	0.80	1.02	3.01	5.08	3.05	9.02	15.2	U	ND		Y
4.000	0.80	1.02	2.92	5.08	3.05	8.76	15.2	U	ND		Y
4.000	0.80	1.02	3.00	5.08	3.05	9.01	15.2	U	ND		Y
4.000	0.80	1.02	2.92	5.08	3.05	8.76	15.2	U	ND		Y
4.000	0.80	1.02	2.92	5.08	3.05	8.76	15.2	U	ND		Y
4.000	0.67	0.85	2.99	5.08	2.54	8.97	15.2	U	ND		Y
4.000	0.80	1.02	2.92	5.08	3.05	8.76	15.2	U	ND		Y
4.000	0.67	0.85	2.99	5.08	2.54	8.97	15.2	U	ND		Y
4.000	0.67	0.85	2.99	5.08	2.54	8.97	15.2	U	ND		Y
4.000	0.67	0.85	2.99	5.08	2.54	8.97	15.2	J	=		Y
4.000	0.67	0.85	2.99	5.08	2.54	8.97	15.2	U	ND		Y
4.000	0.67	0.85	2.92	5.08	2.54	8.77	15.2	U	ND		Y
4.000	0.57	0.73	2.98	5.08	2.18	8.94	15.2	U	ND		Y
4.000	0.67	0.85	2.71	5.08	2.54	8.13	15.2	U	ND		Y
4.000	0.67	0.85	2.92	5.08	2.54	8.77	15.2	U	ND		Y
4.000	0.57	0.73	2.98	5.08	2.18	8.94	15.2	U	ND		Y
4.000	0.57	0.73	2.98	5.08	2.18	8.94	15.2	U	ND		Y
4.000	0.57	0.73	2.98	5.08	2.18	8.94	15.2	U	ND		Y
4.000	0.50	0.64	2.97	5.08	1.91	8.92	15.2	U	ND		Y
4.000	0.57	0.73	2.98	5.08	2.18	8.94	15.2	U	ND		Y
4.000	0.57	0.73	2.92	5.08	2.18	8.76	15.2	U	ND		Y
4.000	0.50	0.64	2.97	5.08	1.91	8.92	15.2	U	ND		Y
4.000	0.57	0.73	2.74	5.08	2.18	8.22	15.2	U	ND		Y
4.000	0.50	0.64	2.97	5.08	1.91	8.92	15.2	U	ND		Y
4.000	0.50	0.64	2.97	5.08	1.91	8.92	15.2	U	ND		Y
4.000	0.50	0.64	2.97	5.08	1.91	8.92	15.2	U	ND		Y
4.000	0.50	0.64	2.76	5.08	1.91	8.29	15.2	U	ND		Y

4.000	0.50	0.64	2.76	5.08	1.91	8.29	15.2	U	ND	Y
4.000	0.50	0.64	2.71	5.08	1.91	8.14	15.2	U	ND	Y
4.000	0.50	0.64	2.76	5.08	1.91	8.29	15.2	U	ND	Y
4.000	0.44	0.56	2.97	5.08	1.69	8.90	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.40	0.51	2.96	5.08	1.52	8.89	15.2	U	ND	Y
4.000	0.44	0.56	2.78	5.08	1.69	8.34	15.2	U	ND	Y
4.000	0.40	0.51	2.79	5.08	1.52	8.38	15.2	J	=	Y
4.000	0.40	0.51	2.79	5.08	1.52	8.38	15.2	U	ND	Y
4.000	0.36	0.46	2.96	5.08	1.39	8.87	15.2	U	ND	Y
4.000	0.33	0.42	2.95	5.08	1.27	8.86	15.2	U	ND	Y
										Y
45.00	7.5	9.53	33.65	57.15	28.6	100.9	171.5	J	=	Y
45.00	45.0	57.15	37.48	57.15	171.5	112.4	171.5	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
2.7						2.65			
					0.0		0.00		
11.7						11.70			
		0.0				0.00			
					2.1		2.11		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
2.4						2.39			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		6.3				6.29			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
			0.0						

		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		4.2							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		13.5							
		0.0							
0.0						0.00			
0.0						0.00			
16.8	6.3	17.6	0.0	2.1	0.0	23.0	2.1	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
4.16
0.00
0.00
0.00
0.00
0.00

0.00
13.47
0.00

0.0	0.0	0.0	0.0	17.6	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 03

File Name: 2443503A
Description: T-403
Canister: 547
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 11/22/24 **Time:** 15:46
Can Factor: 1.27
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.54	7.62	ND	2.93	8.78	ND	ND
74-86-2	Acetylene	2.54	7.62	ND	2.71	8.12	ND	ND
74-84-0	Ethane	2.54	7.62	ND	3.13	9.40	ND	ND
115-07-1	Propene	1.69	5.08	ND	2.92	8.77	ND	ND
74-98-6	Propane	1.69	5.08	3.90	3.06	9.18	7.05	J
75-28-5	i-Butane	1.27	3.81	ND	3.02	9.07	ND	ND
106-98-9	1-Butene	1.27	3.81	ND	2.92	8.76	ND	ND
106-97-8	n-Butane	1.27	3.81	ND	3.02	9.07	ND	ND
624-64-6	t-2-Butene	1.27	3.81	ND	2.92	8.76	ND	ND
590-18-1	c-2-Butene	1.27	3.81	ND	2.92	8.76	ND	ND
78-78-4	i-Pentane	1.02	3.05	ND	3.01	9.02	ND	ND
109-67-1	1-Pentene	1.02	3.05	ND	2.92	8.76	ND	ND
109-66-0	n-Pentane	1.02	3.05	ND	3.00	9.01	ND	ND
646-04-8	t-2-Pentene	1.02	3.05	ND	2.92	8.76	ND	ND
627-20-3	c-2-Pentene	1.02	3.05	ND	2.92	8.76	ND	ND
75-83-2	2,2-Dimethylbutane	0.85	2.54	ND	2.99	8.97	ND	ND
287-92-3	Cyclopentane	1.02	3.05	ND	2.92	8.76	ND	ND
79-29-8	2,3-Dimethylbutane	0.85	2.54	ND	2.99	8.97	ND	ND
107-83-5	2-Methylpentane	0.85	2.54	ND	2.99	8.97	ND	ND
96-14-0	3-Methylpentane	0.85	2.54	1.05	2.99	8.97	3.70	J
110-54-3	n-Hexane	0.85	2.54	ND	2.99	8.97	ND	ND
96-37-7	Methylcyclopentane	0.85	2.54	ND	2.92	8.77	ND	ND
108-08-7	2,4-Dimethylpentane	0.73	2.18	ND	2.98	8.94	ND	ND
71-43-2	Benzene	0.85	2.54	ND	2.71	8.13	ND	ND
110-82-7	Cyclohexane	0.85	2.54	ND	2.92	8.77	ND	ND
591-76-4	2-Methylhexane	0.73	2.18	ND	2.98	8.94	ND	ND
565-59-3	2,3-Dimethylpentane	0.73	2.18	ND	2.98	8.94	ND	ND
589-34-4	3-Methylhexane	0.73	2.18	ND	2.98	8.94	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.64	1.91	ND	2.97	8.92	ND	ND
142-82-5	n-Heptane	0.73	2.18	ND	2.98	8.94	ND	ND
108-87-2	Methylcyclohexane	0.73	2.18	ND	2.92	8.76	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.64	1.91	ND	2.97	8.92	ND	ND
108-88-3	Toluene	0.73	2.18	ND	2.74	8.22	ND	ND
592-27-8	2-Methylheptane	0.64	1.91	ND	2.97	8.92	ND	ND
589-81-1	3-Methylheptane	0.64	1.91	ND	2.97	8.92	ND	ND
111-65-9	n-Octane	0.64	1.91	ND	2.97	8.92	ND	ND
100-41-4	Ethylbenzene	0.64	1.91	ND	2.76	8.29	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.64	1.91	ND	2.76	8.29	ND	ND
100-42-5	Styrene	0.64	1.91	ND	2.71	8.14	ND	ND
95-47-6	o-xylene	0.64	1.91	ND	2.76	8.29	ND	ND
111-84-2	n-Nonane	0.56	1.69	ND	2.97	8.90	ND	ND
98-82-8	i-Propylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
103-65-1	n-propylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.69	ND	2.78	8.34	ND	ND
622-96-8	4-Ethyltoluene	0.56	1.69	ND	2.78	8.34	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
611-14-3	2-Ethyltoluene	0.56	1.69	ND	2.78	8.34	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
124-18-5	n-Decane	0.51	1.52	ND	2.96	8.89	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.56	1.69	ND	2.78	8.34	ND	ND
141-93-5	1,3-Diethylbenzene	0.51	1.52	1.35	2.79	8.38	7.41	J
105-05-5	1,4-Diethylbenzene	0.51	1.52	ND	2.79	8.38	ND	ND
1120-21-4	Undecane	0.46	1.39	ND	2.96	8.87	ND	ND
112-40-3	Dodecane	0.42	1.27	ND	2.95	8.86	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.53	28.58	16.43	33.65	100.95	58.06	J
TNMHC - C1	Total Non-Methane Hydrocarbons	57.15	171.45	98.60	37.48	112.43	64.66	J

Sample Data Packages

SDG Number 224435

Lab Id Number 4

Client ID T-404

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 4

Client: C.E. Schmidt
Client ID: T-404
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 749
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:24
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

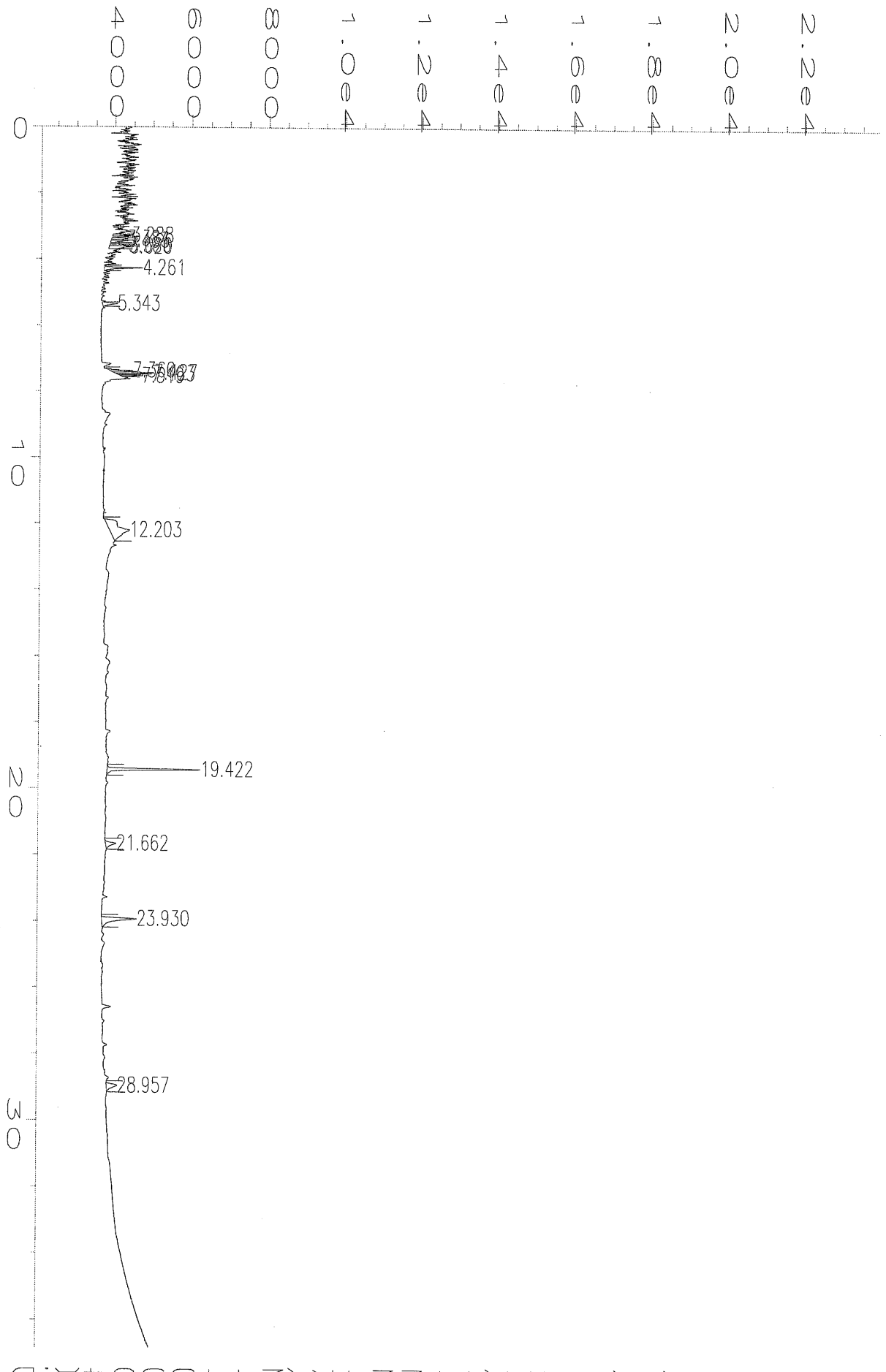
Data File Name : C:\HPCHEM\1\DATA\11224K\2443504A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-404
Run Time Bar Code:
Acquired on : 22 Nov 24 05:03 PM
Report Created on: 22 Nov 24 05:40 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443504A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.288	1259	490	VV	0.041	2.8517
2	3.384	1029	392	VV	0.040	2.3291
3	3.433	1425	474	VV	0.043	3.2265
4	3.586	990	496	VV	0.030	2.2421
5	3.620	2041	539	VV	0.063	4.6213
6	4.261	2730	1017	VV	0.040	6.1812
7	5.343	1506	397	VV	0.056	3.4112
8	7.360	1114	598	PV	0.031	2.5217
9	7.427	2182	1048	VV	0.029	4.9405
10	7.463	1498	928	VV	0.024	3.3914
11	7.519	857	602	VV	0.024	1.9395
12	12.203	10522	521	BB	0.245	23.8266
13	19.422	7640	2432	BB	0.048	17.3001
14	21.662	1694	277	BB	0.081	3.8350
15	23.930	5612	914	BB	0.088	12.7076
16	28.957	2064	280	BB	0.092	4.6745

Total area = 44162


4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
4.261
5.343
12.203
19.422
21.662
23.930
28.957
C:\HPCHEM\1\DATA\1122K\244350A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **04**
File Name: **2443504A**
Sample ID: **T-404**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **749**
Can Factor: **1.24**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:24** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **17:03** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.15	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.19			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.26**	2730	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**		I	O	M	277	290
74-98-6	Propane	P	5.20	**5.20**	**5.34**	1506	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.74**						126	351
106-98-9	1-Butene	P	7.29	7.43	**7.43**	2182	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.40**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.81						193	410
590-18-1	c-2-Butene	P	9.63	9.69						193	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.20**	10522	I	I	H	494	495
109-66-0	n-Pentane	P	12.48	**12.46**	**12.46**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						106	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	631	626
71-43-2	Benzene	P	17.87	**17.85**	**17.96**		O	O	L	655	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	665	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	O	M	673	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						106	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	680	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	693	690
142-82-5	n-Heptane	P	19.41	19.50	**19.42**	7640	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.21**	**21.28**		I	O	M	762	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.66**	1694	I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.93**	5612	I	O	M	859	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	883	881
95-47-6	o-xylene	P	24.57	24.73	**24.73**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.03	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.42	**27.40**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-29	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**		I	I	H	1032	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	I	H	1037	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					44162		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					44162		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					44162		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.24	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.24		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	4.79	2.39	2.95	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	2.64	0.88	1.59	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	3.83	0.96	2.20	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	18.45	3.69	10.60	18.45	3.69	10.60	10.60	10.60
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	13.40	1.91	7.86	13.40	1.91	7.86	7.86	7.86
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	2.97	0.37	1.74	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	9.84	1.23	5.35	9.84	1.23	5.35	5.35	5.35

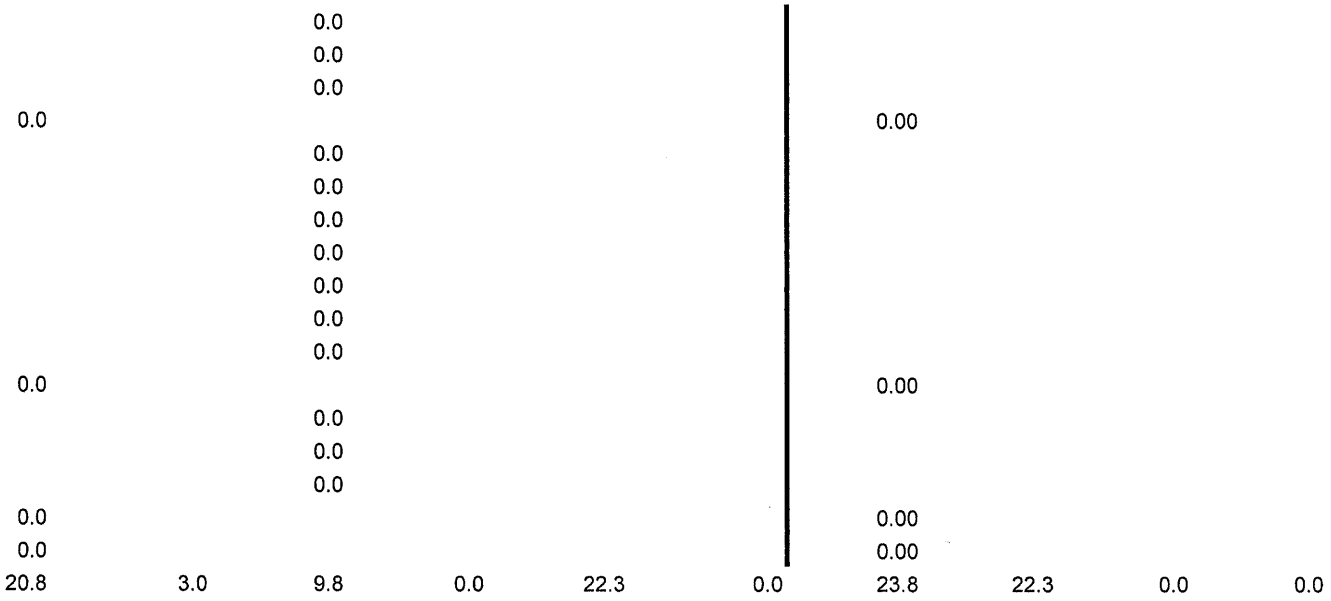
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	77.45	12.9	45.6	77.45	12.91	45.60	45.60	45.60
Total Non-Methane Hydrocarbons	16	1.0	77.45	77.4	50.8	77.45	77.45	50.78	50.78	50.78

SDG: **224435**
Laboratory Number: **04**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.48	2.86	4.96	7.44	8.57	14.9	U	ND		Y
4.000	2.00	2.48	2.64	4.96	7.44	7.93	14.9	U	ND		Y
4.000	2.00	2.48	3.06	4.96	7.44	9.18	14.9	U	ND		Y
4.000	1.33	1.65	2.85	4.96	4.96	8.56	14.9	U	ND		Y
4.000	1.33	1.65	2.99	4.96	4.96	8.96	14.9	U	ND		Y
4.000	1.00	1.24	2.95	4.96	3.72	8.86	14.9	U	ND		Y
4.000	1.00	1.24	2.85	4.96	3.72	8.55	14.9	U	ND		Y
4.000	1.00	1.24	2.95	4.96	3.72	8.86	14.9	U	ND		Y
4.000	1.00	1.24	2.85	4.96	3.72	8.55	14.9	U	ND		Y
4.000	1.00	1.24	2.85	4.96	3.72	8.55	14.9	U	ND		Y
4.000	0.80	0.99	2.94	4.96	2.98	8.81	14.9	U	ND		Y
4.000	0.80	0.99	2.85	4.96	2.98	8.55	14.9		=		Y
4.000	0.80	0.99	2.93	4.96	2.98	8.79	14.9	U	ND		Y
4.000	0.80	0.99	2.85	4.96	2.98	8.55	14.9	U	ND		Y
4.000	0.80	0.99	2.85	4.96	2.98	8.55	14.9	U	ND		Y
4.000	0.67	0.83	2.92	4.96	2.48	8.76	14.9	U	ND		Y
4.000	0.80	0.99	2.85	4.96	2.98	8.55	14.9	U	ND		Y
4.000	0.67	0.83	2.92	4.96	2.48	8.76	14.9	U	ND		Y
4.000	0.67	0.83	2.92	4.96	2.48	8.76	14.9	U	ND		Y
4.000	0.67	0.83	2.92	4.96	2.48	8.76	14.9	U	ND		Y
4.000	0.67	0.83	2.92	4.96	2.48	8.76	14.9	U	ND		Y
4.000	0.67	0.83	2.85	4.96	2.48	8.56	14.9	U	ND		Y
4.000	0.57	0.71	2.91	4.96	2.13	8.73	14.9	U	ND		Y
4.000	0.67	0.83	2.65	4.96	2.48	7.94	14.9	U	ND		Y
4.000	0.67	0.83	2.85	4.96	2.48	8.56	14.9	U	ND		Y
4.000	0.57	0.71	2.91	4.96	2.13	8.73	14.9	U	ND		Y
4.000	0.57	0.71	2.91	4.96	2.13	8.73	14.9	U	ND		Y
4.000	0.57	0.71	2.91	4.96	2.13	8.73	14.9	U	ND		Y
4.000	0.50	0.62	2.90	4.96	1.86	8.71	14.9	U	ND		Y
4.000	0.57	0.71	2.91	4.96	2.13	8.73	14.9	J	=		Y
4.000	0.57	0.71	2.85	4.96	2.13	8.56	14.9	U	ND		Y
4.000	0.50	0.62	2.90	4.96	1.86	8.71	14.9	U	ND		Y
4.000	0.57	0.71	2.67	4.96	2.13	8.02	14.9	U	ND		Y
4.000	0.50	0.62	2.90	4.96	1.86	8.71	14.9	U	ND		Y
4.000	0.50	0.62	2.90	4.96	1.86	8.71	14.9	U	ND		Y
4.000	0.50	0.62	2.90	4.96	1.86	8.71	14.9	U	ND		Y
4.000	0.50	0.62	2.70	4.96	1.86	8.10	14.9	J	=		Y

4.000	0.50	0.62	2.70	4.96	1.86	8.10	14.9	U	ND	Y
4.000	0.50	0.62	2.65	4.96	1.86	7.94	14.9	U	ND	Y
4.000	0.50	0.62	2.70	4.96	1.86	8.10	14.9	U	ND	Y
4.000	0.44	0.55	2.90	4.96	1.65	8.69	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.40	0.50	2.89	4.96	1.49	8.68	14.9	U	ND	Y
4.000	0.44	0.55	2.71	4.96	1.65	8.14	14.9	U	ND	Y
4.000	0.40	0.50	2.73	4.96	1.49	8.18	14.9	U	ND	Y
4.000	0.40	0.50	2.73	4.96	1.49	8.18	14.9	U	ND	Y
4.000	0.36	0.45	2.89	4.96	1.35	8.67	14.9	U	ND	Y
4.000	0.33	0.41	2.88	4.96	1.24	8.65	14.9	U	ND	Y
										Y
45.00	7.5	9.30	32.85	55.80	27.9	98.6	167.4	J	=	Y
45.00	45.0	55.80	36.59	55.80	167.4	109.8	167.4	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
	4.8					4.79			
					0.0		0.00		
	2.6					2.64			
		0.0				0.00			
					3.8		3.83		
	0.0					0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					18.5		18.45		
	0.0					0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	13.4					13.40			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		3.0				2.97			
	0.0					0.00			
			9.8						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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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0.00

9.84

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 04

File Name: 2443504A
Description: T-404
Canister: 749
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 8:24
Date Analyzed: 11/22/24 **Time:** 17:03
Can Factor: 1.24
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.48	7.44	ND	2.86	8.57	ND	ND
74-86-2	Acetylene	2.48	7.44	ND	2.64	7.93	ND	ND
74-84-0	Ethane	2.48	7.44	ND	3.06	9.18	ND	ND
115-07-1	Propene	1.65	4.96	ND	2.85	8.56	ND	ND
74-98-6	Propane	1.65	4.96	ND	2.99	8.96	ND	ND
75-28-5	i-Butane	1.24	3.72	ND	2.95	8.86	ND	ND
106-98-9	1-Butene	1.24	3.72	ND	2.85	8.55	ND	ND
106-97-8	n-Butane	1.24	3.72	ND	2.95	8.86	ND	ND
624-64-6	t-2-Butene	1.24	3.72	ND	2.85	8.55	ND	ND
590-18-1	c-2-Butene	1.24	3.72	ND	2.85	8.55	ND	ND
78-78-4	i-Pentane	0.99	2.98	ND	2.94	8.81	ND	ND
109-67-1	1-Pentene	0.99	2.98	3.69	2.85	8.55	10.60	
109-66-0	n-Pentane	0.99	2.98	ND	2.93	8.79	ND	ND
646-04-8	t-2-Pentene	0.99	2.98	ND	2.85	8.55	ND	ND
627-20-3	c-2-Pentene	0.99	2.98	ND	2.85	8.55	ND	ND
75-83-2	2,2-Dimethylbutane	0.83	2.48	ND	2.92	8.76	ND	ND
287-92-3	Cyclopentane	0.99	2.98	ND	2.85	8.55	ND	ND
79-29-8	2,3-Dimethylbutane	0.83	2.48	ND	2.92	8.76	ND	ND
107-83-5	2-Methylpentane	0.83	2.48	ND	2.92	8.76	ND	ND
96-14-0	3-Methylpentane	0.83	2.48	ND	2.92	8.76	ND	ND
110-54-3	n-Hexane	0.83	2.48	ND	2.92	8.76	ND	ND
96-37-7	Methylcyclopentane	0.83	2.48	ND	2.85	8.56	ND	ND
108-08-7	2,4-Dimethylpentane	0.71	2.13	ND	2.91	8.73	ND	ND
71-43-2	Benzene	0.83	2.48	ND	2.65	7.94	ND	ND
110-82-7	Cyclohexane	0.83	2.48	ND	2.85	8.56	ND	ND
591-76-4	2-Methylhexane	0.71	2.13	ND	2.91	8.73	ND	ND
565-59-3	2,3-Dimethylpentane	0.71	2.13	ND	2.91	8.73	ND	ND
589-34-4	3-Methylhexane	0.71	2.13	ND	2.91	8.73	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.62	1.86	ND	2.90	8.71	ND	ND
142-82-5	n-Heptane	0.71	2.13	1.91	2.91	8.73	7.86	J
108-87-2	Methylcyclohexane	0.71	2.13	ND	2.85	8.56	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.62	1.86	ND	2.90	8.71	ND	ND
108-88-3	Toluene	0.71	2.13	ND	2.67	8.02	ND	ND
592-27-8	2-Methylheptane	0.62	1.86	ND	2.90	8.71	ND	ND
589-81-1	3-Methylheptane	0.62	1.86	ND	2.90	8.71	ND	ND
111-65-9	n-Octane	0.62	1.86	ND	2.90	8.71	ND	ND
100-41-4	Ethylbenzene	0.62	1.86	1.23	2.70	8.10	5.35	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.62	1.86	ND	2.70	8.10	ND	ND
100-42-5	Styrene	0.62	1.86	ND	2.65	7.94	ND	ND
95-47-6	o-xylene	0.62	1.86	ND	2.70	8.10	ND	ND
111-84-2	n-Nonane	0.55	1.65	ND	2.90	8.69	ND	ND
98-82-8	i-Propylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
103-65-1	n-propylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
620-14-4	3-Ethyltoluene	0.55	1.65	ND	2.71	8.14	ND	ND
622-96-8	4-Ethyltoluene	0.55	1.65	ND	2.71	8.14	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
611-14-3	2-Ethyltoluene	0.55	1.65	ND	2.71	8.14	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
124-18-5	n-Decane	0.50	1.49	ND	2.89	8.68	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.55	1.65	ND	2.71	8.14	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.49	ND	2.73	8.18	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.49	ND	2.73	8.18	ND	ND
1120-21-4	Undecane	0.45	1.35	ND	2.89	8.67	ND	ND
112-40-3	Dodecane	0.41	1.24	ND	2.88	8.65	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.30	27.90	12.91	32.85	98.56	45.60	J
TNMHC - C1	Total Non-Methane Hydrocarbons	55.80	167.40	77.45	36.59	109.77	50.78	J

Sample Data Packages

SDG Number 224435

Lab Id Number 5

Client ID T-405

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 5

Client: C.E. Schmidt
Client ID: T-405
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 837
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:20
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Area Percent Report

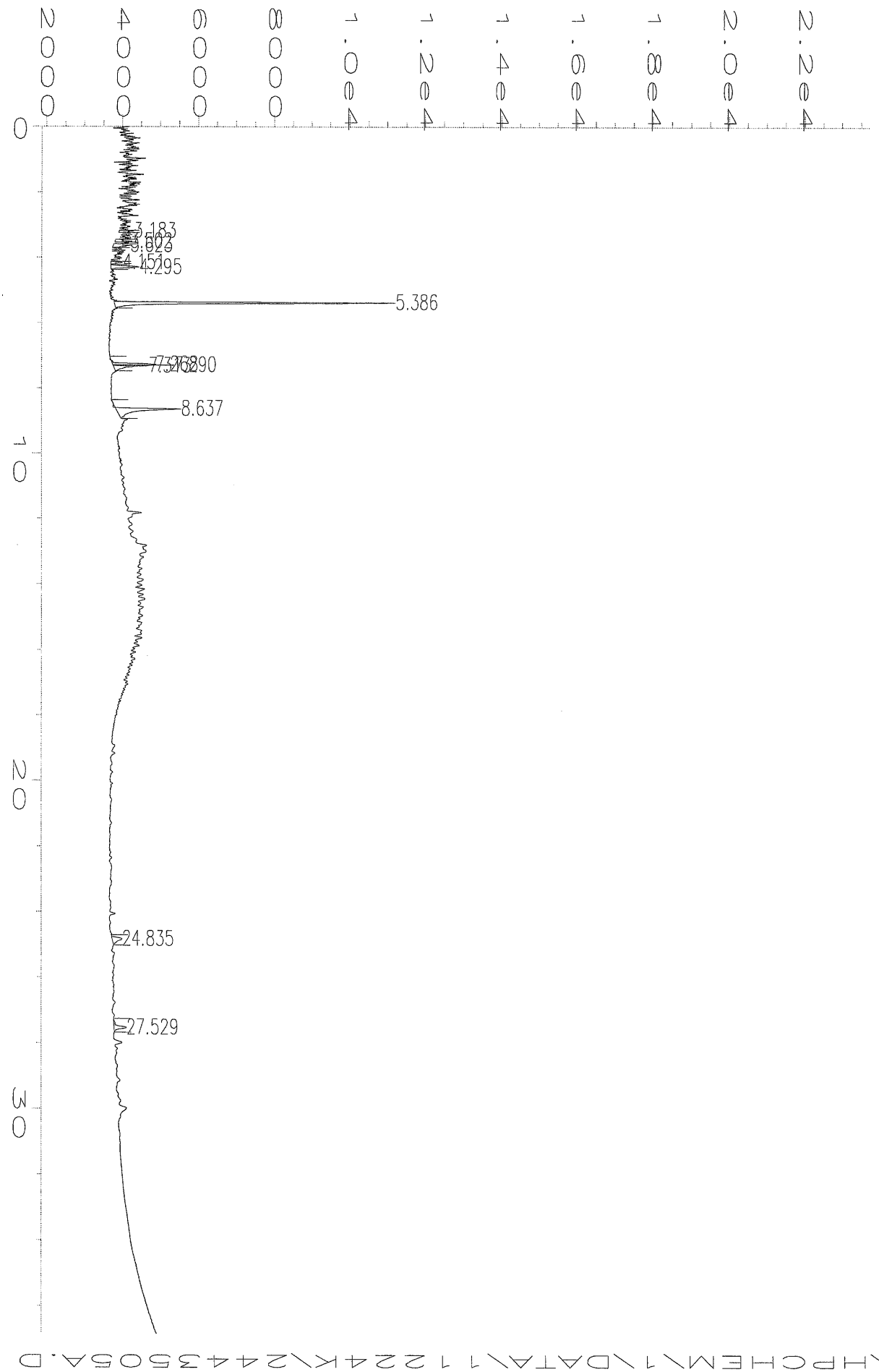
Data File Name : C:\HPCHEM\1\DATA\11224K\2443505A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-405
Run Time Bar Code:
Acquired on : 22 Nov 24 05:50 PM
Report Created on: 22 Nov 24 06:27 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443505A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.183	912	386	VV	0.033	1.8813
2	3.502	1241	466	VV	0.042	2.5589
3	3.623	1833	501	VV	0.049	3.7803
4	4.151	865	307	VV	0.040	1.7847
5	4.295	2937	753	PV	0.052	6.0556
6	5.386	20931	7432	PV	0.042	43.1619
7	7.268	2860	1124	BV	0.035	5.8971
8	7.290	1502	1625	VV	0.015	3.0970
9	7.313	2708	918	VV	0.049	5.5848
10	8.637	8733	1705	BV	0.069	18.0084
11	24.835	1979	256	BB	0.107	4.0816
12	27.529	1992	318	BB	0.093	4.1084

Total area = 48495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4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
4.295
5.386
8.637
24.835
27.529
C:\HPCHEM\1\DATA\1224K\244350SA.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **05**
File Name: **2443505A**
Sample ID: **T-405**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **837**
Can Factor: **1.28**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:20** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **17:50** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.04	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.08			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.15	865	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**		I	O	M	277	290
74-98-6	Propane	P	5.20	**5.20**	5.38	20931	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.78**						118	351
106-98-9	1-Butene	P	7.29	7.47	**7.31**	2708	I	I	H	365	367
106-97-8	n-Butane	P	8.34	**8.34**	8.34		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						198	410
590-18-1	c-2-Butene	P	9.63	9.63						198	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.20**		I	I	H	494	495
109-66-0	n-Pentane	P	12.48	**12.46**	12.46		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	16.15		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						106	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	631	626
71-43-2	Benzene	P	17.87	**17.85**	17.96		O	O	L	655	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	665	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	O	M	673	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						106	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	680	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	693	690
142-82-5	n-Heptane	P	19.41	19.50	19.42		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.21**	21.28		I	O	M	762	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.66**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	22.40		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	882	881
95-47-6	o-xylene	P	24.57	24.73	**24.80**	1979	I	O	M	891	886
111-84-2	n-Nonane	P	24.87	25.03	**25.03**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.51**		I	I	H	919	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**		I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	O	M	951	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	956	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	O	M	969	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.42	**27.52**	1992	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-83	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**		I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	O	M	1033	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					48495		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					48495		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					48495		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.28	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.28		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	1.57	0.78	0.97	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	37.89	12.63	22.83	37.89	12.63	22.83	22.83	22.83
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	4.90	1.23	2.82	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	3.58	0.45	1.95	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	3.61	0.36	2.10	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	87.79	14.6	51.7	87.79	14.63	51.69	51.69	51.69
Total Non-Methane Hydrocarbons	16	1.0	87.79	87.8	57.6	87.79	87.79	57.57	57.57	57.57

SDG: **224435**
Laboratory Number: **05**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.56	2.95	5.12	7.68	8.84	15.4	U	ND		Y
4.000	2.00	2.56	2.73	5.12	7.68	8.18	15.4	U	ND		Y
4.000	2.00	2.56	3.16	5.12	7.68	9.47	15.4	U	ND		Y
4.000	1.33	1.71	2.94	5.12	5.12	8.83	15.4	U	ND		Y
4.000	1.33	1.71	3.08	5.12	5.12	9.25	15.4		=		Y
4.000	1.00	1.28	3.05	5.12	3.84	9.14	15.4	U	ND		Y
4.000	1.00	1.28	2.94	5.12	3.84	8.83	15.4	U	ND		Y
4.000	1.00	1.28	3.05	5.12	3.84	9.14	15.4	U	ND		Y
4.000	1.00	1.28	2.94	5.12	3.84	8.83	15.4	U	ND		Y
4.000	1.00	1.28	2.94	5.12	3.84	8.83	15.4	U	ND		Y
4.000	0.80	1.02	3.03	5.12	3.07	9.09	15.4	U	ND		Y
4.000	0.80	1.02	2.94	5.12	3.07	8.83	15.4	U	ND		Y
4.000	0.80	1.02	3.03	5.12	3.07	9.08	15.4	U	ND		Y
4.000	0.80	1.02	2.94	5.12	3.07	8.83	15.4	U	ND		Y
4.000	0.80	1.02	2.94	5.12	3.07	8.83	15.4	U	ND		Y
4.000	0.67	0.85	3.01	5.12	2.56	9.04	15.4	U	ND		Y
4.000	0.80	1.02	2.94	5.12	3.07	8.83	15.4	U	ND		Y
4.000	0.67	0.85	3.01	5.12	2.56	9.04	15.4	U	ND		Y
4.000	0.67	0.85	3.01	5.12	2.56	9.04	15.4	U	ND		Y
4.000	0.67	0.85	3.01	5.12	2.56	9.04	15.4	U	ND		Y
4.000	0.67	0.85	3.01	5.12	2.56	9.04	15.4	U	ND		Y
4.000	0.67	0.85	2.94	5.12	2.56	8.83	15.4	U	ND		Y
4.000	0.57	0.73	3.00	5.12	2.19	9.01	15.4	U	ND		Y
4.000	0.67	0.85	2.73	5.12	2.56	8.19	15.4	U	ND		Y
4.000	0.67	0.85	2.94	5.12	2.56	8.83	15.4	U	ND		Y
4.000	0.57	0.73	3.00	5.12	2.19	9.01	15.4	U	ND		Y
4.000	0.57	0.73	3.00	5.12	2.19	9.01	15.4	U	ND		Y
4.000	0.57	0.73	3.00	5.12	2.19	9.01	15.4	U	ND		Y
4.000	0.50	0.64	3.00	5.12	1.92	8.99	15.4	U	ND		Y
4.000	0.57	0.73	3.00	5.12	2.19	9.01	15.4	U	ND		Y
4.000	0.57	0.73	2.94	5.12	2.19	8.83	15.4	U	ND		Y
4.000	0.50	0.64	3.00	5.12	1.92	8.99	15.4	U	ND		Y
4.000	0.57	0.73	2.76	5.12	2.19	8.28	15.4	U	ND		Y
4.000	0.50	0.64	3.00	5.12	1.92	8.99	15.4	U	ND		Y
4.000	0.50	0.64	3.00	5.12	1.92	8.99	15.4	U	ND		Y
4.000	0.50	0.64	3.00	5.12	1.92	8.99	15.4	U	ND		Y
4.000	0.50	0.64	2.79	5.12	1.92	8.36	15.4	U	ND		Y

4.000	0.50	0.64	2.79	5.12	1.92	8.36	15.4	U	ND	Y
4.000	0.50	0.64	2.73	5.12	1.92	8.20	15.4	U	ND	Y
4.000	0.50	0.64	2.79	5.12	1.92	8.36	15.4	U	ND	Y
4.000	0.44	0.57	2.99	5.12	1.71	8.97	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.40	0.51	2.99	5.12	1.54	8.96	15.4	U	ND	Y
4.000	0.44	0.57	2.80	5.12	1.71	8.41	15.4	U	ND	Y
4.000	0.40	0.51	2.82	5.12	1.54	8.45	15.4	U	ND	Y
4.000	0.40	0.51	2.82	5.12	1.54	8.45	15.4	U	ND	Y
4.000	0.36	0.47	2.98	5.12	1.40	8.94	15.4	U	ND	Y
4.000	0.33	0.43	2.98	5.12	1.28	8.93	15.4	U	ND	Y
										Y
45.00	7.5	9.60	33.91	57.60	28.8	101.7	172.8	J	=	Y
45.00	45.0	57.60	37.77	57.60	172.8	113.3	172.8	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
1.6						1.57			
					0.0		0.00		
37.9						37.89			
		0.0				0.00			
					4.9		4.90		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
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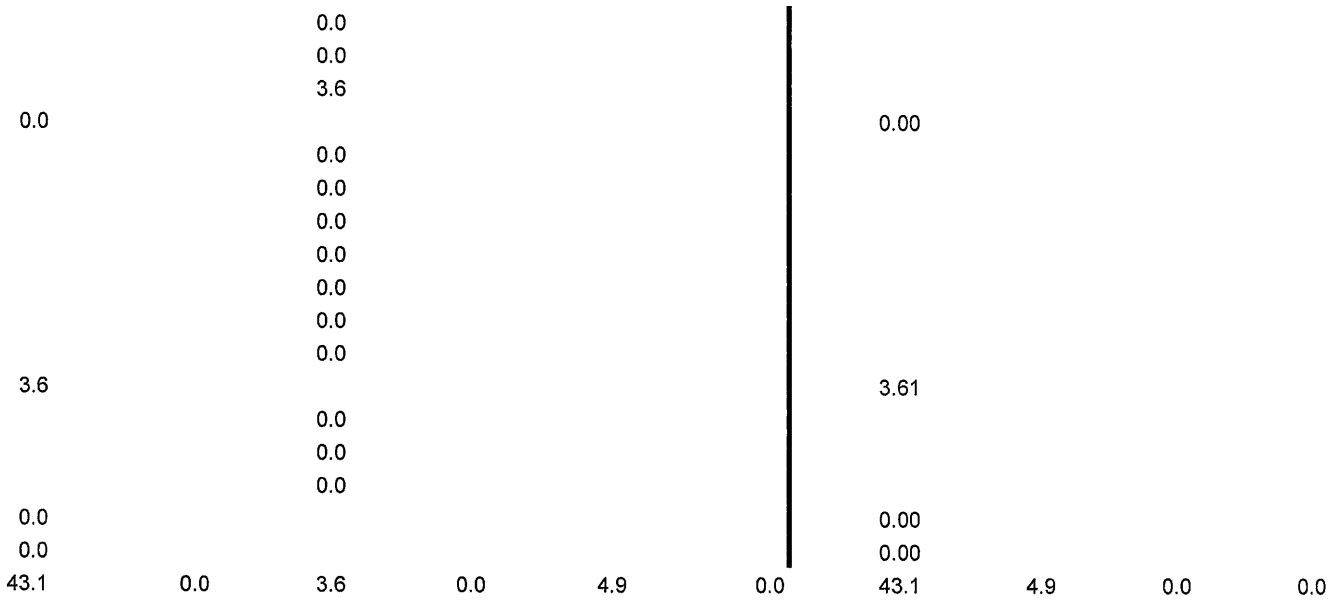
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
			0.0						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3.6
0.0
4.9
0.0
43.1
4.9
0.0
0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
3.58

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
0.00
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0.0	0.0	0.0	0.0	3.6	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 05

File Name: 2443505A
Description: T-405
Canister: 837
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:20
Date Analyzed: 11/22/24 **Time:** 17:50
Can Factor: 1.28
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.56	7.68	ND	2.95	8.84	ND	ND
74-86-2	Acetylene	2.56	7.68	ND	2.73	8.18	ND	ND
74-84-0	Ethane	2.56	7.68	ND	3.16	9.47	ND	ND
115-07-1	Propene	1.71	5.12	ND	2.94	8.83	ND	ND
74-98-6	Propane	1.71	5.12	12.63	3.08	9.25	22.83	
75-28-5	i-Butane	1.28	3.84	ND	3.05	9.14	ND	ND
106-98-9	1-Butene	1.28	3.84	ND	2.94	8.83	ND	ND
106-97-8	n-Butane	1.28	3.84	ND	3.05	9.14	ND	ND
624-64-6	t-2-Butene	1.28	3.84	ND	2.94	8.83	ND	ND
590-18-1	c-2-Butene	1.28	3.84	ND	2.94	8.83	ND	ND
78-78-4	i-Pentane	1.02	3.07	ND	3.03	9.09	ND	ND
109-67-1	1-Pentene	1.02	3.07	ND	2.94	8.83	ND	ND
109-66-0	n-Pentane	1.02	3.07	ND	3.03	9.08	ND	ND
646-04-8	t-2-Pentene	1.02	3.07	ND	2.94	8.83	ND	ND
627-20-3	c-2-Pentene	1.02	3.07	ND	2.94	8.83	ND	ND
75-83-2	2,2-Dimethylbutane	0.85	2.56	ND	3.01	9.04	ND	ND
287-92-3	Cyclopentane	1.02	3.07	ND	2.94	8.83	ND	ND
79-29-8	2,3-Dimethylbutane	0.85	2.56	ND	3.01	9.04	ND	ND
107-83-5	2-Methylpentane	0.85	2.56	ND	3.01	9.04	ND	ND
96-14-0	3-Methylpentane	0.85	2.56	ND	3.01	9.04	ND	ND
110-54-3	n-Hexane	0.85	2.56	ND	3.01	9.04	ND	ND
96-37-7	Methylcyclopentane	0.85	2.56	ND	2.94	8.83	ND	ND
108-08-7	2,4-Dimethylpentane	0.73	2.19	ND	3.00	9.01	ND	ND
71-43-2	Benzene	0.85	2.56	ND	2.73	8.19	ND	ND
110-82-7	Cyclohexane	0.85	2.56	ND	2.94	8.83	ND	ND
591-76-4	2-Methylhexane	0.73	2.19	ND	3.00	9.01	ND	ND
565-59-3	2,3-Dimethylpentane	0.73	2.19	ND	3.00	9.01	ND	ND
589-34-4	3-Methylhexane	0.73	2.19	ND	3.00	9.01	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.64	1.92	ND	3.00	8.99	ND	ND
142-82-5	n-Heptane	0.73	2.19	ND	3.00	9.01	ND	ND
108-87-2	Methylcyclohexane	0.73	2.19	ND	2.94	8.83	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.64	1.92	ND	3.00	8.99	ND	ND
108-88-3	Toluene	0.73	2.19	ND	2.76	8.28	ND	ND
592-27-8	2-Methylheptane	0.64	1.92	ND	3.00	8.99	ND	ND
589-81-1	3-Methylheptane	0.64	1.92	ND	3.00	8.99	ND	ND
111-65-9	n-Octane	0.64	1.92	ND	3.00	8.99	ND	ND
100-41-4	Ethylbenzene	0.64	1.92	ND	2.79	8.36	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.64	1.92	ND	2.79	8.36	ND	ND
100-42-5	Styrene	0.64	1.92	ND	2.73	8.20	ND	ND
95-47-6	o-xylene	0.64	1.92	ND	2.79	8.36	ND	ND
111-84-2	n-Nonane	0.57	1.71	ND	2.99	8.97	ND	ND
98-82-8	i-Propylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
103-65-1	n-propylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
620-14-4	3-Ethyltoluene	0.57	1.71	ND	2.80	8.41	ND	ND
622-96-8	4-Ethyltoluene	0.57	1.71	ND	2.80	8.41	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
611-14-3	2-Ethyltoluene	0.57	1.71	ND	2.80	8.41	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
124-18-5	n-Decane	0.51	1.54	ND	2.99	8.96	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.57	1.71	ND	2.80	8.41	ND	ND
141-93-5	1,3-Diethylbenzene	0.51	1.54	ND	2.82	8.45	ND	ND
105-05-5	1,4-Diethylbenzene	0.51	1.54	ND	2.82	8.45	ND	ND
1120-21-4	Undecane	0.47	1.40	ND	2.98	8.94	ND	ND
112-40-3	Dodecane	0.43	1.28	ND	2.98	8.93	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.60	28.80	14.63	33.91	101.74	51.69	J
TNMHC - C1	Total Non-Methane Hydrocarbons	57.60	172.80	87.79	37.77	113.31	57.57	J

Sample Data Packages

SDG Number 224435

Lab Id Number 6

Client ID T-406

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 6

Client: C.E. Schmidt
Client ID: T-406
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 626
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:06
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11224K\2443506A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-406
Run Time Bar Code:
Acquired on : 22 Nov 24 06:37 PM
Report Created on: 22 Nov 24 07:14 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443506A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.249	1704	542	VV	0.048	7.1005
2	3.314	1036	527	PV	0.032	4.3196
3	3.376	1308	517	VV	0.038	5.4518
4	3.423	948	652	VV	0.021	3.9505
5	3.449	853	445	VV	0.032	3.5543
6	3.514	1328	465	VV	0.039	5.5370
7	3.653	1005	438	VV	0.031	4.1892
8	4.605	3010	577	PV	0.067	12.5483
9	5.793	1298	374	PV	0.052	5.4093
10	7.334	1466	561	PV	0.038	6.1118
11	7.387	843	699	VV	0.020	3.5149
12	7.409	1192	741	VV	0.027	4.9690
13	7.519	2169	729	VV	0.050	9.0414
14	7.540	1422	873	VV	0.025	5.9258
15	7.574	2885	733	VV	0.055	12.0233
16	7.647	1524	636	VV	0.040	6.3533

Total area = 23991

4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
2.4e4
0
10
20
30
4.605
5.793
C:\HPCHEM\1\DATA\1 1 22 4K\2 4 4 350 6A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **06**
File Name: **2443506A**
Sample ID: **T-406**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **626**
Can Factor: **1.26**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:06** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **18:37** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.04	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.08			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.15**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**		I	O	M	277	290
74-98-6	Propane	P	5.20	**5.20**	**5.38**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.78**						118	351
106-98-9	1-Butene	P	7.29	7.47	**7.41**	1192	I	I	H	369	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						198	410
590-18-1	c-2-Butene	P	9.63	9.63						198	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.20**		I	I	H	494	495
109-66-0	n-Pentane	P	12.48	**12.46**	**12.46**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						106	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	631	626
71-43-2	Benzene	P	17.87	**17.85**	**17.96**		O	O	L	655	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	665	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	O	M	673	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						106	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	680	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	693	690
142-82-5	n-Heptane	P	19.41	19.50	**19.42**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.21**	**21.28**		I	O	M	762	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.66**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	882	881
95-47-6	o-xylene	P	24.57	24.73	**24.80**		I	O	M	891	886
111-84-2	n-Nonane	P	24.87	25.03	**25.03**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.51**		I	I	H	919	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**		I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	O	M	951	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	956	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	O	M	969	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.42	**27.52**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-83	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**		I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	O	M	1033	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					23991		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					23991		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					23991		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.26	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.26		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.12	0.53	1.22	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	42.75	7.1	25.2	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	42.75	42.8	28.0	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **06**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.52	2.90	5.04	7.56	8.71	15.1	U	ND		Y
4.000	2.00	2.52	2.69	5.04	7.56	8.06	15.1	U	ND		Y
4.000	2.00	2.52	3.11	5.04	7.56	9.33	15.1	U	ND		Y
4.000	1.33	1.68	2.90	5.04	5.04	8.70	15.1	U	ND		Y
4.000	1.33	1.68	3.04	5.04	5.04	9.11	15.1	U	ND		Y
4.000	1.00	1.26	3.00	5.04	3.78	9.00	15.1	U	ND		Y
4.000	1.00	1.26	2.90	5.04	3.78	8.69	15.1	U	ND		Y
4.000	1.00	1.26	3.00	5.04	3.78	9.00	15.1	U	ND		Y
4.000	1.00	1.26	2.90	5.04	3.78	8.69	15.1	U	ND		Y
4.000	1.00	1.26	2.90	5.04	3.78	8.69	15.1	U	ND		Y
4.000	0.80	1.01	2.98	5.04	3.02	8.95	15.1	U	ND		Y
4.000	0.80	1.01	2.90	5.04	3.02	8.69	15.1	U	ND		Y
4.000	0.80	1.01	2.98	5.04	3.02	8.94	15.1	U	ND		Y
4.000	0.80	1.01	2.90	5.04	3.02	8.69	15.1	U	ND		Y
4.000	0.80	1.01	2.90	5.04	3.02	8.69	15.1	U	ND		Y
4.000	0.67	0.84	2.97	5.04	2.52	8.90	15.1	U	ND		Y
4.000	0.80	1.01	2.90	5.04	3.02	8.69	15.1	U	ND		Y
4.000	0.67	0.84	2.97	5.04	2.52	8.90	15.1	U	ND		Y
4.000	0.67	0.84	2.97	5.04	2.52	8.90	15.1	U	ND		Y
4.000	0.67	0.84	2.97	5.04	2.52	8.90	15.1	U	ND		Y
4.000	0.67	0.84	2.97	5.04	2.52	8.90	15.1	U	ND		Y
4.000	0.67	0.84	2.90	5.04	2.52	8.70	15.1	U	ND		Y
4.000	0.57	0.72	2.96	5.04	2.16	8.87	15.1	U	ND		Y
4.000	0.67	0.84	2.69	5.04	2.52	8.07	15.1	U	ND		Y
4.000	0.67	0.84	2.90	5.04	2.52	8.70	15.1	U	ND		Y
4.000	0.57	0.72	2.96	5.04	2.16	8.87	15.1	U	ND		Y
4.000	0.57	0.72	2.96	5.04	2.16	8.87	15.1	U	ND		Y
4.000	0.57	0.72	2.96	5.04	2.16	8.87	15.1	U	ND		Y
4.000	0.50	0.63	2.95	5.04	1.89	8.85	15.1	U	ND		Y
4.000	0.57	0.72	2.96	5.04	2.16	8.87	15.1	U	ND		Y
4.000	0.57	0.72	2.90	5.04	2.16	8.69	15.1	U	ND		Y
4.000	0.50	0.63	2.95	5.04	1.89	8.85	15.1	U	ND		Y
4.000	0.57	0.72	2.72	5.04	2.16	8.15	15.1	U	ND		Y
4.000	0.50	0.63	2.95	5.04	1.89	8.85	15.1	U	ND		Y
4.000	0.50	0.63	2.95	5.04	1.89	8.85	15.1	U	ND		Y
4.000	0.50	0.63	2.95	5.04	1.89	8.85	15.1	U	ND		Y
4.000	0.50	0.63	2.74	5.04	1.89	8.23	15.1	U	ND		Y

4.000	0.50	0.63	2.74	5.04	1.89	8.23	15.1	U	ND	Y
4.000	0.50	0.63	2.69	5.04	1.89	8.07	15.1	U	ND	Y
4.000	0.50	0.63	2.74	5.04	1.89	8.23	15.1	U	ND	Y
4.000	0.44	0.56	2.94	5.04	1.68	8.83	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.40	0.50	2.94	5.04	1.51	8.82	15.1	U	ND	Y
4.000	0.44	0.56	2.76	5.04	1.68	8.28	15.1	U	ND	Y
4.000	0.40	0.50	2.77	5.04	1.51	8.32	15.1	U	ND	Y
4.000	0.40	0.50	2.77	5.04	1.51	8.32	15.1	U	ND	Y
4.000	0.36	0.46	2.93	5.04	1.37	8.80	15.1	U	ND	Y
4.000	0.33	0.42	2.93	5.04	1.26	8.79	15.1	U	ND	Y
										Y
45.00	7.5	9.45	33.38	56.70	28.4	100.2	170.1	U	ND	Y
45.00	45.0	56.70	37.18	56.70	170.1	111.5	170.1	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
	0.0					0.00			
					2.1		2.12		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
	0.0					0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
	0.0					0.00			
			0.0						0.00
	0.0					0.00			
	0.0					0.00			
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0.0						0.00			
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0.0						0.00			
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		0.0							
0.0						0.00			
0.0						0.00			
0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.1	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes
				0.00	
				0.00	
				0.00	

0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
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0.00
0.00
0.00

0.0	0.0	0.0	0.0	0.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 06

File Name: 2443506A
Description: T-406
Canister: 626
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 11/22/24 **Time:** 18:37
Can Factor: 1.26
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.52	7.56	ND	2.90	8.71	ND	ND
74-86-2	Acetylene	2.52	7.56	ND	2.69	8.06	ND	ND
74-84-0	Ethane	2.52	7.56	ND	3.11	9.33	ND	ND
115-07-1	Propene	1.68	5.04	ND	2.90	8.70	ND	ND
74-98-6	Propane	1.68	5.04	ND	3.04	9.11	ND	ND
75-28-5	i-Butane	1.26	3.78	ND	3.00	9.00	ND	ND
106-98-9	1-Butene	1.26	3.78	ND	2.90	8.69	ND	ND
106-97-8	n-Butane	1.26	3.78	ND	3.00	9.00	ND	ND
624-64-6	t-2-Butene	1.26	3.78	ND	2.90	8.69	ND	ND
590-18-1	c-2-Butene	1.26	3.78	ND	2.90	8.69	ND	ND
78-78-4	i-Pentane	1.01	3.02	ND	2.98	8.95	ND	ND
109-67-1	1-Pentene	1.01	3.02	ND	2.90	8.69	ND	ND
109-66-0	n-Pentane	1.01	3.02	ND	2.98	8.94	ND	ND
646-04-8	t-2-Pentene	1.01	3.02	ND	2.90	8.69	ND	ND
627-20-3	c-2-Pentene	1.01	3.02	ND	2.90	8.69	ND	ND
75-83-2	2,2-Dimethylbutane	0.84	2.52	ND	2.97	8.90	ND	ND
287-92-3	Cyclopentane	1.01	3.02	ND	2.90	8.69	ND	ND
79-29-8	2,3-Dimethylbutane	0.84	2.52	ND	2.97	8.90	ND	ND
107-83-5	2-Methylpentane	0.84	2.52	ND	2.97	8.90	ND	ND
96-14-0	3-Methylpentane	0.84	2.52	ND	2.97	8.90	ND	ND
110-54-3	n-Hexane	0.84	2.52	ND	2.97	8.90	ND	ND
96-37-7	Methylcyclopentane	0.84	2.52	ND	2.90	8.70	ND	ND
108-08-7	2,4-Dimethylpentane	0.72	2.16	ND	2.96	8.87	ND	ND
71-43-2	Benzene	0.84	2.52	ND	2.69	8.07	ND	ND
110-82-7	Cyclohexane	0.84	2.52	ND	2.90	8.70	ND	ND
591-76-4	2-Methylhexane	0.72	2.16	ND	2.96	8.87	ND	ND
565-59-3	2,3-Dimethylpentane	0.72	2.16	ND	2.96	8.87	ND	ND
589-34-4	3-Methylhexane	0.72	2.16	ND	2.96	8.87	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.63	1.89	ND	2.95	8.85	ND	ND
142-82-5	n-Heptane	0.72	2.16	ND	2.96	8.87	ND	ND
108-87-2	Methylcyclohexane	0.72	2.16	ND	2.90	8.69	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.63	1.89	ND	2.95	8.85	ND	ND
108-88-3	Toluene	0.72	2.16	ND	2.72	8.15	ND	ND
592-27-8	2-Methylheptane	0.63	1.89	ND	2.95	8.85	ND	ND
589-81-1	3-Methylheptane	0.63	1.89	ND	2.95	8.85	ND	ND
111-65-9	n-Octane	0.63	1.89	ND	2.95	8.85	ND	ND
100-41-4	Ethylbenzene	0.63	1.89	ND	2.74	8.23	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.63	1.89	ND	2.74	8.23	ND	ND
100-42-5	Styrene	0.63	1.89	ND	2.69	8.07	ND	ND
95-47-6	o-xylene	0.63	1.89	ND	2.74	8.23	ND	ND
111-84-2	n-Nonane	0.56	1.68	ND	2.94	8.83	ND	ND
98-82-8	i-Propylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
103-65-1	n-propylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
620-14-4	3-Ethyltoluene	0.56	1.68	ND	2.76	8.28	ND	ND
622-96-8	4-Ethyltoluene	0.56	1.68	ND	2.76	8.28	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
611-14-3	2-Ethyltoluene	0.56	1.68	ND	2.76	8.28	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
124-18-5	n-Decane	0.50	1.51	ND	2.94	8.82	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.56	1.68	ND	2.76	8.28	ND	ND
141-93-5	1,3-Diethylbenzene	0.50	1.51	ND	2.77	8.32	ND	ND
105-05-5	1,4-Diethylbenzene	0.50	1.51	ND	2.77	8.32	ND	ND
1120-21-4	Undecane	0.46	1.37	ND	2.93	8.80	ND	ND
112-40-3	Dodecane	0.42	1.26	ND	2.93	8.79	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	9.45	28.35	ND	33.38	100.15	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	56.70	170.10	ND	37.18	111.54	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 7

Client ID T-407

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 7

Client: C.E. Schmidt
Client ID: T-407
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 740
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:05
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

==========

Area Percent Report

==========

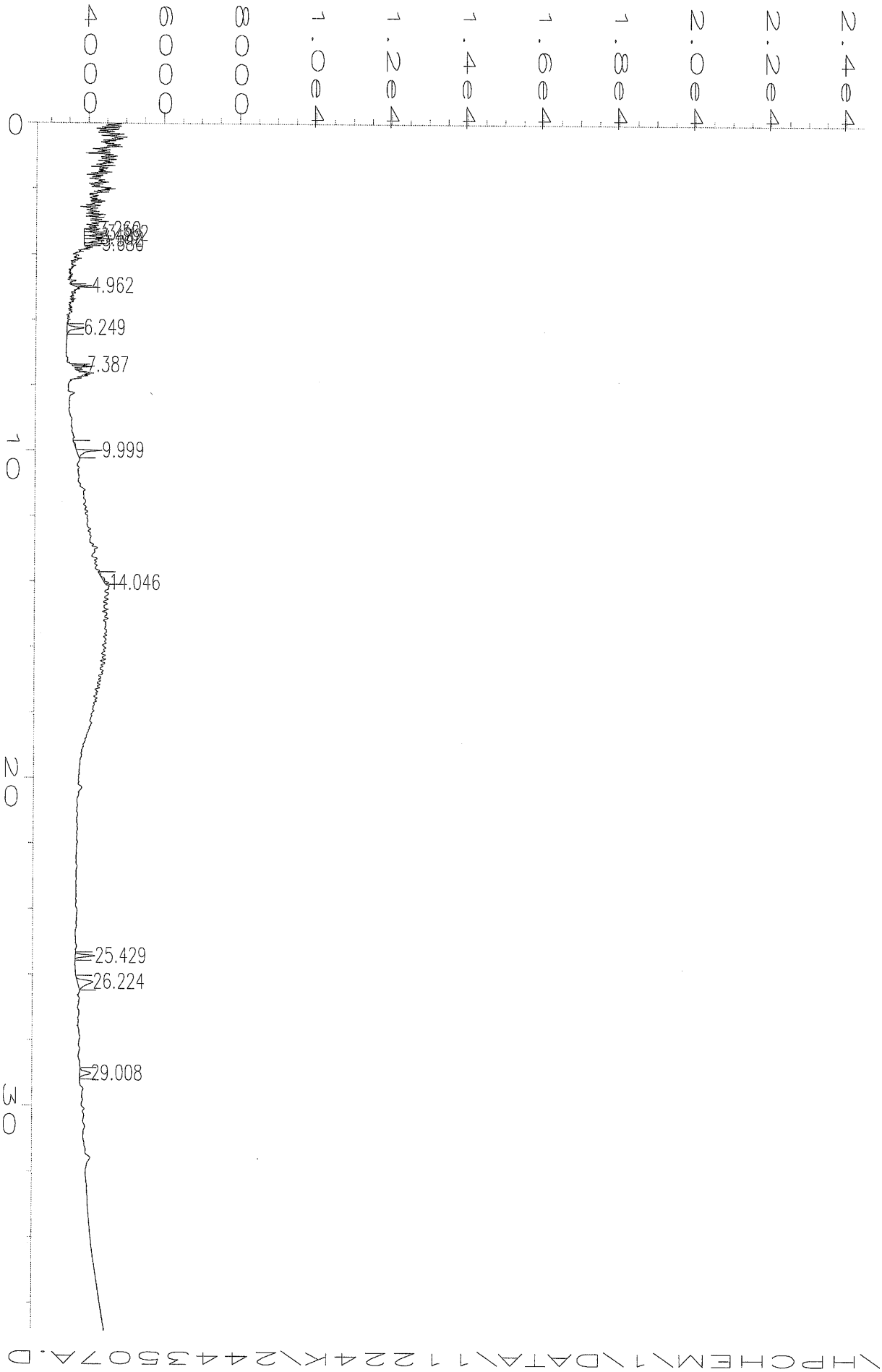
Data File Name : C:\HPCHEM\1\DATA\11224K\2443507A.D
Operator : LR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-407
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 22 Nov 24 07:25 PM
Instrument Method: KTO3DHC.MTH
Report Created on: 22 Nov 24 08:02 PM
Analysis Method : KTO3DHC.MTH
Sample Info : 200 ML, SCHMIDT

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443507A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.260	1178	396	PV	0.040	4.5168
2	3.362	2284	613	VV	0.050	8.7578
3	3.482	1650	553	VV	0.045	6.3282
4	3.542	2651	540	VV	0.077	10.1664
5	3.680	1399	562	VV	0.039	5.3637
6	4.962	1040	470	PV	0.034	3.9875
7	6.249	2647	444	PB	0.084	10.1516
8	7.387	803	385	VV	0.035	3.0792
9	9.999	2993	674	BB	0.061	11.4784
10	14.046	884	103	VV	0.111	3.3904
11	25.429	2402	511	BB	0.074	9.2118
12	26.224	4019	413	BB	0.128	15.4130
13	29.008	2126	294	BB	0.110	8.1551

Total area = 26075

==========


4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
2.4e4
0
10
20
30
4.962
6.249
7.387
9.999
14.046
25.429
26.224
29.008
C:\HPCHEM\1\DATA\1 1 224K\244350 7A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **07**
File Name: **2443507A**
Sample ID: **T-407**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **740**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:05** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **19:25** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.04	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.08			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.15**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**		I	O	M	277	290
74-98-6	Propane	P	5.20	**5.20**	**5.38**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.78**						118	351
106-98-9	1-Butene	P	7.29	7.47	**7.39**	803	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						198	410
590-18-1	c-2-Butene	P	9.63	9.63						198	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.20**		I	I	H	494	495
109-66-0	n-Pentane	P	12.48	**12.46**	**12.46**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						106	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	631	626
71-43-2	Benzene	P	17.87	**17.85**	**17.96**		O	O	L	655	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	665	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	O	M	673	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						106	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	680	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	693	690
142-82-5	n-Heptane	P	19.41	19.50	**19.42**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.21**	**21.28**		I	O	M	762	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.66**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	882	881
95-47-6	o-xylene	P	24.57	24.73	**24.80**		I	O	M	891	886
111-84-2	n-Nonane	P	24.87	25.03	**25.03**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.43**	2402	I	I	H	916	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**		I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	O	M	951	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	956	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	O	M	969	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.42	**27.52**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-83	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**		I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	O	M	1033	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					26075		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					26075		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					26075		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.14	0.28	0.65	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	3.40	0.38	1.86	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	36.88	6.1	21.7	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	36.88	36.9	24.2	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **07**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					1.1		1.14		
0.0						0.00			
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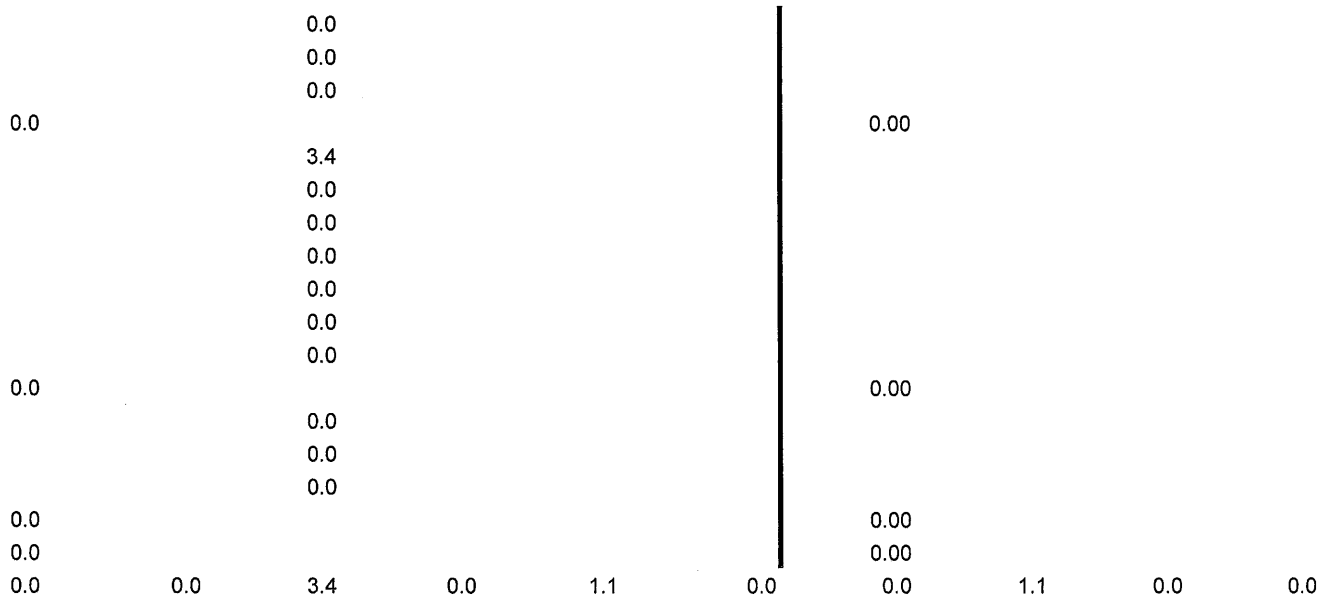
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

SDG: 224435
Analytical Method: TO-14FID
Laboratory Number: 07

File Name: 2443507A
Description: T-407
Canister: 740
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 11/22/24 **Time:** 19:25
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 8

Client ID T-408

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 8

Client: C.E. Schmidt
Client ID: T-408
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 805
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:19
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11224K\2443508A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-408
Run Time Bar Code:
Acquired on : 22 Nov 24 08:22 PM
Report Created on: 22 Nov 24 08:59 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443508A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.261	846	394	VV	0.030	1.4096
2	3.396	1977	640	PV	0.043	3.2931
3	3.519	1052	650	VV	0.025	1.7522
4	3.581	1022	383	VV	0.039	1.7024
5	3.684	1221	438	VV	0.040	2.0335
6	5.409	3091	746	BV	0.057	5.1491
7	6.684	3310	519	BB	0.086	5.5146
8	7.229	1020	329	BV	0.041	1.6996
9	10.359	11050	1222	BB	0.128	18.4088
10	13.962	7113	648	BV	0.137	11.8490
11	14.155	958	235	VB	0.068	1.5953
12	20.841	1635	239	BB	0.090	2.7240
13	31.553	6721	341	BB	0.237	11.1972
14	32.386	7490	678	BV	0.133	12.4778
15	32.709	9100	712	VB	0.159	15.1602
16	34.524	2421	130	BB	0.236	4.0337

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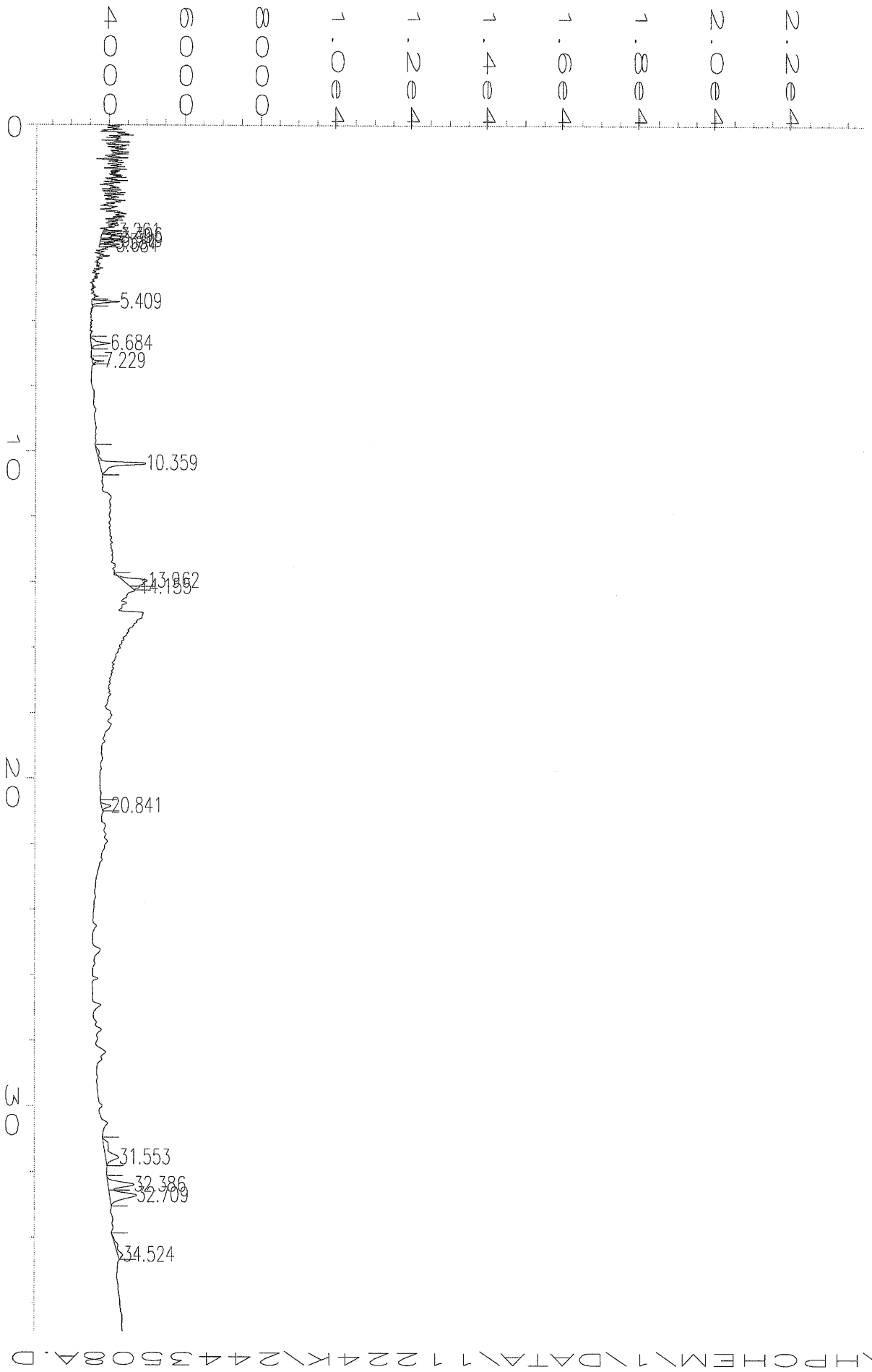
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **08**
File Name: **2443508A**
Sample ID: **T-408**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **805**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:19** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **20:22** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.04	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.08			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.15**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**	3091	I	O	M	275	290
74-98-6	Propane	P	5.20	**5.20**	**5.41**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.81**	**6.68**	3310	I	O	M	343	351
106-98-9	1-Butene	P	7.29	7.50	**7.39**		I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						198	410
590-18-1	c-2-Butene	P	9.63	9.63						198	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.20**		I	I	H	494	495
109-66-0	n-Pentane	P	12.48	**12.46**	**12.46**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						106	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	631	626
71-43-2	Benzene	P	17.87	**17.85**	**17.96**		O	O	L	655	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	665	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	O	M	673	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						106	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	680	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	693	690
142-82-5	n-Heptane	P	19.41	19.50	**19.42**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.21**	**21.28**		I	O	M	762	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.66**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	882	881
95-47-6	o-xylene	P	24.57	24.73	**24.80**		I	O	M	891	886
111-84-2	n-Nonane	P	24.87	25.03	**25.03**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.43**	2402	I	I	H	916	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**		I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	O	M	951	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	956	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	O	M	969	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.42	**27.52**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-83	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**		I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	O	M	1033	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.71**	9100	I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					60027		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					60027		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					60027		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	4.37	1.46	2.51	4.37	1.46	2.51	2.51	2.51
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	4.68	1.17	2.79	4.68	1.17	2.79	2.79	2.79
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	3.40	0.38	1.86	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	12.87	1.07	7.49	12.87	1.07	7.49	7.49	7.49
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	84.89	14.1	50.0	84.89	14.15	49.99	49.99	49.99
Total Non-Methane Hydrocarbons	16	1.0	84.89	84.9	55.7	84.89	84.89	55.67	55.67	55.67

SDG: **224435**
Laboratory Number: **08**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	J	=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0		=	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					4.4		4.37		
0.0						0.00			
		4.7				4.68			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
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0.0						0.00			
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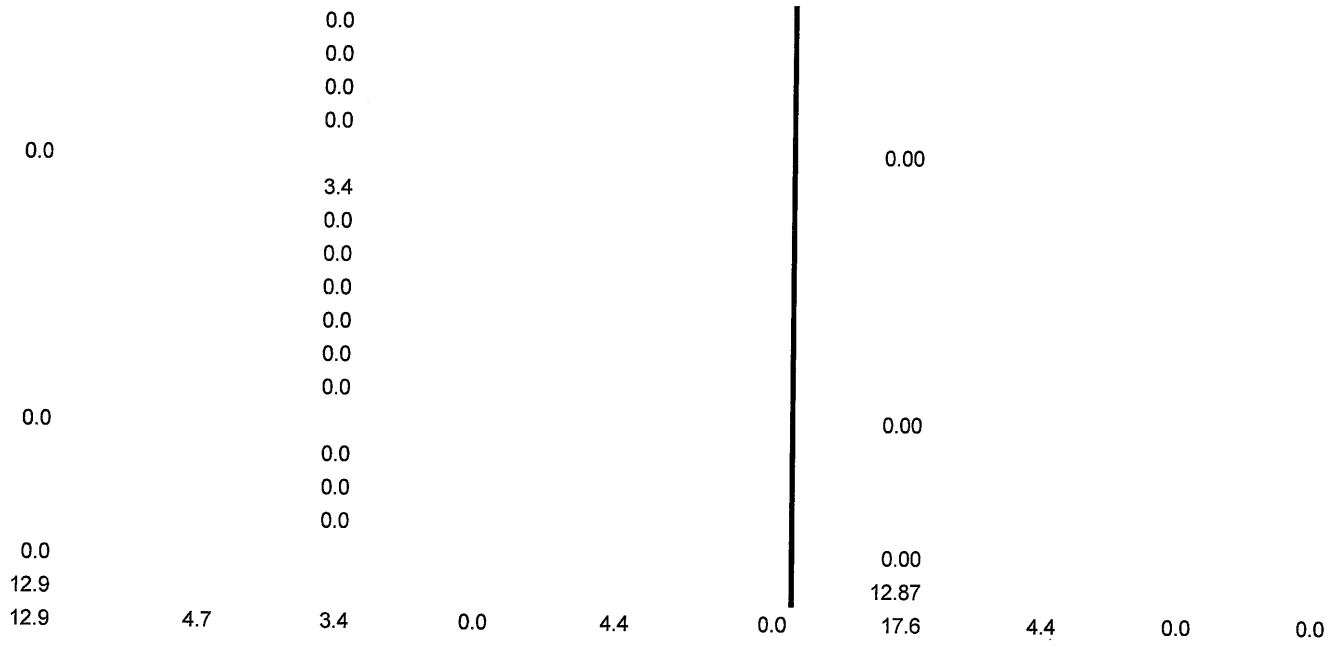
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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0.00

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0.00

3.40
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0.0	0.0	0.0	0.0	3.4	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		08	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	1.72E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	1.72E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	1.72E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	1.72E+04	3091	4.4	1.46	2.51
Propane	3	TRG	44.1	1.72E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	1.72E+04	3310	4.7	1.17	2.79
1-Butene	4	TRG	56.1	1.72E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	1.72E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	1.72E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	1.72E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	1.72E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	1.72E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	1.72E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	1.72E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	1.72E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	1.72E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	1.72E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	1.72E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	1.72E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	1.72E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	1.72E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	1.72E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	1.72E+04	2402	3.4	0.38	1.86
n-propylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	1.72E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	1.72E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	1.72E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	1.72E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	1.72E+04	9100	12.9	1.07	7.49
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	1.72E+04	60027	84.9	14.15	49.99
Total Non-Methane Hydrocarbons	1	TRG	16.0	1.72E+04	60027	84.9	84.89	55.67

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Canister: 805
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 11/22/24 **Time:** 20:22
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	1.46	2.30	6.90	2.51	J
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	1.17	2.38	7.14	2.79	J
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	1.07	2.33	6.98	7.49	
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	14.15	26.50	79.49	49.99	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	84.89	29.51	88.52	55.67	J

Sample Data Packages

SDG Number 224435

Lab Id Number 9

Client ID T-409

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 9

Client: C.E. Schmidt
Client ID: T-409
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 631
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:45
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

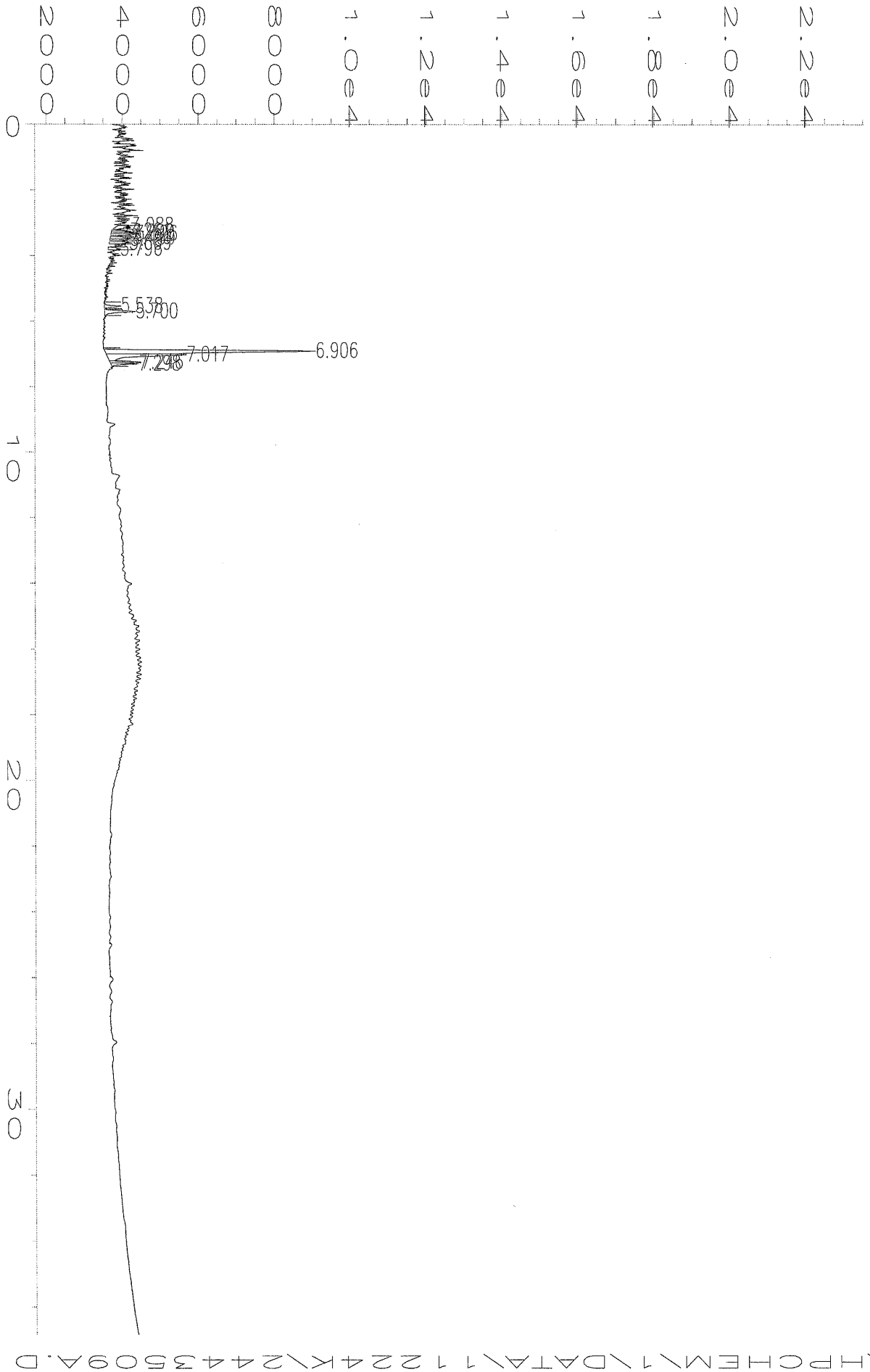
Data File Name : C:\HPCHEM\1\DATA\11224K\2443509A.D
Operator : LR
Instrument : ANALYZER1
Sample Name : T-409
Run Time Bar Code:
Acquired on : 22 Nov 24 09:10 PM
Report Created on: 22 Nov 24 09:47 PM
Sample Info : 200 ML, SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\2443509A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.088	1906	353	VV	0.067	3.2606
2	3.261	1193	459	PV	0.043	2.0413
3	3.290	1164	609	VV	0.029	1.9904
4	3.326	1827	767	VV	0.040	3.1248
5	3.450	1620	594	VV	0.042	2.7715
6	3.494	941	533	VV	0.029	1.6097
7	3.609	1775	581	VV	0.040	3.0356
8	3.796	1104	331	VV	0.046	1.8878
9	5.538	1410	437	BV	0.045	2.4122
10	5.700	3263	822	VV	0.055	5.5815
11	6.906	26863	5537	BV	0.072	45.9504
12	7.017	11596	2100	VV	0.078	19.8354
13	7.246	1861	818	VV	0.034	3.1838
14	7.298	1938	713	VV	0.045	3.3150

Total area = 58460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1.6e4
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10
20
30
6.906
7.017
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **09**
File Name: **2443509A**
Sample ID: **T-409**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/22/24**
QCBatch: **112224-GCK**
Can: **631**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **11:45** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **21:10** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **310466**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win	C2-C	C5-C12
RT	**0.3**	**0.1**
RTI	**3**	**3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.04	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.08			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.15**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.09**	26863	I	O	M	275	290
74-98-6	Propane	P	5.20	**5.20**	**5.41**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.81**	**6.91**		I	I	H	351	351
106-98-9	1-Butene	P	7.29	7.50	**7.39**		I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						198	410
590-18-1	c-2-Butene	P	9.63	9.63						198	431
78-78-4	i-Pentane	P	11.37	11.35	**11.44**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.28	**12.20**		I	I	H	494	495
109-66-0	n-Pentane	P	12.48	**12.46**	**12.46**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.86**		I	I	H	511	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.18**		O	I	M	520	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.88**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.99**		O	I	M	569	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04						162	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.17**		O	I	M	573	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.47**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.15**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						106	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.17**		O	O	L	631	626
71-43-2	Benzene	P	17.87	**17.85**	**17.96**		O	O	L	655	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.26**		I	O	M	665	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.55**		I	O	M	673	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54						106	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.77**		I	I	H	680	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.19**		I	I	H	693	690
142-82-5	n-Heptane	P	19.41	19.50	**19.42**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.08**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.21**	**21.28**		I	O	M	762	758
592-27-8	2-Methylheptane	P	21.33	21.49	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.71	**21.66**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.43	**22.40**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.91	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.11	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.56	**24.55**		I	I	H	882	881
95-47-6	o-xylene	P	24.57	24.73	**24.80**		I	O	M	891	886
111-84-2	n-Nonane	P	24.87	25.03	**25.03**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.52	**25.43**		I	I	H	916	919
103-65-1	n-propylbenzene	P	25.93	26.09	**26.13**		I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.33	**26.30**		I	O	M	951	957
622-96-8	4-Ethyltoluene	P	26.26	26.42	**26.43**		I	I	H	956	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.61	**26.65**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.77	**26.76**		I	O	M	969	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.24	**27.24**		I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.42	**27.52**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.71						-83	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.26	**28.25**		I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.39	**28.37**		I	O	M	1033	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.71**		I	I	H	1200	1200

Abbreviation	**Total Petroleum Hydrocarbons:**	58460	TPH Subtractions
TNMHC - C6	Total Non-Methane Hydrocarbons	58460	0.001
TNMHC - C1	Total Non-Methane Hydrocarbons	58460	0.001

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112224-GCK		
Hexane Std Area:	310466		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	37.99	12.66	21.85	37.99	12.66	21.85	21.85	21.85
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	82.68	13.8	48.7	82.68	13.78	48.68	48.68	48.68
Total Non-Methane Hydrocarbons	16	1.0	82.68	82.7	54.2	82.68	82.68	54.22	54.22	54.22

SDG: **224435**
Laboratory Number: **09**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0		=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					38.0		37.99		
0.0						0.00			
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			

		0.0							
		0.0							
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0.0						0.00			
		0.0							
		0.0							
		0.0							
0.0						0.00			
0.0						0.00			
0.0	0.0	0.0	0.0	38.0	0.0	0.0	38.0	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00
0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
0.00
0.00

0.0	0.0	0.0	0.0	0.0	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		09	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = $\frac{\text{Sum}\ \left|\frac{(\text{Astd}ni)}{(\text{Cstd}ni)}\right|_i}{}$

2) ppbC = $\frac{6\ \text{Carbons} \times \text{Ansamp} \times \text{CDF} \times 1000}{(\text{Avg RFn}) \times \text{SV}}$ = **Cn**

3) Amount ppbv = $\frac{\text{Cn}}{\text{C\#}}$

4) Amount ug/m3 = $\frac{(\text{amt(ppbv)} \times \text{MW})}{24.4}$

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	1.72E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	1.72E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	1.72E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	1.72E+04	26863	38.0	12.66	21.85
Propane	3	TRG	44.1	1.72E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	1.72E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	1.72E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	1.72E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	1.72E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	1.72E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	1.72E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	1.72E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	1.72E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	1.72E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	1.72E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	1.72E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	1.72E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	1.72E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	1.72E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	1.72E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	1.72E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	1.72E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	1.72E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	1.72E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	1.72E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	1.72E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	1.72E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	1.72E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	1.72E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	1.72E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	1.72E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	1.72E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	1.72E+04	58460	82.7	13.78	48.68
Total Non-Methane Hydrocarbons	1	TRG	16.0	1.72E+04	58460	82.7	82.68	54.22

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Canister: 631
QC_Batch: 112224-GCK

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 11/22/24 **Time:** 21:10
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	12.66	2.30	6.90	21.85	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	13.78	26.50	79.49	48.68	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	82.68	29.51	88.52	54.22	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **10**

Client ID T-410

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 10

Client: C.E. Schmidt
Client ID: T-410
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 714
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:59
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:

Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCK\12034K\2443510A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-410
Run Time Bar Code:
Acquired on : 03 Dec 24 11:51 AM
Report Created on: 03 Jan 25 01:12 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\2443510A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.905	1860	733	VF	0.035	0.0041
2	2.955	4182	832	FV	0.065	0.0093
3	3.038	1447	534	VV	0.037	0.0032
4	3.131	4070	1315	VV	0.042	0.0091
5	3.161	4156	1706	VV	0.037	0.0093
6	3.212	7258	1666	VV	0.058	0.0162
7	3.306	3453	1459	VV	0.033	0.0077
8	3.363	5106	1679	VV	0.046	0.0114
9	3.396	7589	1514	VV	0.084	0.0169
10	3.542	6725	1495	VV	0.057	0.0150
11	3.589	2015	1317	VV	0.025	0.0045
12	3.617	4368	1217	VV	0.060	0.0097
13	3.746	4818	1443	VV	0.043	0.0107
14	3.772	3384	1327	VV	0.043	0.0075
15	3.815	2746	963	VV	0.048	0.0061
16	3.987	71203	27394	VV	0.038	0.1586
17	4.151	384641	186881	VV	0.031	0.8566
18	4.277	859	375	VV	0.038	0.0019
19	4.431	214	182	PV	0.020	0.0005
20	4.513	14378	5831	VV	0.035	0.0320
21	4.651	524	187	VF	0.047	0.0012
22	5.023	228810	271324	MF	0.014	0.5096
23	5.029	402536	308807	FM	0.022	0.8965
24	5.515	4640	616	FV	0.092	0.0103
25	6.107	974	297	VV	0.055	0.0022
26	6.135	828	295	VV	0.047	0.0018
27	6.179	1033	257	VV	0.067	0.0023
28	6.324	4631	852	VV	0.074	0.0103
29	6.619	2693	317	PB	0.117	0.0060
30	6.917	318225	109991	BV	0.045	0.7087
31	7.142	1474	313	VV	0.066	0.0033
32	7.272	1282	374	VV	0.050	0.0029
33	7.350	3477	561	VB	0.083	0.0077
34	7.877	1318503	433897	BV	0.046	2.9364
35	8.147	3911	1024	VV	0.057	0.0087
36	8.269	2760313	936646	VV	0.049	6.1473
37	8.440	7250	1869	VV	0.056	0.0161
38	8.513	8908	2043	VV	0.058	0.0198
39	8.712	1011972	388753	VV	0.041	2.2537
40	9.155	12576	2865	VV	0.061	0.0280
41	9.291	430108	163359	VV	0.040	0.9579
42	9.539	7461	1944	VV	0.055	0.0166
43	9.621	18638	1796	VV	0.132	0.0415
44	10.634	93402	32353	BV	0.044	0.2080
45	11.349	173775	66177	BV	0.041	0.3870
46	11.605	2789	869	VV	0.047	0.0062
47	11.657	15940	2588	VV	0.081	0.0355
48	11.842	14641	2878	VV	0.069	0.0326
49	11.983	57793	19031	VV	0.046	0.1287
50	12.084	8440	1634	VV	0.072	0.0188
51	12.267	90507	32241	VV	0.043	0.2016
52	12.421	119778	45481	VV	0.041	0.2668
53	12.610	16696	5727	VV	0.045	0.0372
54	12.677	10542	3486	VV	0.045	0.0235
55	12.759	59541	20453	VV	0.044	0.1326
56	12.955	3213	577	VV	0.076	0.0072

57	13.057	18135	5646	VV	0.048	0.0404
58	13.219	155249	56533	VV	0.043	0.3457
59	13.419	51677	4260	VV	0.159	0.1151
60	13.753	39976	12277	VV	0.049	0.0890
61	13.833	16614	4155	VV	0.055	0.0370
62	14.064	2474	637	VV	0.055	0.0055
63	14.149	3965	660	VV	0.087	0.0088
64	14.305	4029	1434	VV	0.047	0.0090
65	14.372	15760	4442	VV	0.053	0.0351
66	14.563	62554	19023	VV	0.050	0.1393
67	14.757	30742	8639	VV	0.053	0.0685
68	14.912	87595	19565	VV	0.069	0.1951
69	15.039	121791	34438	VV	0.050	0.2712
70	15.097	150529	54868	VV	0.042	0.3352
71	15.399	620003	64638	VV	0.126	1.3808
72	15.531	57571	18282	VV	0.048	0.1282
73	15.639	3366	1266	VV	0.039	0.0075
74	15.741	54788	10894	VV	0.080	0.1220
75	15.964	9116	2260	VV	0.060	0.0203
76	16.135	86667	31129	VV	0.044	0.1930
77	16.222	5390	1650	VV	0.054	0.0120
78	16.307	8568	2867	VV	0.044	0.0191
79	16.381	39960	12911	VV	0.047	0.0890
80	16.485	10395	2835	VV	0.053	0.0232
81	16.619	4777	1611	VV	0.046	0.0106
82	16.824	24184	6129	VV	0.058	0.0539
83	16.905	15481	3312	VV	0.064	0.0345
84	17.024	34986	11544	VV	0.047	0.0779
85	17.161	15462	4867	VV	0.050	0.0344
86	17.290	3046	544	VV	0.081	0.0068
87	17.550	3334	580	PV	0.079	0.0074
88	17.688	11622	3857	VV	0.047	0.0259
89	17.829	48770	12327	VV	0.058	0.1086
90	17.943	68040	20084	VV	0.051	0.1515
91	18.117	172039	54270	VV	0.050	0.3831
92	18.259	5863	1852	VV	0.048	0.0131
93	18.358	60511	19034	VV	0.048	0.1348
94	18.429	42304	14435	VV	0.045	0.0942
95	18.544	8973	3273	VV	0.042	0.0200
96	18.633	138858	43652	VV	0.049	0.3092
97	18.751	3168	956	VV	0.050	0.0071
98	18.873	29387	9775	VV	0.047	0.0654
99	19.022	562831	151685	VV	0.055	1.2535
100	19.225	7247	2413	VV	0.050	0.0161
101	19.291	12626	3714	VV	0.051	0.0281
102	19.371	89664	20722	VV	0.063	0.1997
103	19.523	5965	1758	VV	0.050	0.0133
104	19.725	147889	46167	VV	0.050	0.3294
105	19.909	2326	631	VV	0.056	0.0052
106	20.081	332783	76899	VV	0.063	0.7411
107	20.332	12422	4737	VV	0.044	0.0277
108	20.400	66130	17635	VV	0.056	0.1473
109	20.633	72729	19499	VV	0.056	0.1620
110	20.845	102477	30833	VV	0.051	0.2282
111	20.912	83173	24180	VV	0.052	0.1852
112	21.076	119777	33446	VV	0.055	0.2667
113	21.179	51581	10970	VV	0.066	0.1149
114	21.313	69336	11883	VV	0.078	0.1544
115	21.455	18452	5524	VV	0.050	0.0411
116	21.537	65353	9762	VV	0.088	0.1455
117	21.730	368328	79329	VV	0.067	0.8203
118	21.842	48025	14934	VV	0.054	0.1070
119	21.983	85953	22110	VV	0.059	0.1914
120	22.094	157484	33995	VV	0.067	0.3507
121	22.195	29209	8288	VV	0.053	0.0651
122	22.306	228824	66018	VV	0.054	0.5096
123	22.383	75596	24486	VV	0.046	0.1684
124	22.477	156516	41427	VV	0.058	0.3486
125	22.659	48239	14098	VV	0.053	0.1074
126	22.758	101937	20344	VV	0.073	0.2270
127	22.916	87697	23931	VV	0.057	0.1953

128	23.076	70059	19192	VV	0.055	0.1560
129	23.154	163226	42253	VV	0.058	0.3635
130	23.264	480328	116699	VV	0.063	1.0697
131	23.407	4050774	720465	VV	0.081	9.0213
132	23.718	402843	65104	VV	0.089	0.8972
133	23.837	1046965	163474	VV	0.089	2.3316
134	24.156	137897	27637	VV	0.071	0.3071
135	24.230	52022	17571	VV	0.043	0.1159
136	24.312	162003	37471	VV	0.064	0.3608
137	24.458	584368	117723	VV	0.072	1.3014
138	24.563	253971	67065	VV	0.055	0.5656
139	24.637	407839	95980	VV	0.061	0.9083
140	24.725	684335	149046	VV	0.067	1.5240
141	24.796	218807	65371	VV	0.056	0.4873
142	24.936	157439	29759	VV	0.076	0.3506
143	25.070	258277	64472	VV	0.062	0.5752
144	25.244	1087945	189962	VV	0.083	2.4229
145	25.365	414291	88305	VV	0.068	0.9226
146	25.573	744020	144777	VV	0.076	1.6570
147	25.787	985662	145757	VV	0.096	2.1951
148	25.938	2710948	383156	VV	0.099	6.0374
149	26.143	308552	66367	VF	0.069	0.6872
150	26.267	319239	124613	MF	0.043	0.7110
151	26.273	71457	134347	FF	0.009	0.1591
152	26.289	211541	164304	FF	0.021	0.4711
153	26.321	652684	195564	FM	0.056	1.4536
154	26.428	263336	73880	FV	0.053	0.5865
155	26.520	1034639	241954	VV	0.063	2.3042
156	26.594	763655	167235	VV	0.067	1.7007
157	26.863	837256	114529	VF	0.101	1.8646
158	26.960	353634	125085	MF	0.047	0.7876
159	27.033	1131520	466887	FF	0.040	2.5199
160	27.037	180417	491983	FF	0.006	0.4018
161	27.041	65550	516528	FF	0.002	0.1460
162	27.043	67390	542751	FF	0.002	0.1501
163	27.047	172321	568514	FF	0.005	0.3838
164	27.052	185500	615569	FF	0.005	0.4131
165	27.058	275785	664829	FF	0.007	0.6142
166	27.071	1638613	710150	FM	0.038	3.6493
167	27.200	197049	72622	MF	0.045	0.4388
168	27.203	18293	75262	FF	0.004	0.0407
169	27.209	33959	80817	FF	0.007	0.0756
170	27.215	25838	86183	FF	0.005	0.0575
171	27.235	196738	92836	FF	0.035	0.4381
172	27.257	42512	89995	FF	0.008	0.0947
173	27.270	145638	87865	FM	0.028	0.3243
174	27.358	999838	211550	FV	0.069	2.2267
175	27.437	889534	161175	VV	0.078	1.9810
176	27.671	667344	122822	VV	0.080	1.4862
177	27.793	610455	109398	VV	0.080	1.3595
178	27.938	360728	84790	VF	0.062	0.8034
179	28.012	279104	98025	MF	0.047	0.6216
180	28.032	79011	95167	FF	0.014	0.1760
181	28.057	104328	73057	FF	0.024	0.2323
182	28.127	177016	70689	FF	0.042	0.3942
183	28.141	206046	74561	FF	0.046	0.4589
184	28.196	104759	56985	FF	0.031	0.2333
185	28.214	91048	41345	FM	0.037	0.2028
186	28.514	249555	35664	FV	0.106	0.5558
187	28.756	1025312	110466	VV	0.122	2.2834
188	28.947	346177	52413	VV	0.096	0.7710
189	29.153	447377	39270	VV	0.148	0.9963
190	29.415	226519	21714	VV	0.143	0.5045
191	29.647	181553	15610	VV	0.152	0.4043
192	29.800	31010	7399	VV	0.070	0.0691
193	29.936	66083	9151	VV	0.103	0.1472
194	30.062	39147	7169	VV	0.081	0.0872
195	30.170	58232	8976	VV	0.092	0.1297
196	30.388	29780	3935	VV	0.107	0.0663
197	30.540	46816	5404	VV	0.118	0.1043
198	30.983	6202	795	VV	0.109	0.0138

199	31.422	1824	259	VV	0.103	0.0041

Total area = 4.49025E+007

User Modified

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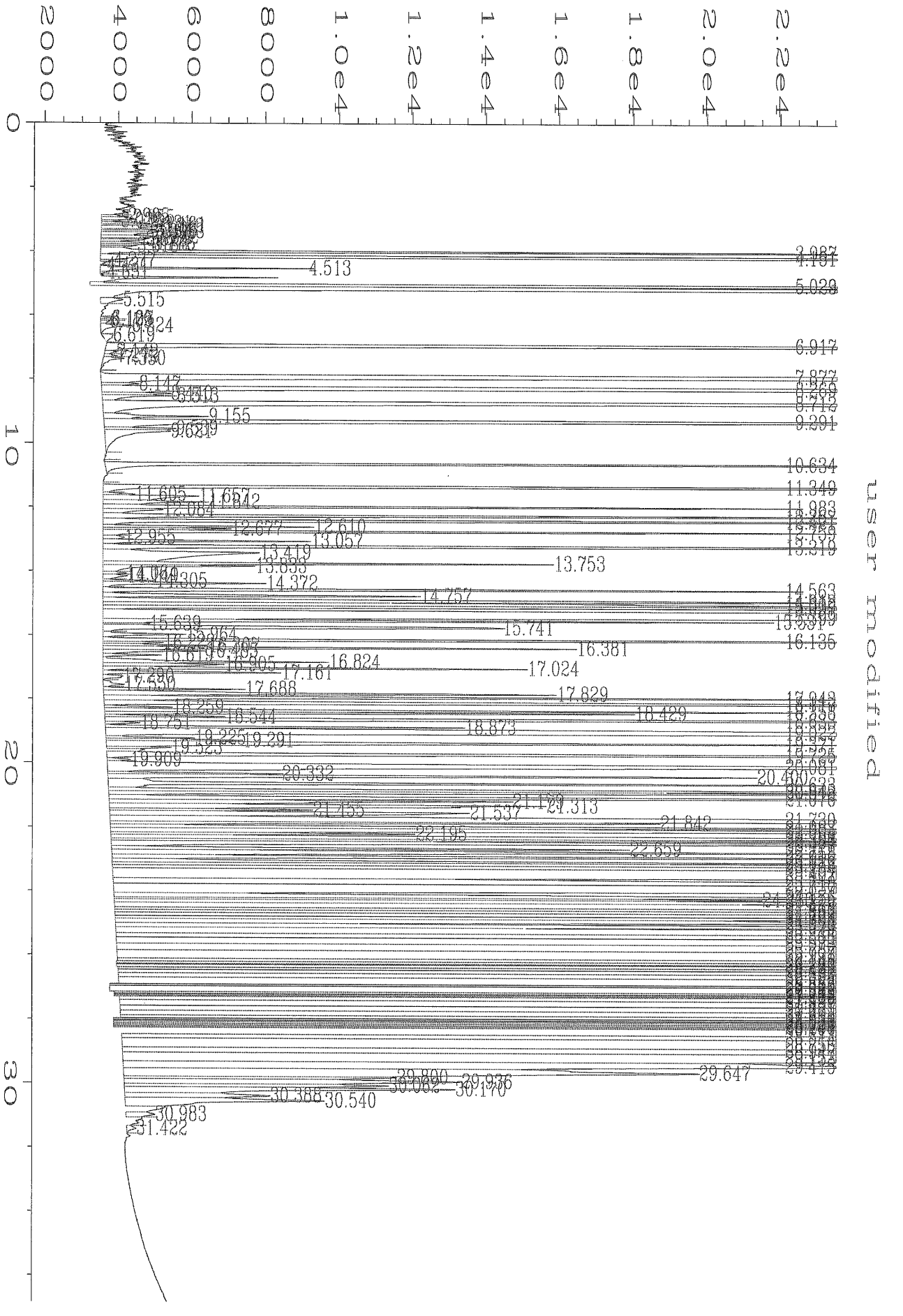
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User Input
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **10**
File Name: **2443510A**
Sample ID: **T-410**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **714**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **11:59** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **11:51** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.04	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.08			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.15**	0	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.03**	401768	I	I	H	290	290
74-98-6	Propane	P	5.20	**5.20**	**5.13**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.53**						137	351
106-98-9	1-Butene	P	7.29	7.22	**7.14**	848	I	I	H	364	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.27**	0	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.68	**8.71**	0	I	I	H	411	410
590-18-1	c-2-Butene	P	9.63	9.56	**9.54**	7151	I	I	H	431	431
78-78-4	i-Pentane	P	11.37	11.31	**11.35**	173797	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.24	**12.27**	90628	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.42**	**12.42**	119711	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.73	**12.76**	59352	I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.02	**13.06**	18209	I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.71	**13.75**	39970	I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.82	**14.91**	87661	I	I	H	567	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.00	**15.04**	122391	I	I	H	570	570
107-83-5	2-Methylpentane	P	15.08	15.02	**15.10**	149836	I	I	H	572	571
96-14-0	3-Methylpentane	P	15.55	15.49	**15.53**	57436	I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.11**	**16.14**	86565	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.83	**16.82**	23907	I	I	H	621	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.02	**17.02**	34907	I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.84**	**17.83**	48595	I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.10	**18.12**	171576	I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.34	**18.36**	60029	I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.41	**18.43**	42060	I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.62	**18.63**	138075	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.05	**19.02**	561351	I	I	H	689	690
142-82-5	n-Heptane	P	19.41	19.37	**19.37**	88204	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.05	**20.08**	315559	I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.89	**20.85**	100671	I	O	M	750	753
108-88-3	Toluene	P	21.12	**21.08**	**21.08**	117718	I	I	H	758	758
592-27-8	2-Methylheptane	P	21.33	21.29	**21.23**	11181	I	O	M	763	768
589-81-1	3-Methylheptane	p	21.55	21.51	**21.54**	62683	I	I	H	774	775
111-65-9	n-Octane	P	22.27	22.23	**22.31**	0	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.71	**23.72**	401141	I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	23.91	**23.84**	1035891	I	I	H	862	863
100-42-5	Styrene	P	24.40	24.36	**24.31**	0	I	I	H	880	881
95-47-6	o-xylene	P	24.57	24.53	**24.56**	246922	I	O	M	890	886
111-84-2	n-Nonane	P	24.87	24.83	**24.80**	0	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.32	**25.37**	0	I	O	M	924	919
103-65-1	n-propylbenzene	P	25.93	25.89	**25.94**	0	I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.13	**26.14**	307306	I	I	H	956	957
622-96-8	4-Ethyltoluene	P	26.26	26.22	**26.28**	71457	I	I	H	961	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.41	**26.43**	264601	I	O	M	968	964
611-14-3	2-Ethyltoluene	P	26.61	26.57	**26.52**	1023052	I	O	M	971	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.04	**27.04**	65550	I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.22	**27.21**	18293	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.51	**27.44**	0	I	O	M	1008	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.06	**28.06**	104328	I	I	H	1031	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.19	**28.18**	104759	I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	29.84	**29.94**	57106	I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.44	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					47666500		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					47666500		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					47666500		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	568.21	189.40	326.80	568.21	189.40	326.80	326.80	326.80
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.20	0.30	0.69	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	10.11	2.53	5.81	10.11	2.53	5.81	5.81	5.81
i-Pentane	72.2	5	245.80	49.16	145.46	245.80	49.16	145.46	145.46	145.46
1-Pentene	70.1	5	128.17	25.63	73.65	128.17	25.63	73.65	73.65	73.65
n-Pentane	72.1	5	169.30	33.86	100.06	169.30	33.86	100.06	100.06	100.06
t-2-Pentene	70.1	5	83.94	16.79	48.23	83.94	16.79	48.23	48.23	48.23
c-2-Pentene	70.1	5	25.75	5.15	14.80	25.75	5.15	14.80	14.80	14.80
2,2-Dimethylbutane	86.2	6	56.53	9.42	33.28	56.53	9.42	33.28	33.28	33.28
Cyclopentane	70.1	5	123.98	24.80	71.24	123.98	24.80	71.24	71.24	71.24
2,3-Dimethylbutane	86.2	6	173.09	28.85	101.92	173.09	28.85	101.92	101.92	101.92
2-Methylpentane	86.2	6	211.91	35.32	124.77	211.91	35.32	124.77	124.77	124.77
3-Methylpentane	86.2	6	81.23	13.54	47.83	81.23	13.54	47.83	47.83	47.83
n-Hexane	86.2	6	122.43	**20.40**	72.08	122.43	20.40	72.08	72.08	72.08
Methylcyclopentane	84.2	6	33.81	5.64	19.45	33.81	5.64	19.45	19.45	19.45
2,4-Dimethylpentane	100.2	7	49.37	7.05	28.96	49.37	7.05	28.96	28.96	28.96
Benzene	78.1	6	68.73	11.45	36.66	68.73	11.45	36.66	36.66	36.66
Cyclohexane	84.2	6	242.65	40.44	139.56	242.65	40.44	139.56	139.56	139.56
2-Methylhexane	100.2	7	84.90	12.13	49.81	84.90	12.13	49.81	49.81	49.81
2,3-Dimethylpentane	100.2	7	59.48	8.50	34.90	59.48	8.50	34.90	34.90	34.90
3-Methylhexane	100.2	7	195.28	27.90	114.56	195.28	27.90	114.56	114.56	114.56
2,2,4-Trimethylpentane	114.2	8	793.90	99.24	464.47	793.90	99.24	464.47	464.47	464.47
n-Heptane	100.2	7	124.74	17.82	73.18	124.74	17.82	73.18	73.18	73.18
Methylcyclohexane	98.2	7	446.29	63.76	256.59	446.29	63.76	256.59	256.59	256.59
2,3,4-Trimethylpentane	114.2	8	142.38	17.80	83.30	142.38	17.80	83.30	83.30	83.30
Toluene	92.1	7	166.49	23.78	89.77	166.49	23.78	89.77	89.77	89.77
2-Methylheptane	114.2	8	15.81	1.98	9.25	15.81	1.98	9.25	9.25	9.25
3-Methylheptane	114.2	8	88.65	11.08	51.86	88.65	11.08	51.86	51.86	51.86
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	567.32	70.92	308.66	567.32	70.92	308.66	308.66	308.66

m,p-xylene	106.2	8	1465.03	183.13	797.06	1,465.03	183.13	797.06	797.06	797.06
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	349.21	43.65	189.99	349.21	43.65	189.99	189.99	189.99
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	434.61	48.29	237.89	434.61	48.29	237.89	237.89	237.89
4-Ethyltoluene	120.2	9	101.06	11.23	55.32	101.06	11.23	55.32	55.32	55.32
1,3,5-Trimethylbenzene	120.2	9	374.22	41.58	204.83	374.22	41.58	204.83	204.83	204.83
2-Ethyltoluene	120.2	9	1446.87	160.76	791.96	1,446.87	160.76	791.96	791.96	791.96
1,2,4-Trimethylbenzene	120.2	9	92.71	10.30	50.74	92.71	10.30	50.74	50.74	50.74
n-Decane	142.3	10	25.87	2.59	15.09	25.87	2.59	15.09	15.09	15.09
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	147.55	14.75	81.15	147.55	14.75	81.15	81.15	81.15
1,4-Diethylbenzene	134.2	10	148.16	14.82	81.49	148.16	14.82	81.49	81.49	81.49
Undecane	156.3	11	80.76	7.34	47.03	80.76	7.34	47.03	47.03	47.03
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	67413.33	11235.6	39692.8	67,413.33	11,235.55	39,692.82	39,692.82	39,692.82
Total Non-Methane Hydrocarbons	16	1.0	67413.33	67413.3	44205.5	67,413.33	67,413.33	44,205.46	44,205.46	44,205.46

SDG: **224435**
Laboratory Number: **10**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0		=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0		=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0		=	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0		=	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					568.2		568.21		
0.0						0.00			
	0.0					0.00			
					1.2		1.20		
0.0						0.00			
					0.0		0.00		
					10.1		10.11		
	245.8					245.80			
					128.2		128.17		
169.3						169.30			
					83.9		83.94		
					25.8		25.75		
	56.5					56.53			
			124.0						123.98
	173.1					173.09			
	211.9					211.91			
	81.2					81.23			
122.4						122.43			
			33.8						33.81
	49.4					49.37			
		68.7							
			242.7			242.65			
	84.9					84.90			
	59.5					59.48			
	195.3					195.28			
	793.9					793.90			
124.7						124.74			
			446.3						446.29
	142.4					142.38			
		166.5							
	15.8					15.81			
	88.7					88.65			
0.0						0.00			
		567.3							

		1465.0							
		0.0							
		349.2							
0.0						0.00			
		0.0							
		0.0							
		434.6							
		101.1							
		374.2							
		1446.9							
		92.7							
25.9						25.87			
		0.0							
		147.5							
		148.2							
80.8						80.76			
0.0						0.00			
523.1	2198.3	5362.0	846.7	817.4	0.0	2964.1	817.4	0.0	604.1

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

68.73

166.49

567.32

				1465.03	
				0.00	
				349.21	
				0.00	
				0.00	
				434.61	
				101.06	
				374.22	
				1446.87	
				92.71	
				0.00	
				147.55	
				148.16	
0.0	0.0	0.0	0.0	5362.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Canister: 714
QC_Batch: 120324-GCK

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/03/24 **Time:** 11:51
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	189.40	2.30	6.90	326.80	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	2.53	2.30	6.90	5.81	J
78-78-4	i-Pentane	0.80	2.40	49.16	2.37	7.10	145.46	
109-67-1	1-Pentene	0.80	2.40	25.63	2.30	6.90	73.65	
109-66-0	n-Pentane	0.80	2.40	33.86	2.36	7.09	100.06	
646-04-8	t-2-Pentene	0.80	2.40	16.79	2.30	6.90	48.23	
627-20-3	c-2-Pentene	0.80	2.40	5.15	2.30	6.90	14.80	
75-83-2	2,2-Dimethylbutane	0.67	2.00	9.42	2.36	7.07	33.28	
287-92-3	Cyclopentane	0.80	2.40	24.80	2.30	6.90	71.24	
79-29-8	2,3-Dimethylbutane	0.67	2.00	28.85	2.36	7.07	101.92	
107-83-5	2-Methylpentane	0.67	2.00	35.32	2.36	7.07	124.77	
96-14-0	3-Methylpentane	0.67	2.00	13.54	2.36	7.07	47.83	
110-54-3	n-Hexane	0.67	2.00	20.40	2.36	7.07	72.08	
96-37-7	Methylcyclopentane	0.67	2.00	5.64	2.30	6.90	19.45	
108-08-7	2,4-Dimethylpentane	0.57	1.71	7.05	2.35	7.04	28.96	
71-43-2	Benzene	0.67	2.00	11.45	2.13	6.40	36.66	
110-82-7	Cyclohexane	0.67	2.00	40.44	2.30	6.90	139.56	
591-76-4	2-Methylhexane	0.57	1.71	12.13	2.35	7.04	49.81	
565-59-3	2,3-Dimethylpentane	0.57	1.71	8.50	2.35	7.04	34.90	
589-34-4	3-Methylhexane	0.57	1.71	27.90	2.35	7.04	114.56	
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	99.24	2.34	7.02	464.47	
142-82-5	n-Heptane	0.57	1.71	17.82	2.35	7.04	73.18	
108-87-2	Methylcyclohexane	0.57	1.71	63.76	2.30	6.90	256.59	
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	17.80	2.34	7.02	83.30	
108-88-3	Toluene	0.57	1.71	23.78	2.16	6.47	89.77	
592-27-8	2-Methylheptane	0.50	1.50	1.98	2.34	7.02	9.25	
589-81-1	3-Methylheptane	0.50	1.50	11.08	2.34	7.02	51.86	
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	70.92	2.18	6.53	308.66	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	183.13	2.18	6.53	797.06	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	43.65	2.18	6.53	189.99	
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	48.29	2.19	6.57	237.89	
622-96-8	4-Ethyltoluene	0.44	1.33	11.23	2.19	6.57	55.32	
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	41.58	2.19	6.57	204.83	
611-14-3	2-Ethyltoluene	0.44	1.33	160.76	2.19	6.57	791.96	
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	10.30	2.19	6.57	50.74	
124-18-5	n-Decane	0.40	1.20	2.59	2.33	7.00	15.09	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	14.75	2.20	6.60	81.15	
105-05-5	1,4-Diethylbenzene	0.40	1.20	14.82	2.20	6.60	81.49	
1120-21-4	Undecane	0.36	1.09	7.34	2.33	6.99	47.03	
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	11,235.55	26.50	79.49	39,692.82	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	67,413.33	29.51	88.52	44,205.46	

Sample Data Packages

SDG Number **224435**

Lab Id Number **11**

Client ID T-411

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 11

Client: C.E. Schmidt
Client ID: T-411
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 551
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:51
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11254K\2443511B.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-411
Run Time Bar Code:
Acquired on : 25 Nov 24 04:05 PM
Report Created on: 25 Nov 24 04:42 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443511B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.109	1061	412	BV	0.035	0.2980
2	3.230	950	543	VV	0.029	0.2669
3	3.355	1450	376	VV	0.050	0.4073
4	3.424	1398	561	VV	0.036	0.3926
5	3.581	1933	599	VV	0.050	0.5429
6	3.646	1044	542	VV	0.032	0.2932
7	4.075	1019	460	VV	0.034	0.2860
8	4.202	4896	1917	VV	0.038	1.3750
9	5.258	3250	1513	PV	0.033	0.9128
10	7.067	2164	905	BV	0.037	0.6078
11	7.485	3959	937	BV	0.058	1.1118
12	7.563	1413	373	VV	0.063	0.3969
13	7.689	1163	538	VV	0.033	0.3267
14	7.768	877	418	VV	0.040	0.2464
15	8.071	1663	323	BB	0.071	0.4670
16	8.406	12619	2575	BB	0.071	3.5438
17	9.288	4515	376	BB	0.151	1.2679
18	11.043	49913	6154	BV	0.104	14.0169
19	11.237	24895	3450	VV	0.094	6.9912
20	11.366	13548	2462	VV	0.070	3.8046
21	11.457	14737	1979	VV	0.097	4.1385
22	11.650	24199	2989	VV	0.104	6.7957
23	12.520	802	290	BB	0.044	0.2252
24	14.977	4105	1388	BV	0.046	1.1528
25	15.353	3754	566	BV	0.093	1.0543
26	15.615	2137	259	VB	0.108	0.6001
27	16.224	1846	632	BB	0.046	0.5185
28	16.960	22596	8095	BV	0.044	6.3456
29	17.941	1677	351	BB	0.070	0.4710
30	18.450	1155	181	BB	0.090	0.3242
31	22.831	2770	914	BB	0.048	0.7780
32	23.439	29283	6556	BV	0.066	8.2235
33	23.926	2359	366	VV	0.089	0.6626
34	24.742	1439	273	PV	0.088	0.4042
35	24.826	1013	272	VB	0.057	0.2846

36	25.346	2491	508	PV	0.073	0.6996
37	25.513	1479	261	VV	0.083	0.4154
38	25.687	1456	345	VV	0.065	0.4088
39	25.896	2085	386	PV	0.080	0.5857
40	26.028	6175	1156	VV	0.076	1.7340
41	26.422	3981	801	BV	0.073	1.1181
42	26.612	4892	991	VV	0.072	1.3739
43	26.698	4505	768	VV	0.088	1.2652
44	26.972	1125	230	PV	0.073	0.3159
45	27.102	11623	3550	VV	0.051	3.2640
46	27.183	1170	374	VB	0.052	0.3286
47	27.362	1472	349	BV	0.066	0.4134
48	27.448	3270	883	VV	0.056	0.9184
49	27.558	27942	5175	VV	0.081	7.8468
50	27.779	4647	838	VV	0.083	1.3051
51	27.914	3971	708	VV	0.081	1.1152
52	28.033	2008	501	VV	0.060	0.5640
53	28.140	9071	1238	VV	0.103	2.5474
54	28.434	7405	1442	VV	0.075	2.0797
55	28.865	6221	847	VV	0.100	1.7470
56	29.066	1494	347	VV	0.068	0.4197

Total area = 356090

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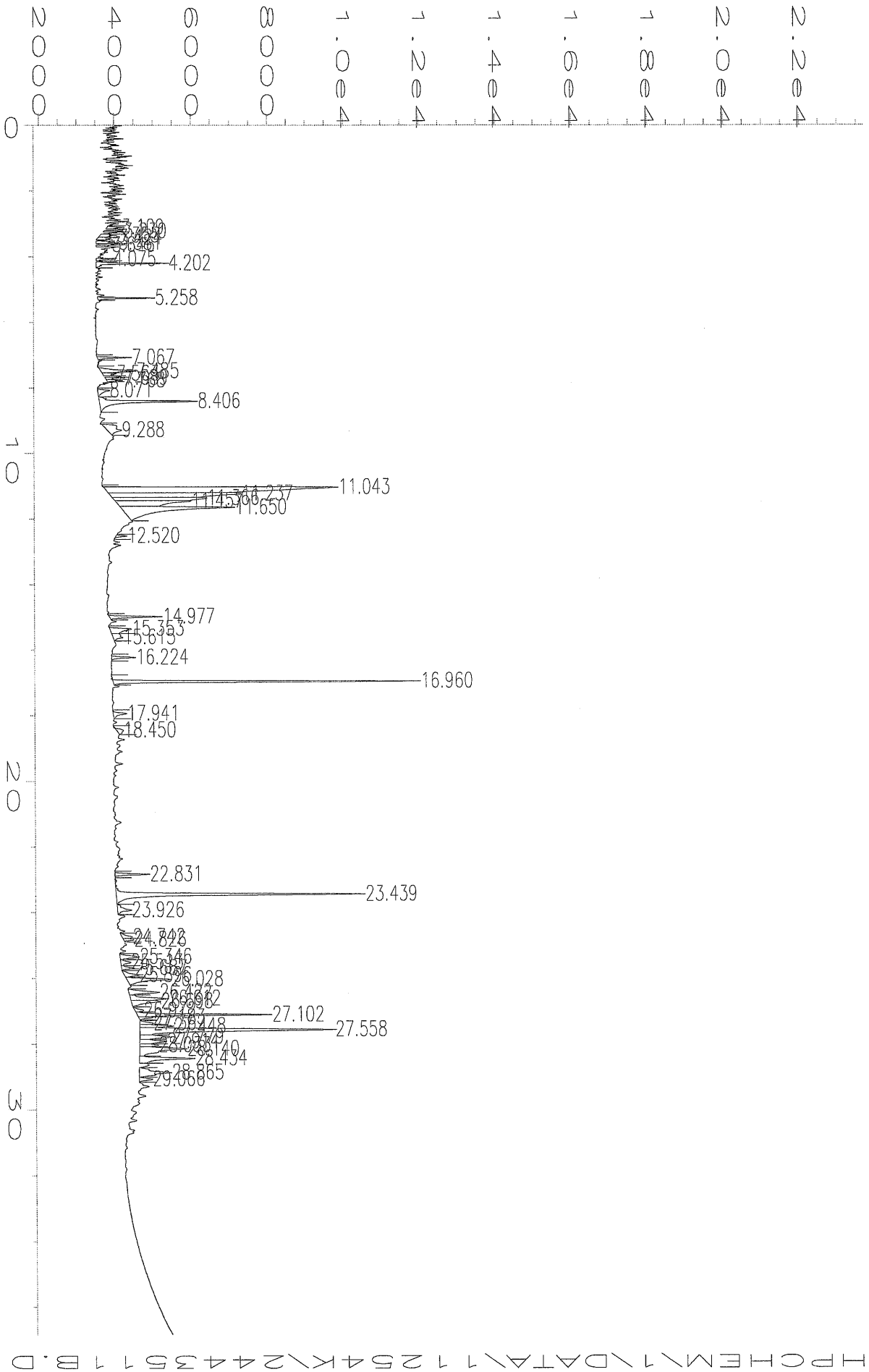
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30
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **11**
File Name: **2443511B**
Sample ID: **T-411**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/25/24**
QCBatch: **112524-GCK**
Can: **551**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **11:51** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **16:05** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **318104**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.09	**4.08**	1019	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.13			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.20	4896	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.10**		I	O	M	285	290
74-98-6	Propane	P	5.20	**5.20**	5.26	3250	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.66**						133	351
106-98-9	1-Butene	P	7.29	7.35						133	367
106-97-8	n-Butane	P	8.34	**8.34**	8.40	12619	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.81						196	410
590-18-1	c-2-Butene	P	9.63	9.69						196	431
78-78-4	i-Pentane	P	11.37	11.41	**11.46**	14737	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.34	**12.39**		I	I	H	497	495
109-66-0	n-Pentane	P	12.48	**12.52**	12.52	802	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.83	**12.85**		I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.12	**13.18**		I	I	H	518	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.81	**13.89**		I	I	H	537	537
287-92-3	Cyclopentane	P	14.88	14.92	**14.98**	4105	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.10						162	570
107-83-5	2-Methylpentane	P	15.08	15.12	**15.18**		I	I	H	572	571
96-14-0	3-Methylpentane	P	15.55	15.59	**15.62**	2137	I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.21**	16.22	1846	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.91	**16.96**	22596	I	I	H	623	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.10						102	626
71-43-2	Benzene	P	17.87	**17.92**	17.94	1677	I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.21	**18.27**		I	O	M	663	658
591-76-4	2-Methylhexane	P	18.38	18.45	**18.45**	1155	I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.52	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane	P	18.66	18.73	**18.78**		I	I	H	679	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.16	**19.21**		I	I	H	692	690
142-82-5	n-Heptane	P	19.41	19.48	**19.48**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.16	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.00	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.19**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.41**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.93**	2359	I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.54						-62	881
95-47-6	o-xylene	P	24.57	24.71	**24.74**	1439	I	O	M	890	886
111-84-2	n-Nonane	P	24.87	25.01	**25.01**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.51**	1479	I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.03**	6175	I	O	M	943	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	955	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**	3981	I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.61**	4892	I	O	M	968	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.70**	4505	I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.18**	1170	I	I	H	992	991
124-18-5	n-Decane	P	27.26	27.40	**27.36**	1472	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69	**27.78**	4647	I	I	H	1016	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-13	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.43**	7405	I	I	H	1040	1037
1120-21-4	Undecane	P	29.86	30.02	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.62	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					356090		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					356090		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					356090		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112524-GCK		
Hexane Std Area:	318104		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.44	0.72	0.83	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	6.92	3.46	4.27	6.92	3.46	4.27	4.27	4.27
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	4.60	1.53	2.77	4.60	1.53	2.77	2.77	2.77
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	17.85	4.46	10.62	17.85	4.46	10.62	10.62	10.62
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	20.84	4.17	12.33	20.84	4.17	12.33	12.33	12.33
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	1.13	0.23	0.67	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	5.81	1.16	3.34	5.81	1.16	3.34	3.34	3.34
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	3.02	0.50	1.78	ND	ND	ND	0	
n-Hexane	86.2	6	2.61	**0.44**	1.54	ND	ND	ND	0	
Methylcyclopentane	84.2	6	31.96	5.33	18.38	31.96	5.33	18.38	18.38	18.38
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	2.37	0.40	1.27	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	1.63	0.23	0.96	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	3.34	0.42	1.82	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	2.04	0.25	1.11	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	2.09	0.23	1.14	ND	ND	ND	0	
n-propylbenzene	120.2	9	8.73	0.97	4.78	8.73	0.97	4.78	4.78	4.78
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	5.63	0.63	3.08	5.63	0.63	3.08	3.08	3.08
1,3,5-Trimethylbenzene	120.2	9	6.92	0.77	3.79	6.92	0.77	3.79	3.79	3.79
2-Ethyltoluene	120.2	9	6.37	0.71	3.49	6.37	0.71	3.49	3.49	3.49
1,2,4-Trimethylbenzene	120.2	9	1.65	0.18	0.91	ND	ND	ND	0	
n-Decane	142.3	10	2.08	0.21	1.21	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	6.57	0.73	3.60	6.57	0.73	3.60	3.60	3.60
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	10.47	1.05	5.76	10.47	1.05	5.76	5.76	5.76
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	503.61	83.9	296.5	503.61	83.93	296.52	296.52	296.52
Total Non-Methane Hydrocarbons	16	1.0	503.61	503.6	330.2	503.61	503.61	330.23	330.23	330.23

SDG: **224435**
Laboratory Number: **11**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0		=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	J	=	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.4		1.44		
					0.0			0.00	
6.9						6.92			
					0.0		0.00		
4.6						4.60			
		0.0				0.00			
					0.0		0.00		
17.8						17.85			
					0.0		0.00		
					0.0		0.00		
		20.8				20.84			
					0.0		0.00		
1.1						1.13			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				5.8					5.81
		0.0				0.00			
		0.0				0.00			
		3.0				3.02			
2.6						2.61			
				32.0					31.96
		0.0				0.00			
			2.4						
				0.0		0.00			
		1.6				1.63			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
			3.3						

		0.0							
		0.0							
		2.0							
0.0						0.00			
		2.1							
		8.7							
		0.0							
		5.6							
		6.9							
		6.4							
		1.7							
2.1						2.08			
		6.6							
		0.0							
		10.5							
0.0						0.00			
0.0						0.00			
35.2	25.5	56.2	37.8	1.4	0.0	60.7	1.4	0.0	37.8

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

2.37

0.00

3.34

0.00
0.00
2.04

2.09
8.73
0.00
5.63
6.92
6.37
1.65

6.57
0.00
10.47

0.0	0.0	0.0	0.0	56.2	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 11

File Name: 2443511B
Description: T-411
Canister: 551
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 11/25/24 **Time:** 16:05
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.46	2.47	7.40	4.27	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.53	2.41	7.23	2.77	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	4.46	2.38	7.14	10.62	
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	4.17	2.37	7.10	12.33	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	1.16	2.30	6.90	3.34	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	5.33	2.30	6.90	18.38	
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.97	2.19	6.57	4.78	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	0.63	2.19	6.57	3.08	J
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	0.77	2.19	6.57	3.79	J
611-14-3	2-Ethyltoluene	0.44	1.33	0.71	2.19	6.57	3.49	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	0.73	2.19	6.57	3.60	J
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	1.05	2.20	6.60	5.76	J
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	83.93	26.50	79.49	296.52	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	503.61	29.51	88.52	330.23	

Sample Data Packages

SDG Number **224435**

Lab Id Number **12**

Client ID T-412

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 12

Client: C.E. Schmidt
Client ID: T-412
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 881
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 12:06
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11254K\2443512A.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-412
Run Time Bar Code:
Acquired on : 25 Nov 24 05:11 PM
Report Created on: 25 Nov 24 05:48 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443512A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.233	928	386	VV	0.032	0.3658
2	3.364	996	480	PV	0.035	0.3927
3	3.994	1574	1077	PV	0.023	0.6205
4	4.129	1032	468	VV	0.034	0.4071
5	4.216	2993	1113	VV	0.040	1.1800
6	4.683	832	334	VB	0.041	0.3279
7	5.213	2332	673	BV	0.051	0.9196
8	5.295	3640	991	VV	0.052	1.4352
9	7.090	4703	1612	BV	0.043	1.8541
10	7.321	1775	674	VV	0.039	0.7000
11	7.351	916	849	VV	0.018	0.3613
12	7.373	2873	1033	VV	0.046	1.1328
13	8.108	4908	684	BB	0.098	1.9352
14	8.468	1250	320	BV	0.058	0.4927
15	8.558	4616	991	VV	0.066	1.8200
16	8.656	4551	1293	VB	0.047	1.7942
17	9.709	4170	213	PB	0.250	1.6442
18	11.478	2111	670	BV	0.048	0.8321
19	11.739	7566	517	VV	0.180	2.9831
20	11.876	9660	960	VV	0.126	3.8086
21	12.078	3055	592	VV	0.072	1.2043
22	12.173	2457	413	VV	0.077	0.9688
23	14.841	1091	347	PV	0.048	0.4303
24	14.967	5036	1401	VV	0.054	1.9856
25	15.310	7212	1258	PV	0.081	2.8434
26	16.950	10777	3792	BV	0.044	4.2488
27	17.931	2494	467	BV	0.077	0.9832
28	18.193	1392	404	VB	0.053	0.5487
29	19.075	5655	1277	VB	0.062	2.2296
30	22.408	888	259	BB	0.055	0.3500
31	22.826	2481	785	BB	0.049	0.9782
32	23.430	37396	9095	BV	0.062	14.7436
33	24.746	875	147	PV	0.092	0.3449
34	26.023	1951	397	PB	0.073	0.7690
35	26.422	1398	290	BV	0.071	0.5513

36	26.603	2409	339	VB	0.097	0.9499
37	27.097	20443	5869	VV	0.053	8.0597
38	27.438	7595	2204	VV	0.054	2.9945
39	27.568	7253	1402	VV	0.079	2.8593
40	27.723	28755	4670	VV	0.089	11.3369
41	27.888	8005	1149	VV	0.095	3.1561
42	28.123	6334	813	VV	0.105	2.4973
43	28.420	4655	1112	VV	0.063	1.8352
44	28.859	4145	618	VV	0.093	1.6343
45	29.348	9660	1065	VV	0.127	3.8084
46	29.544	1448	277	VB	0.075	0.5710
47	30.605	2831	616	BB	0.067	1.1161
48	31.503	2523	381	VB	0.094	0.9948

Total area = 253643

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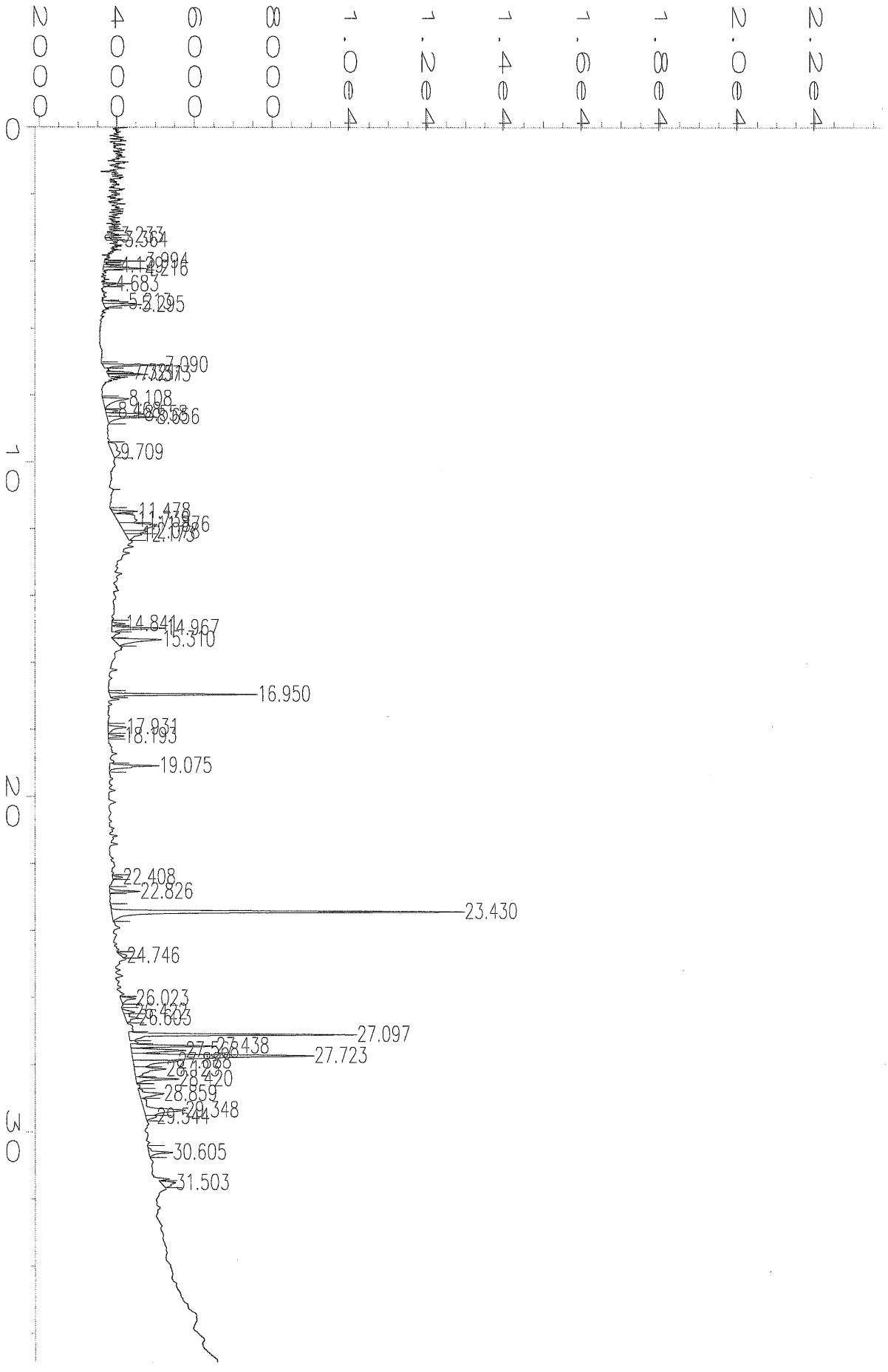
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1.4e4
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10
20
30
7.090
8.108
9.709
16.950
19.075
23.430
27.097
27.723
C:\HPCHEM\1\DATA\1254K\244351 2A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **12**
File Name: **2443512A**
Sample ID: **T-412**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/25/24**
QCBatch: **112524-GCK**
Can: **881**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:06** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **17:11** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **318104**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

			RT Win	C2-C4	C5-C12
			RT	**0.3**	**0.1**
			RTI	**3**	**3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.11	**4.13**	1032	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.15			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.22**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.10**	2993	I	I	H	288	290
74-98-6	Propane	P	5.20	**5.20**	**5.21**	2332	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.61**						133	351
106-98-9	1-Butene	P	7.29	7.30	**7.32**	1775	I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75	**8.67**	4551	I	I	H	408	410
590-18-1	c-2-Butene	P	9.63	9.63	**9.71**	4170	I	I	H	433	431
78-78-4	i-Pentane	P	11.37	11.41	**11.47**	2111	I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.34	**12.39**		I	I	H	497	495
109-66-0	n-Pentane	P	12.48	**12.52**	**12.52**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.83	**12.85**		I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.12	**13.18**		I	I	H	518	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.81	**13.89**		I	I	H	537	537
287-92-3	Cyclopentane	P	14.88	14.92	**14.97**	5036	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.10						162	570
107-83-5	2-Methylpentane	P	15.08	15.12	**15.18**		I	I	H	572	571
96-14-0	3-Methylpentane	P	15.55	15.59	**15.62**		I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.21**	**16.22**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.91	**16.95**	10777	I	I	H	622	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.10						102	626
71-43-2	Benzene	P	17.87	**17.92**	**17.93**	2494	I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.20	**18.19**	1392	I	I	H	660	658
591-76-4	2-Methylhexane	P	18.38	18.44	**18.45**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.51	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane	P	18.66	18.72	**18.78**		I	I	H	679	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.15	**19.08**	5655	I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.47	**19.48**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.15	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.99	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.18**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.41**	888	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.54						-62	881
95-47-6	o-xylene	P	24.57	24.71	**24.74**	875	I	O	M	890	886
111-84-2	n-Nonane	P	24.87	25.01	**25.01**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.02**	1951	I	O	M	942	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**	1398	I	I	H	958	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.60**	2409	I	I	H	966	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.70**		I	O	M	970	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.18**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.40	**27.43**	7595	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69	**27.72**	28755	I	I	H	1011	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-43	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.42**	4655	I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	30.01	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.61	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					253643		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					253643		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					253643		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112524-GCK		
Hexane Std Area:	318104		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.46	0.73	0.84	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	4.23	1.41	2.43	4.23	1.41	2.43	2.43	2.43
Propane	44.1	3	3.30	1.10	1.99	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.51	0.63	1.44	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	6.44	1.61	3.70	6.44	1.61	3.70	3.70	3.70
c-2-Butene	56.1	4	5.90	1.47	3.39	5.90	1.47	3.39	3.39	3.39
i-Pentane	72.2	5	2.99	0.60	1.77	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	7.12	1.42	4.09	7.12	1.42	4.09	4.09	4.09
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	15.24	2.54	8.77	15.24	2.54	8.77	8.77	8.77
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	3.53	0.59	1.88	ND	ND	ND	0	
Cyclohexane	84.2	6	1.97	0.33	1.13	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	8.00	1.00	4.68	8.00	1.00	4.68	4.68	4.68
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	1.26	0.16	0.73	ND	ND	ND	0	

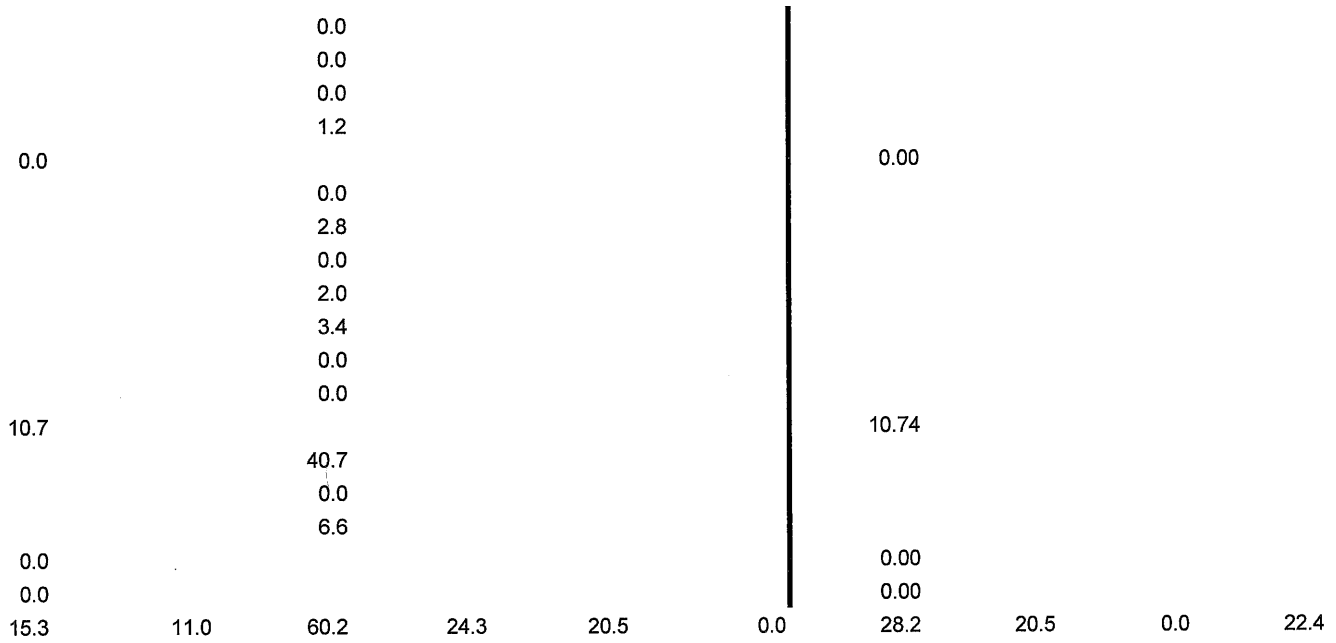
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	1.24	0.15	0.67	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	2.76	0.31	1.51	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	1.98	0.22	1.08	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	3.41	0.38	1.86	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	10.74	1.07	6.26	10.74	1.07	6.26	6.26	6.26
1,2,3-Trimethylbenzene	120.2	9	40.67	4.52	22.26	40.67	4.52	22.26	22.26	22.26
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	6.58	0.66	3.62	6.58	0.66	3.62	3.62	3.62
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	358.72	59.8	211.2	358.72	59.79	211.21	211.21	211.21
Total Non-Methane Hydrocarbons	16	1.0	358.72	358.7	235.2	358.72	358.72	235.23	235.23	235.23

SDG: **224435**
Laboratory Number: **12**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	J	=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	J	=	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.5		1.46		
					0.0			0.00	
	0.0					0.00			
					4.2		4.23		
	3.3					3.30			
		0.0				0.00			
					2.5		2.51		
	0.0					0.00			
					6.4		6.44		
					5.9		5.90		
		3.0				2.99			
					0.0		0.00		
	0.0					0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				7.1					7.12
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				15.2					15.24
		0.0				0.00			
			3.5						
				2.0		1.97			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		8.0				8.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
	1.3					1.26			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2.0
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10.7
10.74
40.7
0.0
6.6
0.0
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0.0
0.00
15.3
11.0
60.2
24.3
20.5
0.0
28.2
20.5
0.0
22.4

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

3.53

0.00

0.00
0.00
0.00
1.24

0.00
2.76
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3.41
0.00
0.00

40.67
0.00
6.58

0.0	0.0	0.0	0.0	60.2	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		12	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum [(Astdni) / (Cstdni)]$_i$

2) ppbC = $\frac{\text{6 Carbons} \times \text{Ansamp} \times \text{CDF} \times 1000}{\text{(Avg RFn)} \times \text{SV}}$ = **Cn**

3) Amount ppbv = $\frac{\text{Cn}}{\text{C\#}}$

4) Amount ug/m3 = $\frac{\text{(amt(ppbv)} \times \text{MW}}{24.4}$

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	1.76E+04	1032	1.5	0.73	0.84
Acetylene	2	TRG	26.0	1.76E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	1.76E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	1.76E+04	2993	4.2	1.41	2.43
Propane	3	TRG	44.1	1.76E+04	2332	3.3	1.10	1.99
i-Butane	4	TRG	58.1	1.76E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	1.76E+04	1775	2.5	0.63	1.44
n-Butane	4	TRG	58.1	1.76E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	1.76E+04	4551	6.4	1.61	3.70
c-2-Butene	4	TRG	56.1	1.76E+04	4170	5.9	1.47	3.39
i-Pentane	5	TRG	72.2	1.76E+04	2111	3.0	0.60	1.77
1-Pentene	5	TRG	70.1	1.76E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	1.76E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	1.76E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	1.76E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	1.76E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	1.76E+04	5036	7.1	1.42	4.09
2,3-Dimethylbutane	6	TRG	86.2	1.76E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	1.76E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	1.76E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	1.76E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	1.76E+04	10777	15.2	2.54	8.77
2,4-Dimethylpentane	7	TRG	100.2	1.76E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	1.76E+04	2494	3.5	0.59	1.88
Cyclohexane	6	TRG	84.2	1.76E+04	1392	2.0	0.33	1.13
2-Methylhexane	7	TRG	100.2	1.76E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	1.76E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	1.76E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	1.76E+04	5655	8.0	1.00	4.68
n-Heptane	7	TRG	100.2	1.76E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	1.76E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	1.76E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	1.76E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	1.76E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	1.76E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	1.76E+04	888	1.3	0.16	0.73
Ethylbenzene	8	TRG	106.2	1.76E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	1.76E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	1.76E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	1.76E+04	875	1.2	0.15	0.67
n-Nonane	9	TRG	128.3	1.76E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	1.76E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	1.76E+04	1951	2.8	0.31	1.51
3-Ethyltoluene	9	TRG	120.2	1.76E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	1.76E+04	1398	2.0	0.22	1.08
1,3,5-Trimethylbenzene	9	TRG	120.2	1.76E+04	2409	3.4	0.38	1.86
2-Ethyltoluene	9	TRG	120.2	1.76E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	1.76E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	1.76E+04	7595	10.7	1.07	6.26
1,2,3-Trimethylbenzene	9	TRG	120.2	1.76E+04	28755	40.7	4.52	22.26
1,3-Diethylbenzene	10	TRG	134.2	1.76E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	1.76E+04	4655	6.6	0.66	3.62
Undecane	11	TRG	156.3	1.76E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	1.76E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	1.76E+04	253643	358.7	59.79	211.21
Total Non-Methane Hydrocarbons	1	TRG	16.0	1.76E+04	253643	358.7	358.72	235.23

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Canister: 881
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 11/25/24 **Time:** 17:11
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	1.41	2.30	6.90	2.43	J
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.61	2.30	6.90	3.70	J
590-18-1	c-2-Butene	1.00	3.00	1.47	2.30	6.90	3.39	J
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	1.42	2.30	6.90	4.09	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	2.54	2.30	6.90	8.77	
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	1.00	2.34	7.02	4.68	J
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	1.07	2.33	7.00	6.26	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	4.52	2.19	6.57	22.26	
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	0.66	2.20	6.60	3.62	J
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	59.79	26.50	79.49	211.21	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	358.72	29.51	88.52	235.23	

Sample Data Packages

SDG Number 224435

Lab Id Number 13

Client ID T-413

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 13

Client: C.E. Schmidt
Client ID: T-413
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 766
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

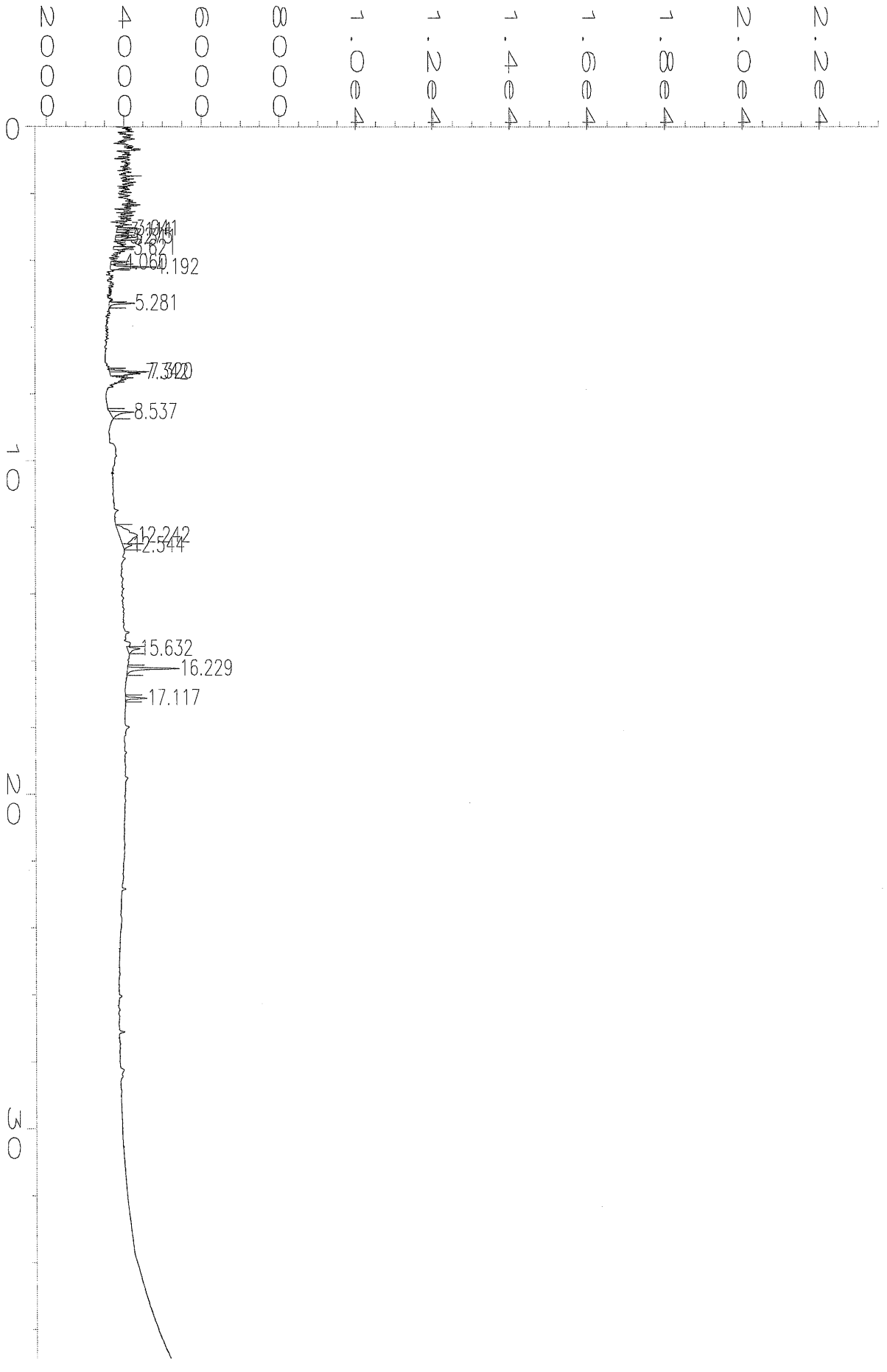
Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11254K\2443513A.D
Operator : SS
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-413
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 25 Nov 24 06:00 PM
Instrument Method: KTO3DHC.MTH
Report Created on: 25 Nov 24 06:37 PM
Analysis Method : KTO3DHC.MTH
Sample Info : SCHMIDT, 200 ML

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443513A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.041	1065	482	BV	0.032	2.6371
2	3.111	1076	345	VV	0.048	2.6652
3	3.275	816	361	VV	0.032	2.0195
4	3.311	1374	475	VV	0.039	3.4013
5	3.621	1704	518	VV	0.047	4.2194
6	4.060	905	340	VV	0.040	2.2418
7	4.192	3936	1199	PV	0.047	9.7440
8	5.281	2006	674	VB	0.045	4.9665
9	7.320	1754	1031	BV	0.028	4.3419
10	7.342	3969	960	VV	0.069	9.8258
11	8.537	2668	636	BB	0.056	6.6066
12	12.242	9445	479	BV	0.243	23.3849
13	12.544	1274	237	VB	0.074	3.1538
14	15.632	1732	328	VB	0.075	4.2885
15	16.229	4859	1351	BB	0.054	12.0312
16	17.117	1806	567	BB	0.048	4.4725

Total area = 40389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8000
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1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
4.192
5.281
8.537
12.242
15.632
16.229
17.117
C:\HPCHEM\1\DATA\1254K\244351 3A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **13**
File Name: **2443513A**
Sample ID: **T-413**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/25/24**
QCBatch: **112524-GCK**
Can: **766**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **13:37** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **18:00** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **318104**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

			PAMS	STD	Corrected	Samp	Sample	RT	RTI	Flag	Calc	EAS
CAS#	Compound			RT	RT	RT	Area	in/out	in/out		RTI	RTI
74-85-1	Ethene		P	4.06	4.08	**4.06**	905	NA	NA	NA		
74-86-2	Acetylene		P	4.10	4.12			NA	NA	NA		
74-84-0	Ethane		P	4.17	**4.17**	4.19	3936	I	I	H	200	200
115-07-1	Propene		P	5.11	5.11	**5.10**		I	O	M	283	290
74-98-6	Propane		P	5.20	**5.20**	5.28	2006	I	I	H	300	300
75-28-5	i-Butane		P	6.60	**6.68**						127	351
106-98-9	1-Butene		P	7.29	7.37	**7.32**	1754	I	I	H	367	367
106-97-8	n-Butane		P	8.34	**8.34**	8.34		I	I	H	400	400
624-64-6	t-2-Butene		P	8.75	8.75	**8.67**		I	I	H	408	410
590-18-1	c-2-Butene		P	9.63	9.63	**9.71**		I	I	H	433	431
78-78-4	i-Pentane		P	11.37	11.43	**11.47**		I	I	H	475	473
109-67-1	1-Pentene		P	12.30	12.36	**12.39**		I	I	H	496	495
109-66-0	n-Pentane		P	12.48	**12.54**	12.54	1274	I	I	H	500	500
646-04-8	t-2-Pentene		P	12.79	12.85	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene		P	13.08	13.14	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane		P	13.77	13.83	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane		P	14.88	14.94	**14.97**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane		P	15.06	15.12						160	570
107-83-5	2-Methylpentane		P	15.08	15.14	**15.18**		I	I	H	572	571
96-14-0	3-Methylpentane		P	15.55	15.61	**15.63**	1732	I	I	H	584	583
110-54-3	n-Hexane		P	16.17	**16.23**	16.23	4859	I	I	H	600	600
96-37-7	Methylcyclopentane		P	16.86	16.92	**16.95**		I	I	H	622	622
108-08-7	2,4-Dimethylpentane		P	17.05	17.11	**17.12**	1806	I	I	H	627	626
71-43-2	Benzene		P	17.87	**17.93**	17.93		I	I	H	652	651
110-82-7	Cyclohexane		P	18.14	18.20	**18.19**		I	I	H	660	658
591-76-4	2-Methylhexane		P	18.38	18.44	**18.45**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane		P	18.45	18.51	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane		P	18.66	18.72	**18.78**		I	I	H	678	678
540-84-1	2,2,4-Trimethylpentane		P	19.09	19.15	**19.08**		I	I	H	688	690
142-82-5	n-Heptane		P	19.41	19.47	19.48		I	I	H	700	700
108-87-2	Methylcyclohexane		P	20.09	20.15	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane		P	20.93	20.99	**21.07**		I	I	H	754	753
108-88-3	Toluene		P	21.12	**21.18**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane		P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane		p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane		P	22.27	22.41	**22.41**		I	I	H	800	800

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.54						-62	881
95-47-6	o-xylene	P	24.57	24.71	**24.74**		I	O	M	890	886
111-84-2	n-Nonane	P	24.87	25.01	**25.01**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.02**		I	O	M	942	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**		I	I	H	958	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.60**		I	I	H	966	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.70**		I	O	M	970	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.18**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.40	**27.43**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69	**27.72**		I	I	H	1011	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-43	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.42**		I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	30.01	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.61	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					40389		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					40389		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					40389		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112524-GCK		
Hexane Std Area:	318104		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.28	0.64	0.74	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	5.57	2.78	3.43	5.57	2.78	3.43	3.43	3.43
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	2.84	0.95	1.71	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.48	0.62	1.43	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	1.80	0.36	1.06	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	2.45	0.41	1.44	ND	ND	ND	0	
n-Hexane	86.2	6	6.87	**1.15**	4.05	6.87	1.15	4.05	4.05	4.05
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	2.55	0.36	1.50	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	57.12	9.5	33.6	57.12	9.52	33.63	33.63	33.63
Total Non-Methane Hydrocarbons	16	1.0	57.12	57.1	37.5	57.12	57.12	37.46	37.46	37.46

SDG: **224435**
Laboratory Number: **13**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.3		1.28		
					0.0			0.00	
5.6						5.57			
					0.0		0.00		
2.8						2.84			
		0.0				0.00			
					2.5		2.48		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
1.8						1.80			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		2.4				2.45			
6.9						6.87			
				0.0					0.00
		2.6				2.55			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
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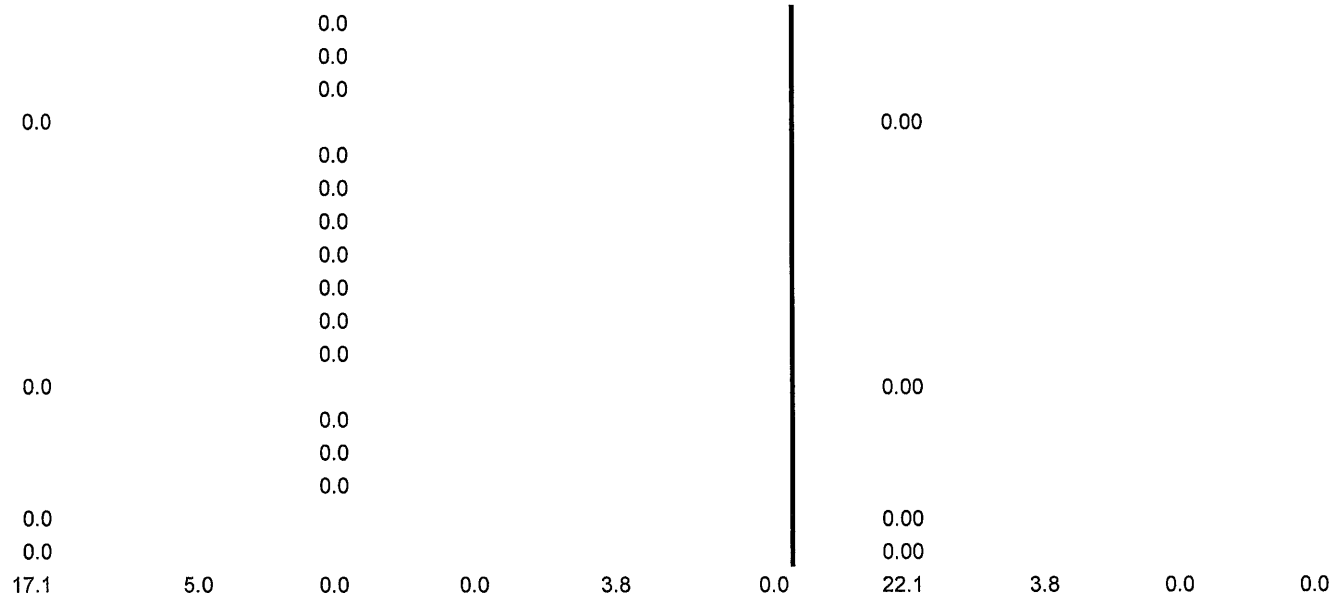
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 13

File Name: 2443513A
Description: T-413
Canister: 766
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 11/25/24 **Time:** 18:00
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.78	2.47	7.40	3.43	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	1.15	2.36	7.07	4.05	J
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9.52	26.50	79.49	33.63	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	57.12	29.51	88.52	37.46	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **14**

Client ID T-414

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 14

Client: C.E. Schmidt
Client ID: T-414
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 725
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

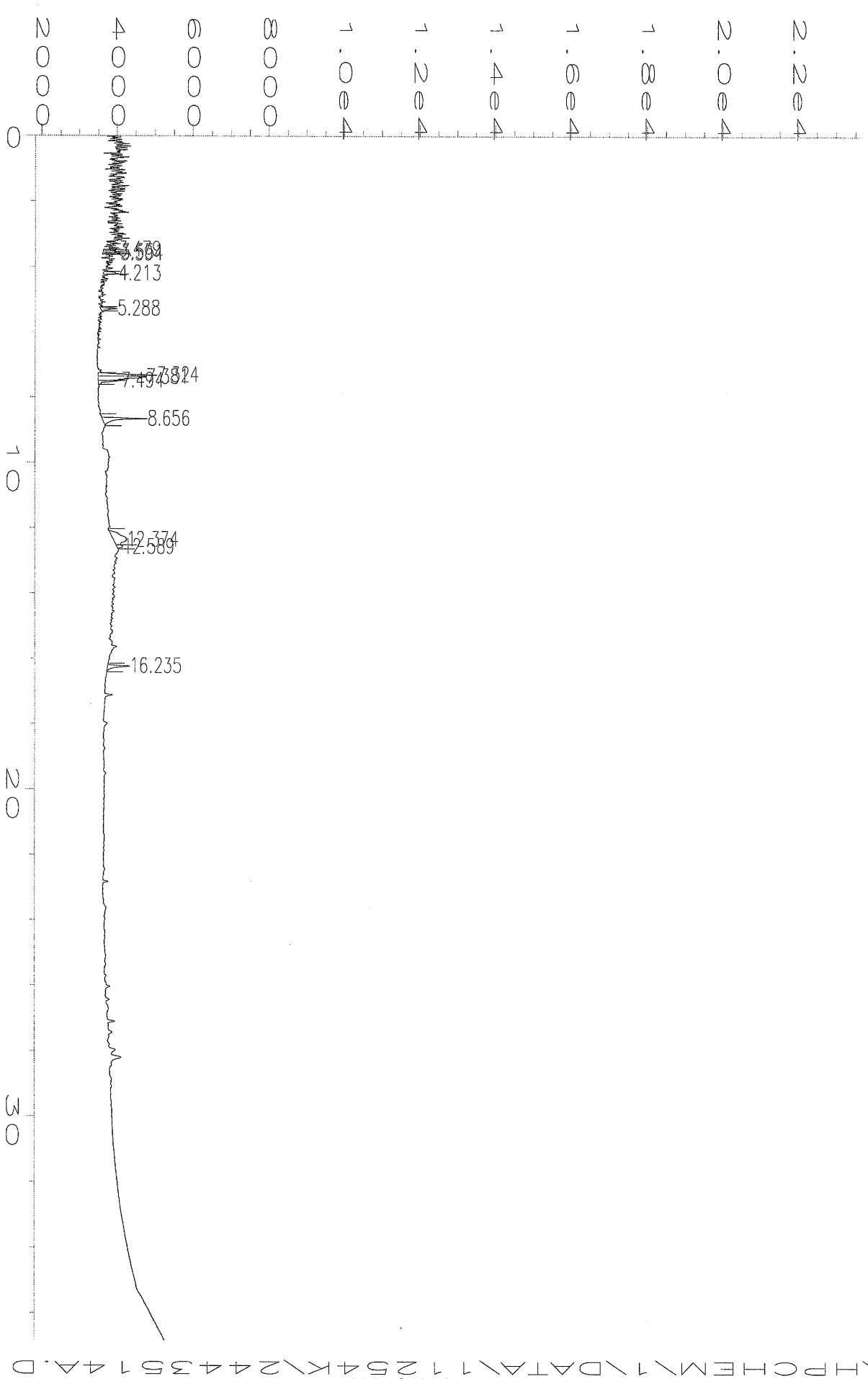
Data File Name : C:\HPCHEM\1\DATA\11254K\2443514A.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-414
Run Time Bar Code:
Acquired on : 25 Nov 24 06:50 PM
Report Created on: 25 Nov 24 07:27 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443514A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.479	895	377	VV	0.040	2.7464
2	3.551	1104	485	VV	0.031	3.3875
3	3.594	955	482	VV	0.029	2.9311
4	4.213	1298	419	PV	0.052	3.9842
5	5.288	1392	458	VV	0.044	4.2709
6	7.324	4698	1561	VV	0.038	14.4180
7	7.381	6914	1291	VV	0.069	21.2191
8	7.494	1625	622	VB	0.044	4.9862
9	8.656	4495	1205	BB	0.049	13.7946
10	12.374	6017	340	BV	0.216	18.4642
11	12.589	807	144	VB	0.076	2.4776
12	16.235	2385	580	BB	0.060	7.3200

Total area = 32586


2000
4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
4.213
5.288
8.656
16.235
C:\HPCHEM\1\DATA\1254K\244351 4A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **14**
File Name: **2443514A**
Sample ID: **T-414**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/25/24**
QCBatch: **112524-GCK**
Can: **725**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: **TO-14FID** TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **13:37** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **18:50** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **318104**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

											RT Win C2-C4	C5-C12
										RT	**0.3**	**0.1**
										RTI	**3**	**3**
CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI	
74-85-1	Ethene	P	4.06	4.10	**4.06**		NA	NA	NA			
74-86-2	Acetylene	P	4.10	4.14			NA	NA	NA			
74-84-0	Ethane	P	4.17	**4.17**	4.21	1298	I	I	H	200	200	
115-07-1	Propene	P	5.11	5.11	**5.10**		I	O	M	282	290	
74-98-6	Propane	P	5.20	**5.20**	5.29	1392	I	I	H	300	300	
75-28-5	i-Butane	P	6.60	**6.69**						127	351	
106-98-9	1-Butene	P	7.29	7.38	**7.38**	6914	I	I	H	369	367	
106-97-8	n-Butane	P	8.34	**8.34**	8.34		I	I	H	400	400	
624-64-6	t-2-Butene	P	8.75	8.75	**8.66**	4495	I	I	H	408	410	
590-18-1	c-2-Butene	P	9.63	9.63	**9.71**		I	I	H	432	431	
78-78-4	i-Pentane	P	11.37	11.48	**11.47**		I	I	H	474	473	
109-67-1	1-Pentene	P	12.30	12.41	**12.37**	6017	I	I	H	495	495	
109-66-0	n-Pentane	P	12.48	**12.59**	12.59	807	I	I	H	500	500	
646-04-8	t-2-Pentene	P	12.79	12.90	**12.85**		I	I	H	507	510	
627-20-3	c-2-Pentene	P	13.08	13.19	**13.18**		I	I	H	516	518	
75-83-2	2,2-Dimethylbutane	P	13.77	13.88	**13.89**		I	I	H	535	537	
287-92-3	Cyclopentane	P	14.88	14.99	**14.97**		I	I	H	565	567	
79-29-8	2,3-Dimethylbutane	P	15.06	15.17						155	570	
107-83-5	2-Methylpentane	P	15.08	15.19	**15.18**		I	I	H	571	571	
96-14-0	3-Methylpentane	P	15.55	15.66	**15.63**		I	I	H	583	583	
110-54-3	n-Hexane	P	16.17	**16.28**	16.24	2385	I	I	H	600	600	
96-37-7	Methylcyclopentane	P	16.86	16.93	**16.95**		I	I	H	622	622	
108-08-7	2,4-Dimethylpentane	P	17.05	17.12	**17.12**		I	I	H	627	626	
71-43-2	Benzene	P	17.87	**17.94**	17.93		I	I	H	652	651	
110-82-7	Cyclohexane	P	18.14	18.20	**18.19**		I	I	H	660	658	
591-76-4	2-Methylhexane	P	18.38	18.44	**18.45**		I	I	H	668	670	
565-59-3	2,3-Dimethylpentane	P	18.45	18.51	**18.57**		I	I	H	672	671	
589-34-4	3-Methylhexane	P	18.66	18.72	**18.78**		I	I	H	678	678	
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.15	**19.08**		I	I	H	688	690	
142-82-5	n-Heptane	P	19.41	19.47	19.48		I	I	H	700	700	
108-87-2	Methylcyclohexane	P	20.09	20.15	**20.23**		I	O	M	726	722	
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.99	**21.07**		I	I	H	754	753	
108-88-3	Toluene	P	21.12	**21.18**	21.26		I	I	H	761	758	
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768	
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775	
111-65-9	n-Octane	P	22.27	22.41	22.41		I	I	H	800	800	

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.54						-62	881
95-47-6	o-xylene	P	24.57	24.71	**24.74**		I	O	M	890	886
111-84-2	n-Nonane	P	24.87	25.01	**25.01**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.02**		I	O	M	942	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**		I	I	H	958	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.60**		I	I	H	966	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.70**		I	O	M	970	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.18**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.40	**27.43**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69	**27.72**		I	I	H	1011	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-43	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.42**		I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	30.01	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.61	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					32586		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					32586		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					32586		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112524-GCK		
Hexane Std Area:	318104		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	1.84	0.92	1.13	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	1.97	0.66	1.19	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	9.78	2.44	5.62	9.78	2.44	5.62	5.62	5.62
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	6.36	1.59	3.65	6.36	1.59	3.65	3.65	3.65
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	8.51	1.70	4.89	8.51	1.70	4.89	4.89	4.89
n-Pentane	72.1	5	1.14	0.23	0.67	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	3.37	**0.56**	1.99	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	46.09	7.7	27.1	46.09	7.68	27.13	27.13	27.13
Total Non-Methane Hydrocarbons	16	1.0	46.09	46.1	30.2	46.09	46.09	30.22	30.22	30.22

SDG: **224435**
Laboratory Number: **14**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
	1.8					1.84			
					0.0		0.00		
	2.0					1.97			
		0.0				0.00			
					9.8		9.78		
	0.0					0.00			
					6.4		6.36		
					0.0		0.00		
		0.0				0.00			
					8.5		8.51		
	1.1					1.14			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	3.4					3.37			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
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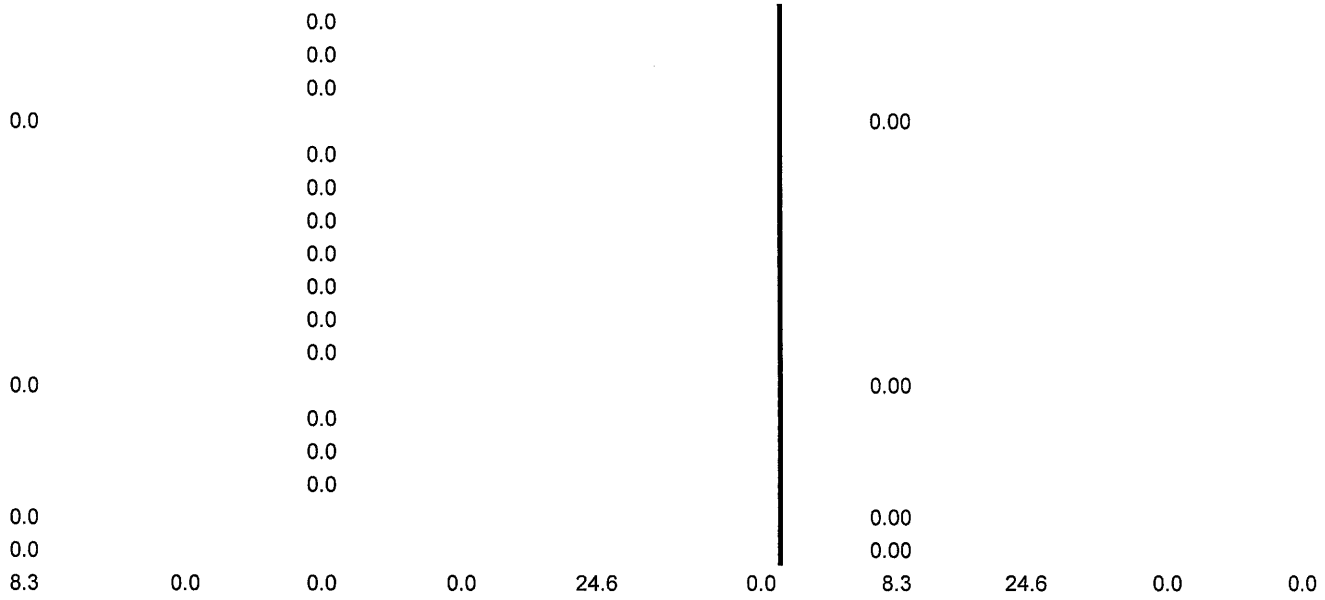
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Canister: 725
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 11/25/24 **Time:** 18:50
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	2.44	2.30	6.90	5.62	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.59	2.30	6.90	3.65	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.70	2.30	6.90	4.89	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	7.68	26.50	79.49	27.13	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	46.09	29.51	88.52	30.22	J

Sample Data Packages

SDG Number 224435

Lab Id Number 15

Client ID T-415

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 15

Client: C.E. Schmidt
Client ID: T-415
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 896
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:38
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

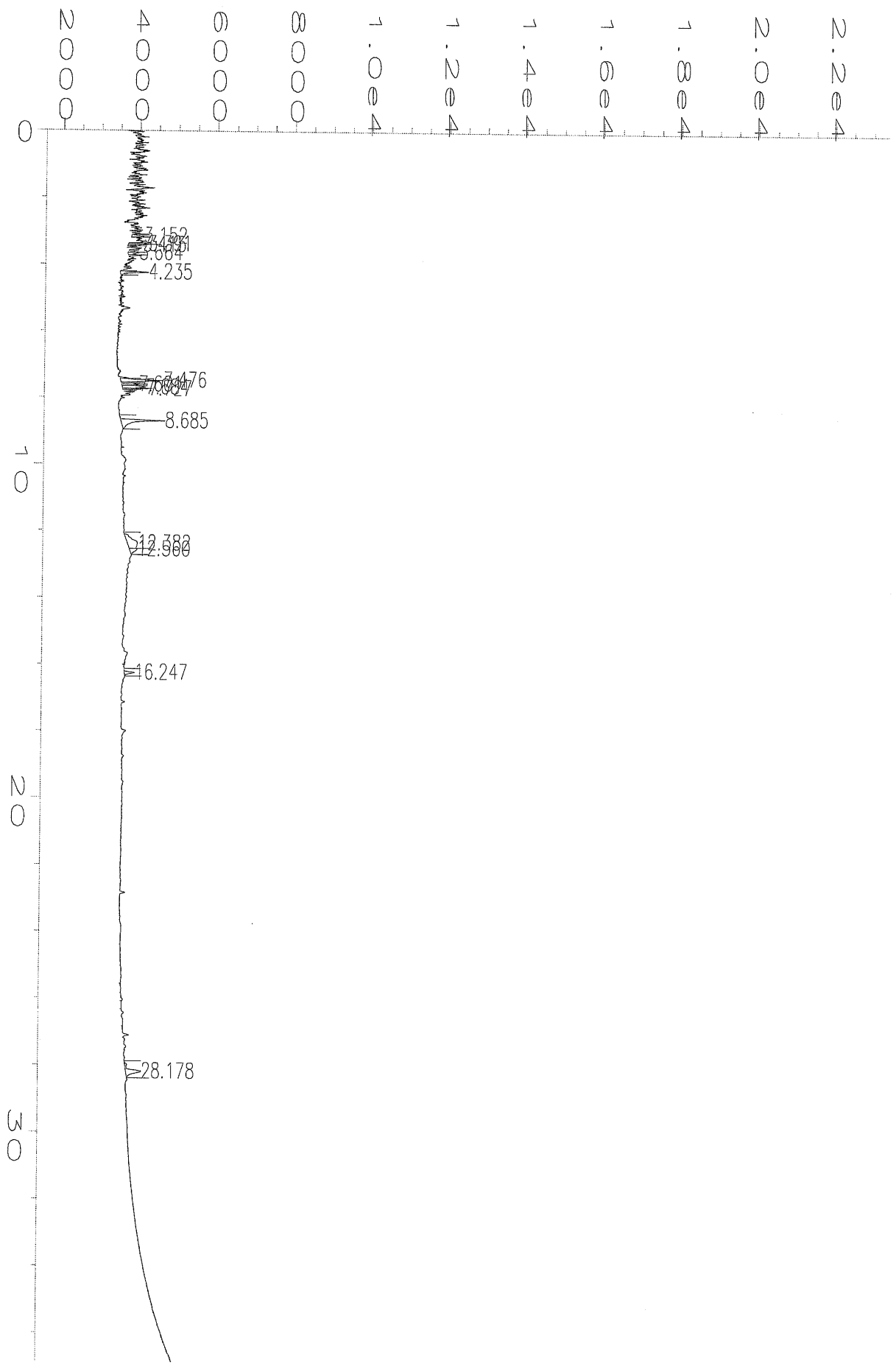
Data File Name : C:\HPCHEM\1\DATA\11254K\2443515A.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-415
Run Time Bar Code:
Acquired on : 25 Nov 24 07:47 PM
Report Created on: 25 Nov 24 08:24 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443515A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.152	920	354	PV	0.038	3.2585
2	3.391	1025	523	VV	0.033	3.6298
3	3.415	873	482	VV	0.030	3.0928
4	3.664	828	297	VV	0.042	2.9328
5	4.235	1905	728	PV	0.042	6.7441
6	7.476	3989	1137	VV	0.056	14.1229
7	7.601	881	454	VV	0.029	3.1191
8	7.684	2247	613	VV	0.053	7.9573
9	7.727	805	678	VV	0.018	2.8515
10	8.685	4913	1146	BB	0.056	17.3959
11	12.382	4615	260	BV	0.249	16.3409
12	12.560	1198	194	VB	0.091	4.2417
13	16.247	926	259	BB	0.054	3.2792
14	28.178	3116	387	BB	0.119	11.0335

Total area = 28243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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **15**
File Name: **2443515A**
Sample ID: **T-415**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/25/24**
QCBatch: **112524-GCK**
Can: **896**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **13:38** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **19:47** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **318104**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.13	**4.06**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.17			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.24	1905	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.10**		I	O	M	282	290
74-98-6	Propane	P	5.20	**5.20**	5.29		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.69**						127	351
106-98-9	1-Butene	P	7.29	7.38	**7.48**	3989	I	O	M	372	367
106-97-8	n-Butane	P	8.34	**8.34**	8.34		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75	**8.69**	4913	I	I	H	408	410
590-18-1	c-2-Butene	P	9.63	9.63	**9.71**		I	I	H	432	431
78-78-4	i-Pentane	P	11.37	11.45	**11.47**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.38	**12.38**	4615	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.56**	12.56	1198	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.87	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.16	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.85	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.96	**14.97**		I	I	H	565	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.14						160	570
107-83-5	2-Methylpentane	P	15.08	15.16	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.63	**15.63**		I	I	H	583	583
110-54-3	n-Hexane	P	16.17	**16.25**	16.25	926	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.94	**16.95**		I	I	H	622	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.13	**17.12**		I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.95**	17.93		I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.20	**18.19**		I	I	H	660	658
591-76-4	2-Methylhexane	P	18.38	18.44	**18.45**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.51	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane	P	18.66	18.72	**18.78**		I	I	H	678	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.15	**19.08**		I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.47	19.48		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.15	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.99	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.18**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	22.41		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.54						-62	881
95-47-6	o-xylene	P	24.57	24.71	**24.74**		I	O	M	890	886
111-84-2	n-Nonane	P	24.87	25.01	**25.01**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.02**		I	O	M	942	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**		I	I	H	958	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.60**		I	I	H	966	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.70**		I	O	M	970	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.18**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.40	**27.43**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69	**27.72**		I	I	H	1011	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24	**28.18**	3116	I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.42**		I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	30.01	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.61	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					28243		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					28243		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					28243		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112524-GCK		
Hexane Std Area:	318104		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	2.69	1.35	1.66	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	5.64	1.41	3.24	5.64	1.41	3.24	3.24	3.24
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	6.95	1.74	3.99	6.95	1.74	3.99	3.99	3.99
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	6.53	1.31	3.75	6.53	1.31	3.75	3.75	3.75
n-Pentane	72.1	5	1.69	0.34	1.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	1.31	**0.22**	0.77	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	4.41	0.44	2.42	4.41	0.44	2.42	2.42	2.42
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	39.94	6.7	23.5	ND	ND	ND	0	
Total Non-Methane Hydrocarbons	16	1.0	39.94	39.9	26.2	ND	ND	ND	0	

SDG: **224435**
Laboratory Number: **15**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	J	=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
	2.7					2.69			
					0.0		0.00		
	0.0					0.00			
		0.0				0.00			
					5.6		5.64		
	0.0					0.00			
					6.9		6.95		
					0.0		0.00		
		0.0				0.00			
					6.5		6.53		
	1.7					1.69			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	1.3					1.31			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
			0.0						

		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		4.4							
		0.0							
0.0						0.00			
0.0						0.00			
5.7	0.0	4.4	0.0	19.1	0.0	5.7	19.1	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
4.41
0.00

0.0	0.0	0.0	0.0	4.4	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 15

File Name: 2443515A
Description: T-415
Canister: 896
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 11/25/24 **Time:** 19:47
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.41	2.30	6.90	3.24	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.74	2.30	6.90	3.99	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.31	2.30	6.90	3.75	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.44	2.20	6.60	2.42	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 16

Client ID T-416

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 16

Client: C.E. Schmidt
Client ID: T-416
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 659
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:24
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

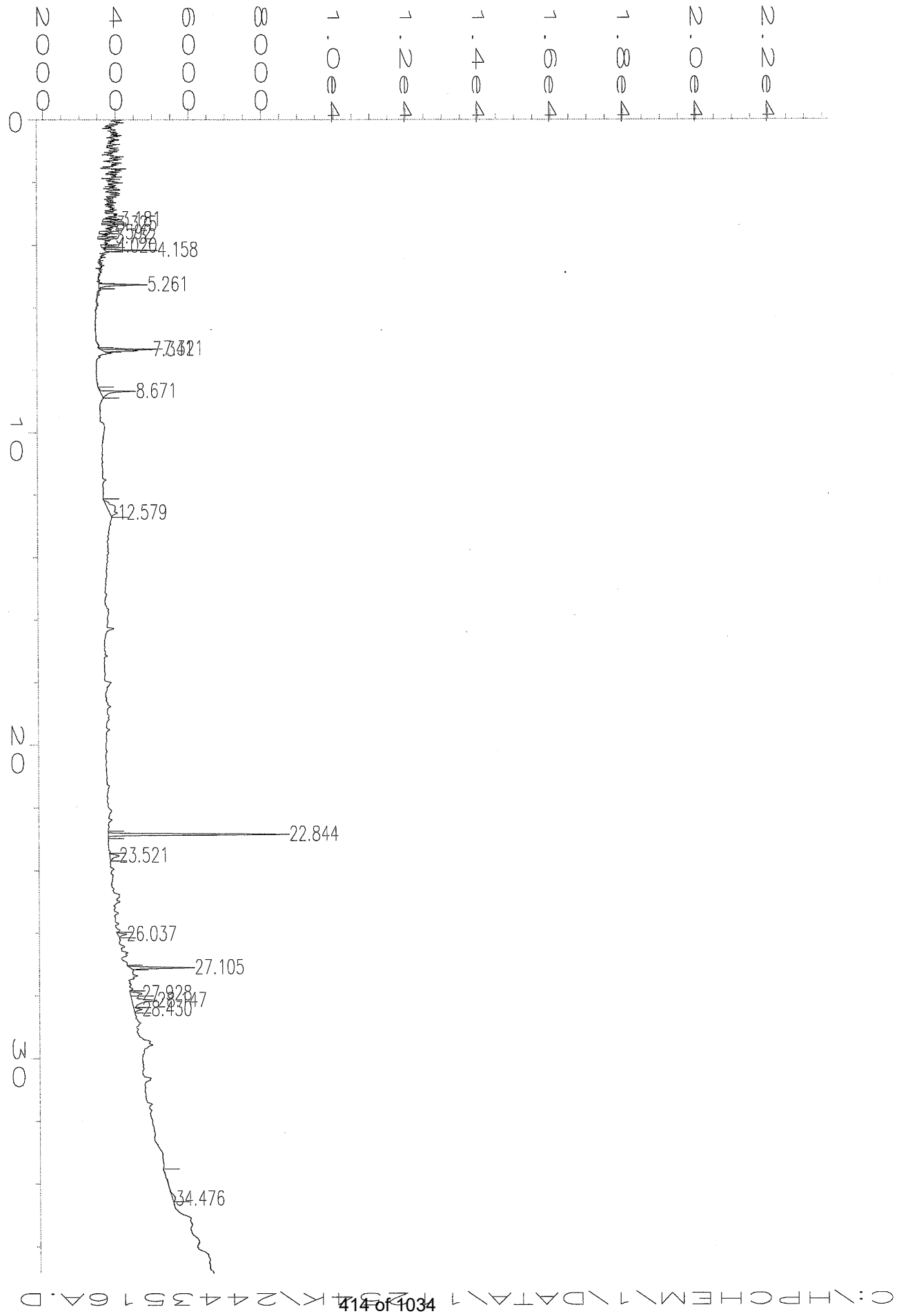
Data File Name : C:\HPCHEM\1\DATA\11254K\2443516A.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-416
Run Time Bar Code:
Acquired on : 25 Nov 24 08:43 PM
Report Created on: 25 Nov 24 09:20 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443516A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.181	1457	496	PV	0.039	2.5098
2	3.325	960	416	VV	0.036	1.6529
3	3.592	1121	384	VV	0.043	1.9308
4	3.732	1011	446	VV	0.033	1.7405
5	4.020	967	419	VV	0.032	1.6660
6	4.158	2770	1457	PV	0.029	4.7694
7	5.261	3820	1342	PV	0.041	6.5779
8	7.321	2345	1740	PV	0.022	4.0385
9	7.341	4023	1414	VV	0.038	6.9273
10	8.671	3472	995	BB	0.047	5.9793
11	12.579	4397	208	BB	0.258	7.5720
12	22.844	14347	4991	BB	0.045	24.7061
13	23.521	1493	253	BB	0.080	2.5713
14	26.037	1045	239	PB	0.058	1.7991
15	27.105	5301	1781	PV	0.046	9.1286
16	27.928	1814	324	PV	0.078	3.1231
17	28.147	5726	689	VV	0.111	9.8607
18	28.430	973	224	VB	0.062	1.6752
19	34.476	1029	74	BV	0.194	1.7715

Total area = 58071


2000
4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
4.158
5.261
8.671
12.579
22.844
23.521
26.037
27.105
34.476
C:\HPCHEM\1\DATA\1 [illegible]K\24435 16A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **16**
File Name: **2443516A**
Sample ID: **T-416**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/25/24**
QCBatch: **112524-GCK**
Can: **659**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: **TO-14FID** TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **13:24** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **20:43** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **318104**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

			RT Win	C2-C4	C5-C12
		RT		**0.3**	**0.1**
		RTI		**3**	**3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.05	**4.02**	967	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.09			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.16	2770	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.10**		I	O	M	285	290
74-98-6	Propane	P	5.20	**5.20**	5.26	3820	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.66**						129	351
106-98-9	1-Butene	P	7.29	7.35	**7.34**	4023	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	8.34		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75	**8.67**	3472	I	I	H	408	410
590-18-1	c-2-Butene	P	9.63	9.63	**9.71**		I	I	H	432	431
78-78-4	i-Pentane	P	11.37	11.47	**11.47**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.40	**12.38**		I	I	H	495	495
109-66-0	n-Pentane	P	12.48	**12.58**	12.58	4397	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.89	**12.85**		I	I	H	507	510
627-20-3	c-2-Pentene	P	13.08	13.18	**13.18**		I	I	H	516	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.87	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.98	**14.97**		I	I	H	565	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.16						157	570
107-83-5	2-Methylpentane	P	15.08	15.18	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.65	**15.63**		I	I	H	583	583
110-54-3	n-Hexane	P	16.17	**16.27**	16.25		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.94	**16.95**		I	I	H	622	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.13	**17.12**		I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.95**	17.93		I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.20	**18.19**		I	I	H	660	658
591-76-4	2-Methylhexane	P	18.38	18.44	**18.45**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.51	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane	P	18.66	18.72	**18.78**		I	I	H	678	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.15	**19.08**		I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.47	**19.48**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.15	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.99	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.18**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	22.41		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.93**		I	O	M	858	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	865	863
100-42-5	Styrene	P	24.40	24.54						-62	881
95-47-6	o-xylene	P	24.57	24.71	**24.74**		I	O	M	890	886
111-84-2	n-Nonane	P	24.87	25.01	**25.01**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.51**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.04**	1045	I	O	M	943	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.42**		I	I	H	958	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.60**		I	I	H	966	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.70**		I	O	M	970	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22	**27.18**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.40	**27.43**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69	**27.72**		I	I	H	1011	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24	**28.15**	5726	I	O	M	1027	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.43**	973	I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	30.01	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.61	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					58071		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					58071		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					58071		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112524-GCK		
Hexane Std Area:	318104		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.37	0.68	0.79	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	3.92	1.96	2.42	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	5.40	1.80	3.25	5.40	1.80	3.25	3.25	3.25
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	5.69	1.42	3.27	5.69	1.42	3.27	3.27	3.27
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	4.91	1.23	2.82	4.91	1.23	2.82	2.82	2.82
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	6.22	1.24	3.68	6.22	1.24	3.68	3.68	3.68
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	1.48	0.16	0.81	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	8.10	0.81	4.45	8.10	0.81	4.45	4.45	4.45
1,4-Diethylbenzene	134.2	10	1.38	0.14	0.76	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	82.13	13.7	48.4	82.13	13.69	48.36	48.36	48.36
Total Non-Methane Hydrocarbons	16	1.0	82.13	82.1	53.9	82.13	82.13	53.85	53.85	53.85

SDG: **224435**
Laboratory Number: **16**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	J	=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.4		1.37		
					0.0			0.00	
3.9						3.92			
					0.0		0.00		
5.4						5.40			
		0.0				0.00			
					5.7		5.69		
0.0						0.00			
					4.9		4.91		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
6.2						6.22			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
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0.0						0.00			
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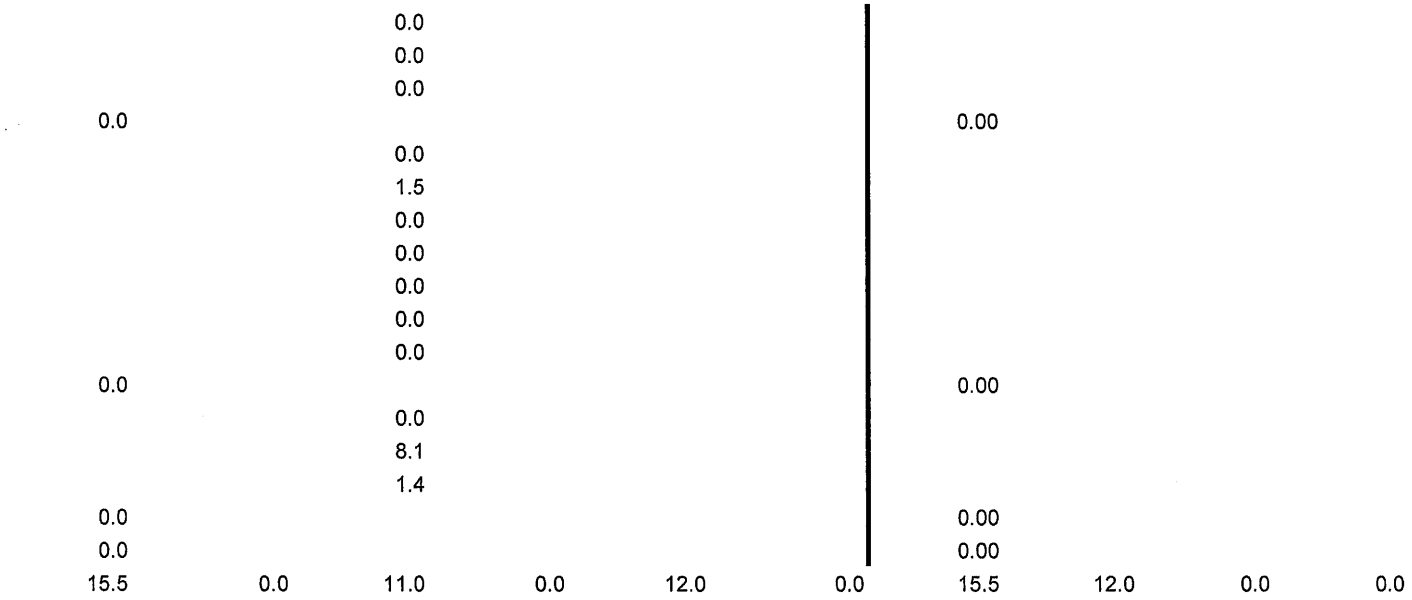
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
1.48
0.00
0.00
0.00
0.00
0.00

0.00
8.10
1.38

0.0	0.0	0.0	0.0	11.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Canister: 659
QC_Batch: 112524-GCK

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 11/25/24 **Time:** 20:43
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.80	2.41	7.23	3.25	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.42	2.30	6.90	3.27	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.23	2.30	6.90	2.82	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	1.24	2.36	7.09	3.68	J
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.81	2.20	6.60	4.45	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	13.69	26.50	79.49	48.36	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	82.13	29.51	88.52	53.85	J

Sample Data Packages

SDG Number 224435

Lab Id Number 17

Client ID T-417

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 17

Client: C.E. Schmidt
Client ID: T-417
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 899
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 13:29
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11264K\2443517A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-417
Run Time Bar Code:
Acquired on : 26 Nov 24 01:36 PM
Report Created on: 26 Nov 24 02:13 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443517A.D

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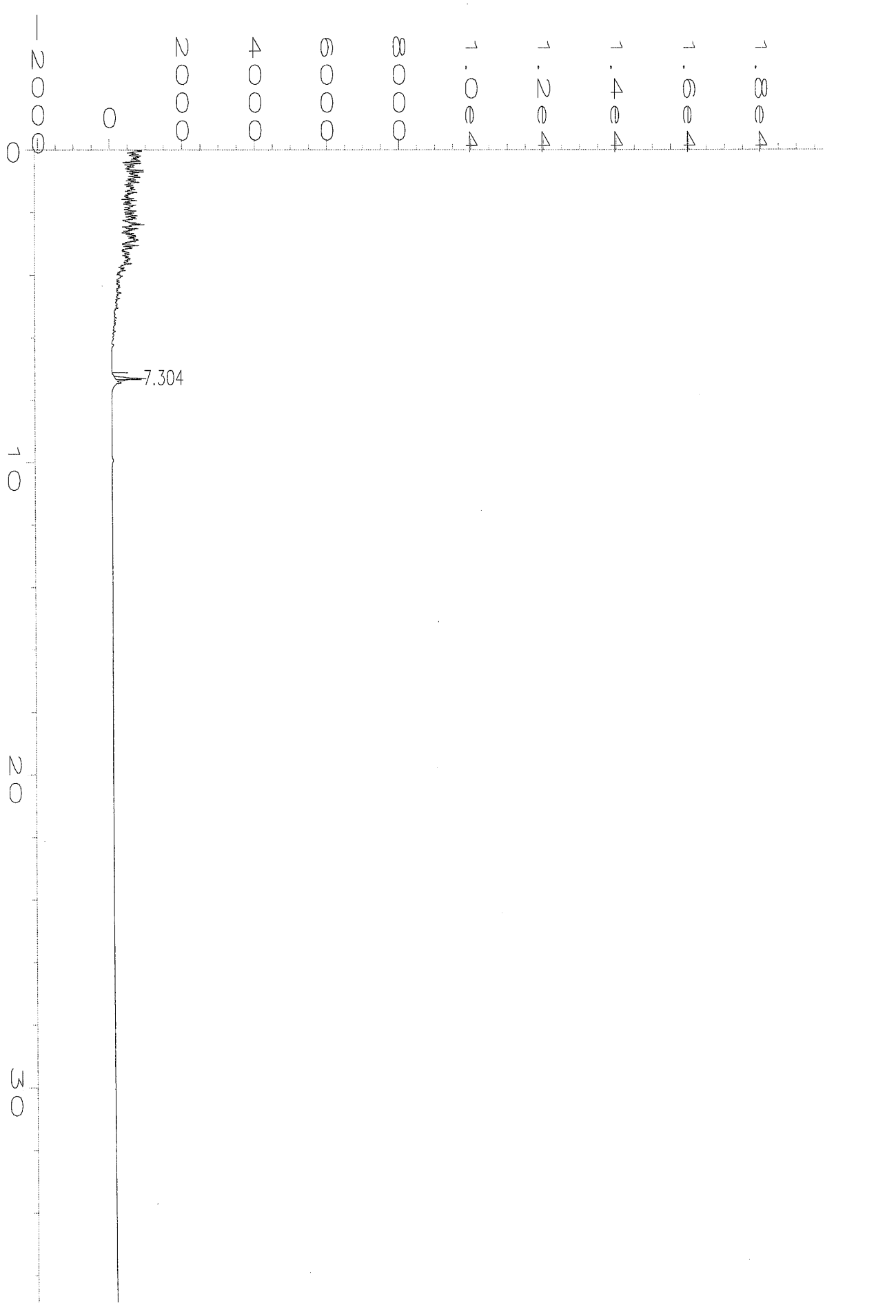
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **17**
File Name: **2443517A**
Sample ID: **T-417**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/26/24**
QCBatch: **112624-GCK**
Can: **899**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **13:29** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **13:36** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **343092**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

		PAMS	STD	Corrected	Samp	Sample	RT	RTI	Flag	Calc	EAS
CAS#	Compound		RT	RT	RT	Area	in/out	in/out		RTI	RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.18		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	5.22		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31	**7.30**	2237	I	I	H	366	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	12.55		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	16.28		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	17.98		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	19.52		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	22.39		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					2237		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					2237		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					2237		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	3.16	0.79	1.82	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	3.16	0.5	1.9	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	3.16	3.2	2.1	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **17**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					3.2		3.16		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
			0.0						

		0.0							
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		0.0							
0.0						0.00			
		0.0							
		0.0							
		0.0							
0.0						0.00			
0.0						0.00			
0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.2	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
0.00
0.00

0.0	0.0	0.0	0.0	0.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 17

File Name: 2443517A
Description: T-417
Canister: 899
QC_Batch: 112624-GCK

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 11/26/24 **Time:** 13:36
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 18

Client ID T-418

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 18

Client: C.E. Schmidt
Client ID: T-418
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 522
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 13:40
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

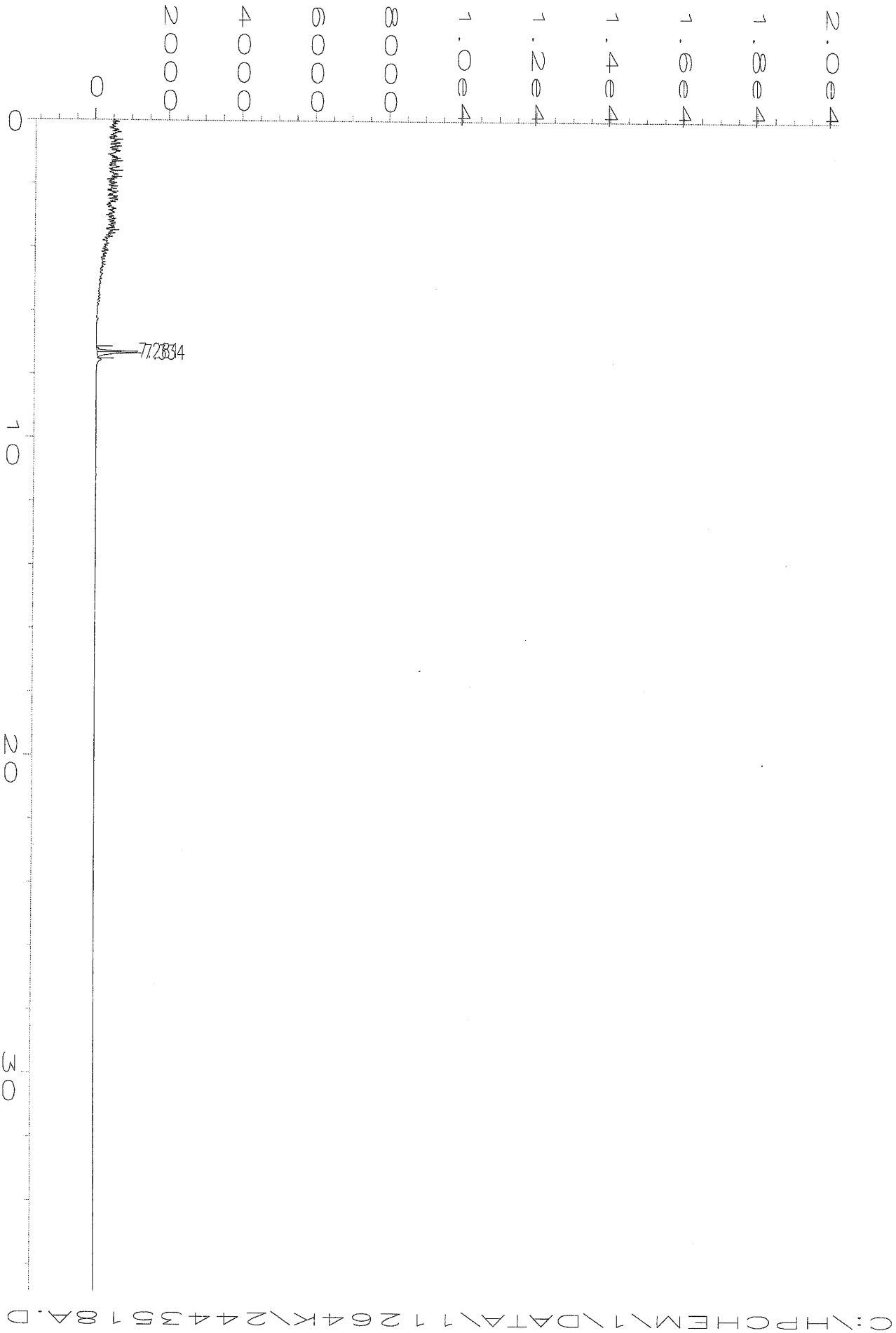
Data File Name : C:\HPCHEM\1\DATA\11264K\2443518A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-418
Run Time Bar Code:
Acquired on : 26 Nov 24 02:28 PM
Report Created on: 26 Nov 24 03:05 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443518A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	7.281	2486	1128	BV	0.032	39.3589
2	7.334	3831	1288	VV	0.043	60.6411

Total area = 6317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4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
0
10
20
30
C:\HPCHEM\1\DATA\1264K\24435184.D

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Canister: 522
QC_Batch: 112624-GCK

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 11/26/24 **Time:** 14:28
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **18**
File Name: **2443518A**
Sample ID: **T-418**
Sampled: **11/19/2024**
Received: **11/21/24**
Analyzed: **11/26/24**
QCBatch: **112624-GCK**
Can: **522**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **13:40** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **14:28** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **343092**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31	**7.33**		I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					6317		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					6317		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					6317		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	8.93	1.5	5.3	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	8.93	8.9	5.9	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **18**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			

		0.0							
		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		0.0							
		0.0							
0.0						0.00			
0.0						0.00			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00
0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
0.00
0.00

0.0	0.0	0.0	0.0	0.0	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		18	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	1.90E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	1.90E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	1.90E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	1.90E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	1.90E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	1.90E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	1.90E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	1.90E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	1.90E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	1.90E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	1.90E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	1.90E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	1.90E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	1.90E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	1.90E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	1.90E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	1.90E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	1.90E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	1.90E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	1.90E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	1.90E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	1.90E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	1.90E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	1.90E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	1.90E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	1.90E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	1.90E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	1.90E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	1.90E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	1.90E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	1.90E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	1.90E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	1.90E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	1.90E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	1.90E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	1.90E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	1.90E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	1.90E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	1.90E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	1.90E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	1.90E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	1.90E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	1.90E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	1.90E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	1.90E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	1.90E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	1.90E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	1.90E+04	6317	8.9	1.49	5.26
Total Non-Methane Hydrocarbons	1	TRG	16.0	1.90E+04	6317	8.9	8.93	5.86

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Canister: 522
QC_Batch: 112624-GCK

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 11/26/24 **Time:** 14:28
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **19**

Client ID T-501

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 19

Client: C.E. Schmidt
Client ID: T-501
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 664
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 8:30
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

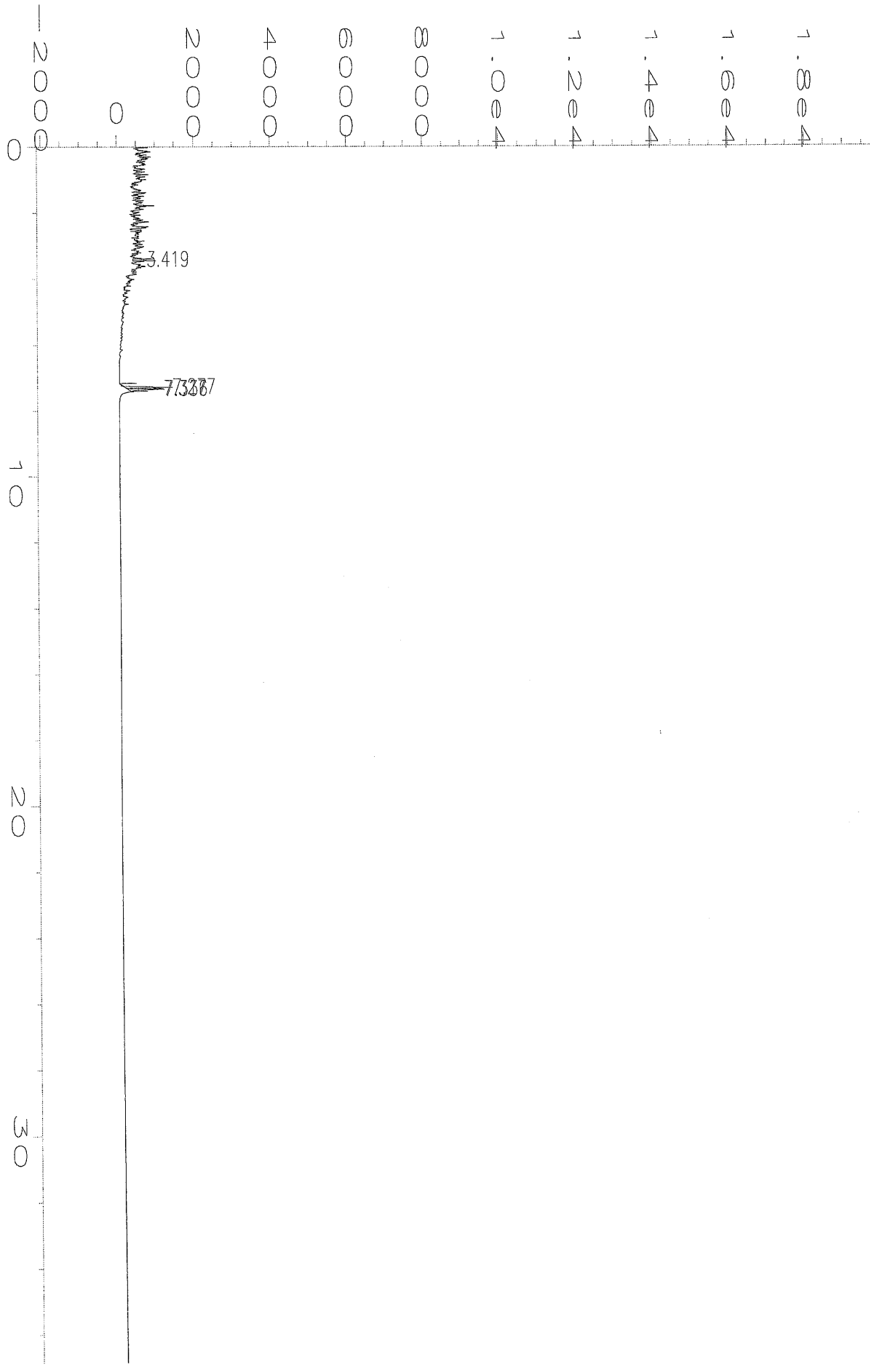
Data File Name : C:\HPCHEM\1\DATA\11264K\2443519A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-501
Run Time Bar Code:
Acquired on : 26 Nov 24 03:18 PM
Report Created on: 26 Nov 24 03:55 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443519A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.419	830	355	VV	0.033	14.1250
2	7.277	1993	1232	BV	0.027	33.9356
3	7.317	1484	960	VV	0.026	25.2656
4	7.336	1567	971	VV	0.023	26.6738

Total area = 5874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6000
8000
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1.2e4
1.4e4
1.6e4
1.8e4
0
10
20
30
3.419
7.326
7.387
C:\HPCHEM\1\DATA\1_264K\244351 9A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **19**
File Name: **2443519A**
Sample ID: **T-501**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/26/24**
QCBatch: **112624-GCK**
Can: **664**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:30** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **15:18** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **343092**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.18		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	5.22		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31	**7.32**	1484	I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	12.55		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	16.28		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	17.98		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	19.52		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	22.39		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					5874		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					5874		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					5874		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.10	0.52	1.21	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	8.31	1.4	4.9	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	8.31	8.3	5.4	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **19**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					2.1		2.10		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
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0.0						0.00			
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0.0						0.00			
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		0.0							
0.0						0.00			
0.0						0.00			
0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.1	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
0.00
0.00

0.0	0.0	0.0	0.0	0.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 19

File Name: 2443519A
Description: T-501
Canister: 664
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 11/26/24 **Time:** 15:18
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 20

Client ID T-502

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 20

Client: C.E. Schmidt
Client ID: T-502
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 716
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 8:37
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11264K\2443520B.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-502
Run Time Bar Code:
Acquired on : 26 Nov 24 05:53 PM
Report Created on: 26 Nov 24 06:30 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443520B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.113	865	348	VV	0.035	0.1731
2	3.255	852	414	PV	0.028	0.1706
3	3.365	1248	518	VV	0.034	0.2498
4	3.454	828	525	VV	0.023	0.1657
5	3.516	1307	490	VV	0.044	0.2616
6	3.697	1215	285	PV	0.059	0.2432
7	4.193	3356	1174	VV	0.040	0.6717
8	5.272	2114	442	PV	0.062	0.4231
9	7.322	2241	1015	VV	0.032	0.4484
10	7.374	2586	892	VV	0.048	0.5175
11	8.733	1761	605	BB	0.039	0.3525
12	12.278	4799	501	PV	0.123	0.9605
13	12.371	2233	373	VV	0.080	0.4469
14	12.550	825	169	VB	0.069	0.1651
15	12.924	1864	285	PV	0.082	0.3731
16	17.906	93190	25360	BV	0.056	18.6509
17	18.082	6997	1041	VB	0.092	1.4004
18	18.731	1232	294	BB	0.062	0.2466
19	19.468	4212	1268	BV	0.050	0.8430
20	19.513	3647	1129	VB	0.047	0.7298
21	21.061	3835	853	BV	0.064	0.7676
22	21.191	36545	7048	VV	0.073	7.3140
23	21.496	1657	355	VB	0.068	0.3316
24	22.091	3716	611	BV	0.083	0.7438
25	22.266	7667	1899	VV	0.060	1.5345
26	22.351	10436	2437	VV	0.064	2.0886
27	22.447	5032	1345	VV	0.057	1.0072
28	22.560	10168	2157	VV	0.070	2.0351
29	22.821	17032	5659	VV	0.047	3.4088
30	23.451	9781	1846	VV	0.077	1.9575
31	23.596	2121	510	VB	0.063	0.4245
32	23.838	23917	4681	BV	0.073	4.7868
33	24.056	32695	4780	VV	0.098	6.5434
34	24.286	2825	487	VB	0.097	0.5653
35	24.728	7873	1366	BV	0.083	1.5757

36	24.847	3206	690	VV	0.060	0.6417
37	24.957	8928	2173	VV	0.060	1.7868
38	25.517	2453	474	BV	0.072	0.4910
39	25.889	2487	405	PV	0.085	0.4978
40	26.021	2896	650	VV	0.066	0.5795
41	26.305	1260	285	VV	0.066	0.2521
42	26.432	3424	738	VV	0.068	0.6853
43	26.498	7778	870	VV	0.113	1.5566
44	27.091	9197	1807	VV	0.071	1.8407
45	27.344	14920	2812	VB	0.077	2.9860
46	27.776	1480	491	VV	0.050	0.2961
47	27.877	110247	26384	VV	0.065	22.0646
48	28.130	18706	3714	VV	0.074	3.7438

Total area = 499655

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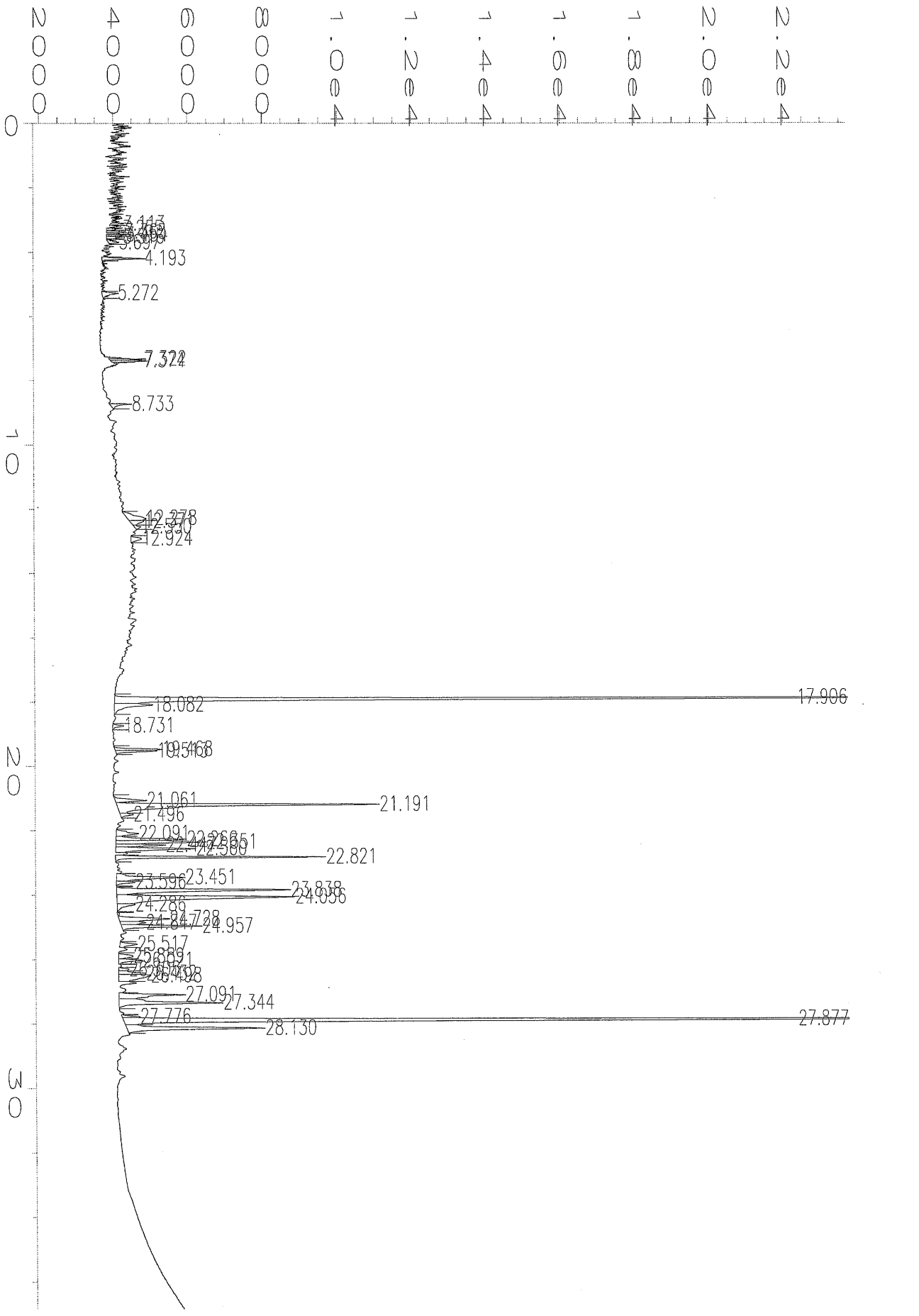
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C:\HPCHEM\1\DATA\1 2 4 K\2443520B.D

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11264K\2443520A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-502
Run Time Bar Code:
Acquired on : 26 Nov 24 04:06 PM
Report Created on: 26 Nov 24 04:43 PM
Sample Info : SCHMIDT, 200 ML

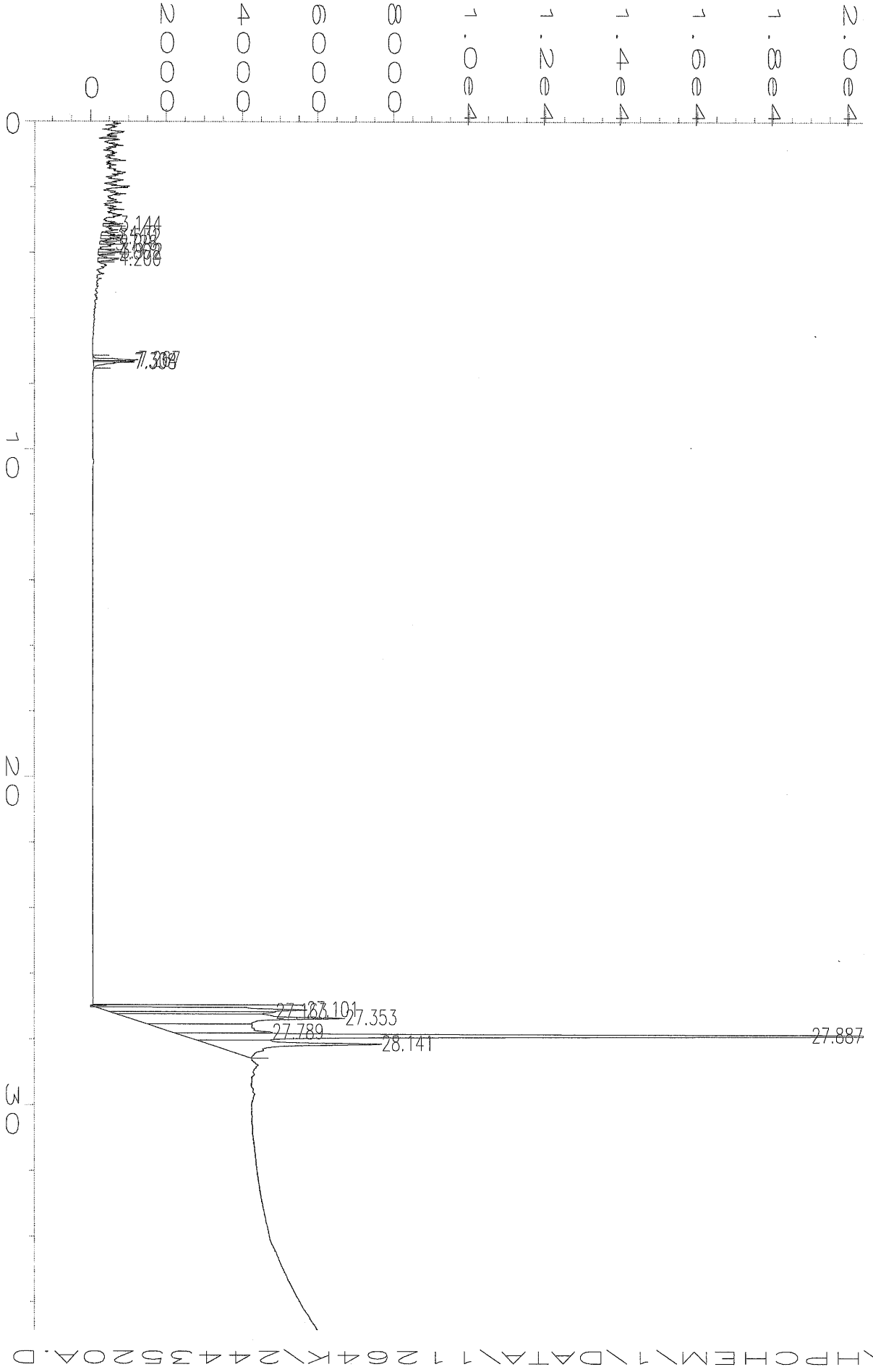
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443520A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.144	1063	442	VV	0.033	0.3014
2	3.440	1509	350	PV	0.057	0.4278
3	3.532	1811	514	VV	0.049	0.5132
4	3.726	1221	417	VV	0.043	0.3461
5	3.972	2004	618	PV	0.054	0.5681
6	4.002	1275	562	VV	0.032	0.3614
7	4.200	2128	557	VV	0.050	0.6031
8	7.267	3177	1185	BV	0.037	0.9007
9	7.304	1913	1096	VV	0.027	0.5423
10	7.338	3547	1076	VB	0.055	1.0054
11	27.101	36018	5351	BV	0.090	10.2098
12	27.163	17440	4362	VV	0.067	4.9437
13	27.353	71450	5692	VV	0.162	20.2535
14	27.789	40733	2615	VV	0.260	11.5465
15	27.887	121066	24331	VV	0.075	34.3181
16	28.141	46422	4577	VB	0.135	13.1590

- signal tissue excluded from TPH calc

Total area = 352777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20
30
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27.353
27.789
28.141
27.887
C:\HPCHEM\1\DATA\1 1264K\2443520A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **20**
File Name: **2443520B**
Sample ID: **T-502**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/26/24**
QCBatch: **112624-GCK**
Can: **716**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:37** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **17:53** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **343092**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.08	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.12			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.19	3356	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	O	M	285	290
74-98-6	Propane	P	5.20	**5.20**	5.27	2114	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.67**						129	351
106-98-9	1-Butene	P	7.29	7.36	**7.37**	2586	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.73**	1761	I	I	H	409	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.37**	2233	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	12.55	825	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.92**	1864	I	I	H	510	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	16.28		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						90	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	17.91	93190	I	I	H	651	651
110-82-7	Cyclohexane	P	18.14	18.18	**18.08**		O	I	M	656	658
591-76-4	2-Methylhexane	P	18.38	18.42	**18.51**		I	I	H	670	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.49	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane	P	18.66	18.70	**18.73**	1232	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.13	**19.21**		I	I	H	692	690
142-82-5	n-Heptane	P	19.41	19.45	19.47	4212	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.13	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.97	**21.06**	3835	I	I	H	755	753
108-88-3	Toluene	P	21.12	**21.16**	21.19	36545	I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.40	**21.50**	1657	I	I	H	770	768
589-81-1	3-Methylheptane	p	21.55	21.62	**21.68**		I	I	H	777	775
111-65-9	n-Octane	P	22.27	22.34	22.35	10436	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.82	**23.84**	23917	I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.02	**24.06**	32695	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.47						-57	881
95-47-6	o-xylene	P	24.57	24.64	**24.73**	7873	I	O	M	891	886
111-84-2	n-Nonane	P	24.87	24.94	**24.96**	8928	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.43	**25.52**	2453	I	O	M	924	919
103-65-1	n-propylbenzene	P	25.93	26.00	**26.02**	2896	I	I	H	945	947
620-14-4	3-Ethyltoluene	P	26.17	26.24	**26.31**	1260	I	I	H	957	957
622-96-8	4-Ethyltoluene	P	26.26	26.33						-147	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.52	**26.50**	7778	I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.68	**26.74**		I	I	H	975	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.15	**27.09**	9197	I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.33	**27.34**	14920	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.62						-5	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.17	**28.13**	18706	I	I	H	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.30	**28.36**		I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	29.91	**30.06**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.51	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					499655		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					499655		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					499655		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	4.75	2.37	2.93	4.75	2.37	2.93	2.93	2.93
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	2.99	1.00	1.80	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	3.66	0.91	2.10	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	2.49	0.62	1.43	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	3.16	0.63	1.81	ND	ND	ND	0	
n-Pentane	72.1	5	1.17	0.23	0.69	ND	ND	ND	0	
t-2-Pentene	70.1	5	2.64	0.53	1.51	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	131.80	21.97	70.31	131.80	21.97	70.31	70.31	70.31
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	1.74	0.25	1.02	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	5.96	0.85	3.49	5.96	0.85	3.49	3.49	3.49
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	5.42	0.68	3.17	5.42	0.68	3.17	3.17	3.17
Toluene	92.1	7	51.68	7.38	27.87	51.68	7.38	27.87	27.87	27.87
2-Methylheptane	114.2	8	2.34	0.29	1.37	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	14.76	1.84	8.63	14.76	1.84	8.63	8.63	8.63
Ethylbenzene	106.2	8	33.83	4.23	18.40	33.83	4.23	18.40	18.40	18.40

m,p-xylene	106.2	8	46.24	5.78	25.16	46.24	5.78	25.16	25.16	25.16
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	11.13	1.39	6.06	11.13	1.39	6.06	6.06	6.06
n-Nonane	128.3	9	12.63	1.40	7.38	12.63	1.40	7.38	7.38	7.38
i-Propylbenzene	120.2	9	3.47	0.39	1.90	ND	ND	ND	0	
n-propylbenzene	120.2	9	4.10	0.46	2.24	4.10	0.46	2.24	2.24	2.24
3-Ethyltoluene	120.2	9	1.78	0.20	0.98	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	11.00	1.22	6.02	11.00	1.22	6.02	6.02	6.02
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	13.01	1.45	7.12	13.01	1.45	7.12	7.12	7.12
n-Decane	142.3	10	21.10	2.11	12.31	21.10	2.11	12.31	12.31	12.31
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	26.46	2.65	14.55	26.46	2.65	14.55	14.55	14.55
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	706.65	117.8	416.1	706.65	117.77	416.07	416.07	416.07
Total Non-Methane Hydrocarbons	16	1.0	706.65	706.6	463.4	706.65	706.65	463.38	463.38	463.38

SDG: **224435**
Laboratory Number: **20**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	J	=		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0		=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
4.7					0.0			0.00	
						4.75			
3.0					0.0		0.00		
	0.0					2.99			
						0.00			
0.0					3.7		3.66		
						0.00			
					2.5		2.49		
	0.0				0.0		0.00		
						0.00			
1.2					3.2		3.16		
						1.17			
					2.6		2.64		
					0.0		0.00		
	0.0					0.00			
			0.0						0.00
	0.0					0.00			
	0.0					0.00			
	0.0					0.00			
0.0						0.00			
			0.0						0.00
	0.0					0.00			
		131.8							
			0.0			0.00			
	0.0								
	0.0					0.00			
	1.7					0.00			
	0.0					1.74			
6.0						0.00			
			0.0			5.96			
	5.4								0.00
		51.7				5.42			
	2.3								
	0.0					2.34			
14.8						0.00			
		33.8				14.76			

		46.2							
		0.0							
		11.1							
12.6						12.63			
		3.5							
		4.1							
		1.8							
		0.0							
		11.0							
		0.0							
		13.0							
21.1						21.10			
		0.0							
		26.5							
		0.0							
0.0						0.00			
0.0						0.00			
63.3	9.5	334.5	0.0	11.9	0.0	72.9	11.9	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

131.80

51.68

33.83

				46.24	
				0.00	
				11.13	
				3.47	
				4.10	
				1.78	
				0.00	
				11.00	
				0.00	
				13.01	
				0.00	
				26.46	
				0.00	
0.0	0.0	0.0	0.0	334.5	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 20

File Name: 2443520B
Description: T-502
Canister: 716
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 11/26/24 **Time:** 17:53
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.37	2.47	7.40	2.93	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	21.97	2.13	6.40	70.31	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	0.85	2.35	7.04	3.49	J
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	0.68	2.34	7.02	3.17	J
108-88-3	Toluene	0.57	1.71	7.38	2.16	6.47	27.87	
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	1.84	2.34	7.02	8.63	
100-41-4	Ethylbenzene	0.50	1.50	4.23	2.18	6.53	18.40	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	5.78	2.18	6.53	25.16	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	1.39	2.18	6.53	6.06	J
111-84-2	n-Nonane	0.44	1.33	1.40	2.34	7.01	7.38	
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.46	2.19	6.57	2.24	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	1.22	2.19	6.57	6.02	J
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	1.45	2.19	6.57	7.12	
124-18-5	n-Decane	0.40	1.20	2.11	2.33	7.00	12.31	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	2.65	2.20	6.60	14.55	
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	117.77	26.50	79.49	416.07	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	706.65	29.51	88.52	463.38	

Sample Data Packages

SDG Number 224435

Lab Id Number 21

Client ID T-503

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 21

Client: C.E. Schmidt
Client ID: T-503
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 751
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:32
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

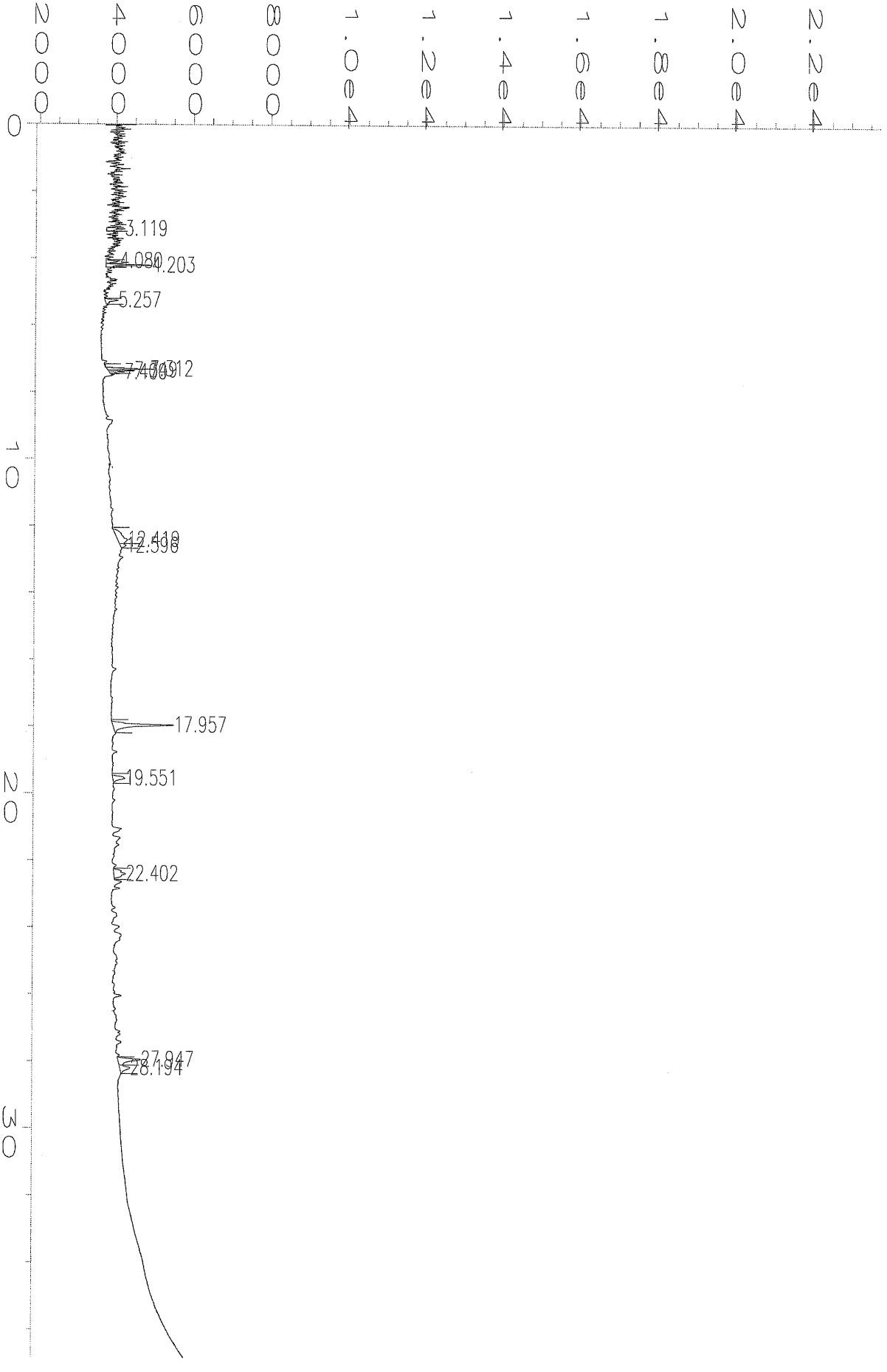
Data File Name : C:\HPCHEM\1\DATA\11264K\2443521A.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-503
Run Time Bar Code:
Acquired on : 26 Nov 24 05:05 PM
Report Created on: 26 Nov 24 05:42 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443521A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.119	1543	427	PV	0.047	4.2865
2	4.080	1199	354	VV	0.048	3.3289
3	4.203	3196	1194	PV	0.040	8.8774
4	5.257	1506	341	PV	0.062	4.1833
5	7.312	2529	1262	PV	0.028	7.0231
6	7.349	1114	701	VV	0.026	3.0948
7	7.400	881	395	VV	0.035	2.4482
8	12.419	4004	242	BV	0.216	11.1210
9	12.596	809	143	VB	0.081	2.2468
10	17.957	8344	1571	BB	0.076	23.1749
11	19.551	2114	302	BB	0.096	5.8713
12	22.402	2922	297	BB	0.131	8.1166
13	27.947	3852	596	VV	0.095	10.6988
14	28.194	1990	266	VB	0.106	5.5282

Total area = 36003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6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
3.119
4.080
4.203
5.257
12.598
17.957
19.551
22.402
27.947
28.194
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: 224435
EAS ID: 21
File Name: 2443521A
Sample ID: T-503
Sampled: 11/20/2024
Received: 11/21/24
Analyzed: 11/26/24
QCBatch: 112624-GCK
Can: 751
Can Factor: 1.00
Volume: 200.0
Type: SA

Method: TO-14FID TO-14FID
Not Detected Flag: ND TO-15FID
SF: 2 TO-3
Instrument: GCK EPA 18M
Time: 8:32 Matrix AA
Time: 13:00 Chem TRG
Time: 17:05 MDL Fac: 1.0
Unit Factor 1000 1000 for ppb 1 for ppm
Hexane Area: 343092
Hexane Concentration: 18.05
Standard Volume: 1.00
Standard ID: ST62344

RT Win C2-C C5-C12
RT 0.3 0.1
RTI 3 3

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.09	**4.08**	1199	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.13			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.20	3196	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	O	M	286	290
74-98-6	Propane	P	5.20	**5.20**	5.26	1506	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.66**						130	351
106-98-9	1-Butene	P	7.29	7.35	**7.35**	1114	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						203	410
590-18-1	c-2-Butene	P	9.63	9.64						203	431
78-78-4	i-Pentane	P	11.37	11.49	**11.46**		I	I	H	473	473
109-67-1	1-Pentene	P	12.30	12.42	**12.42**	4004	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.60**	12.60	809	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.91	**12.85**		I	O	M	507	510
627-20-3	c-2-Pentene	P	13.08	13.20	**13.18**		I	I	H	516	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.89	**13.89**		I	I	H	535	537
287-92-3	Cyclopentane	P	14.88	15.00	**15.01**		I	I	H	565	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.18						159	570
107-83-5	2-Methylpentane	P	15.08	15.20	**15.18**		I	I	H	570	571
96-14-0	3-Methylpentane	P	15.55	15.67	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.29**	16.29		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.98						100	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.17	**17.20**		I	I	H	628	626
71-43-2	Benzene	P	17.87	**17.99**	17.96	8344	I	I	H	651	651
110-82-7	Cyclohexane	P	18.14	18.23	**18.27**		I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.47	**18.51**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.54	**18.57**		I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.75	**18.78**		I	I	H	676	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.18	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.50	19.55	2114	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.18	**20.23**		I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.02	**21.07**		I	I	H	753	753
108-88-3	Toluene	P	21.12	**21.21**	21.26		I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	767	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	22.40	2922	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-60	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24	**28.19**	1990	I	I	H	1030	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					36003		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					36003		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					36003		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.70	0.85	0.98	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	4.52	2.26	2.79	4.52	2.26	2.79	2.79	2.79
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	2.13	0.71	1.28	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.58	0.39	0.91	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	5.66	1.13	3.25	5.66	1.13	3.25	3.25	3.25
n-Pentane	72.1	5	1.14	0.23	0.68	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	11.80	1.97	6.30	11.80	1.97	6.30	6.30	6.30
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	2.99	0.43	1.75	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	4.13	0.52	2.42	4.13	0.52	2.42	2.42	2.42
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	2.81	0.28	1.55	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	50.92	8.5	30.0	50.92	8.49	29.98	29.98	29.98
Total Non-Methane Hydrocarbons	16	1.0	50.92	50.9	33.4	50.92	50.92	33.39	33.39	33.39

SDG: **224435**
Laboratory Number: **21**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	J	=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.7		1.70		
					0.0			0.00	
	4.5					4.52			
					0.0		0.00		
	2.1					2.13			
		0.0				0.00			
					1.6		1.58		
	0.0					0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					5.7		5.66		
	1.1					1.14			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
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		0.0				0.00			
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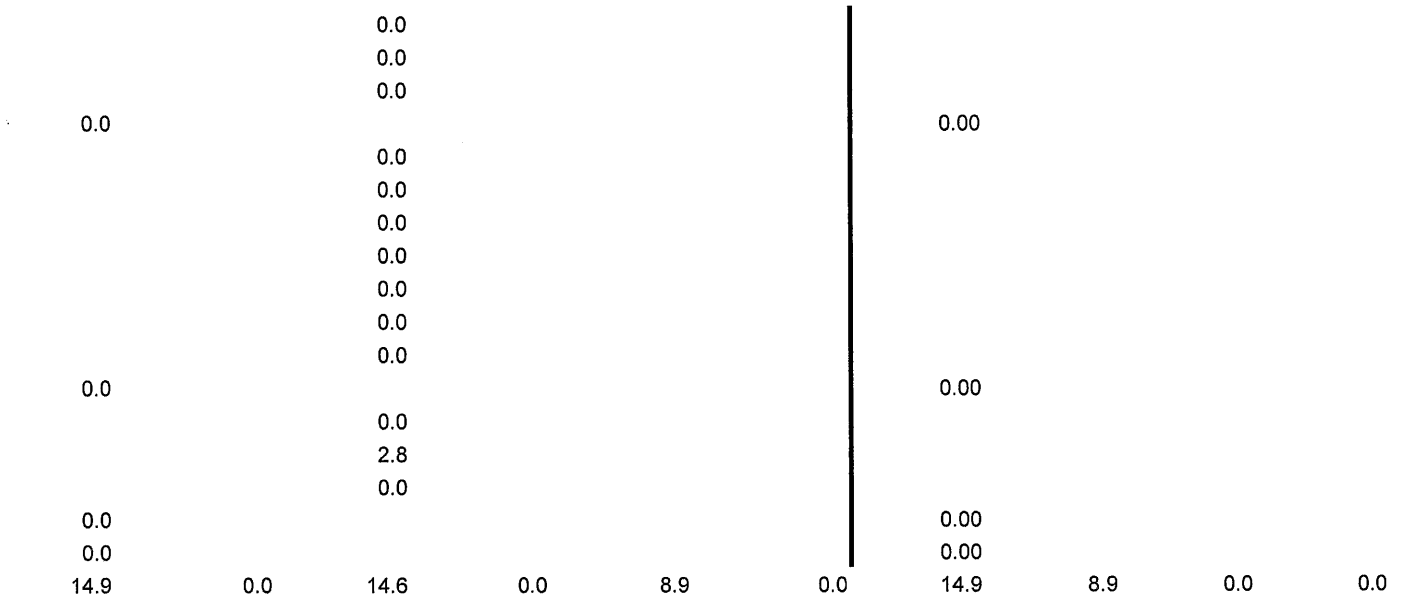
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2.8
0.0
0.0
0.00
0.0
0.00
14.9
0.0
14.6
0.0
8.9
0.0
14.9
8.9
0.0
0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

11.80

0.00

0.00

0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
2.81
0.00

0.0	0.0	0.0	0.0	14.6	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 21

File Name: 2443521A
Description: T-503
Canister: 751
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 11/26/24 **Time:** 17:05
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	2.26	2.47	7.40	2.79	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.13	2.30	6.90	3.25	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	1.97	2.13	6.40	6.30	J
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.52	2.34	7.02	2.42	J
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	8.49	26.50	79.49	29.98	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	50.92	29.51	88.52	33.39	J

Sample Data Packages

SDG Number 224435

Lab Id Number 22

Client ID T-504

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 22

Client: C.E. Schmidt
Client ID: T-504
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 644
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:44
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

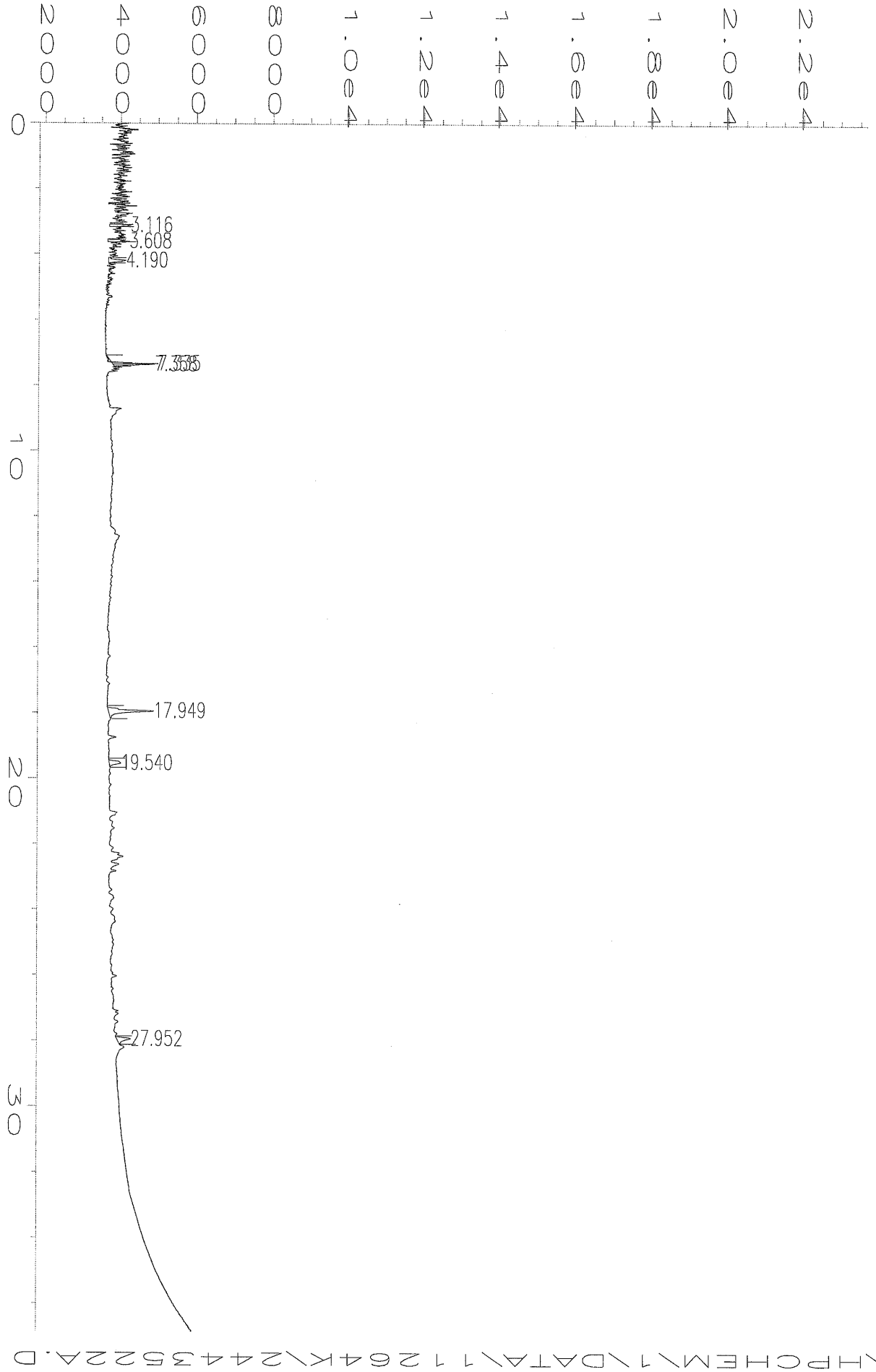
Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11264K\2443522A.D
Operator : SS
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-504
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 26 Nov 24 06:53 PM
Instrument Method: KTO3DHC.MTH
Report Created on: 26 Nov 24 07:30 PM
Analysis Method : KTO3DHC.MTH
Sample Info : SCHMIDT, 200 ML

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443522A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.116	1750	565	VV	0.044	8.8776
2	3.608	1661	477	PV	0.058	8.4227
3	4.190	2090	456	VV	0.058	10.5987
4	7.335	1484	1126	BV	0.022	7.5267
5	7.358	2021	1105	VV	0.030	10.2505
6	17.949	6501	1189	BB	0.076	32.9720
7	19.540	2020	300	BB	0.088	10.2429
8	27.952	2190	360	BB	0.086	11.1090

Total area = 19718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4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
3.116
3.608
4.190
17.949
19.540
27.952
C:\HPCHEM\1\DATA\1126AK\244352A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **22**
File Name: **2443522A**
Sample ID: **T-504**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/26/24**
QCBatch: **112624-GCK**
Can: **644**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:44** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **18:53** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **343092**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.08	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.12			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.19	2090	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	O	M	285	290
74-98-6	Propane	P	5.20	**5.20**	5.27		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.67**						129	351
106-98-9	1-Butene	P	7.29	7.36	**7.36**	2021	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.73**		I	I	H	409	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.37**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	12.55		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.92**		I	I	H	510	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	16.28		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						101	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	628	626
71-43-2	Benzene	P	17.87	**17.98**	17.95	6501	I	I	H	651	651
110-82-7	Cyclohexane	P	18.14	18.22	**18.08**		O	I	M	655	658
591-76-4	2-Methylhexane	P	18.38	18.46	**18.51**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.53	**18.57**		I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.74	**18.73**		I	I	H	675	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.17	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.49	19.54	2020	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.17	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.01	**21.06**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.20**	21.19		I	I	H	759	758
592-27-8	2-Methylheptane	P	21.33	21.40	**21.50**		I	I	H	770	768
589-81-1	3-Methylheptane	p	21.55	21.62	**21.68**		I	I	H	776	775
111-65-9	n-Octane	P	22.27	22.34	22.35		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.82	**23.84**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.02	**24.06**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.47						-57	881
95-47-6	o-xylene	P	24.57	24.64	**24.73**		I	O	M	891	886
111-84-2	n-Nonane	P	24.87	24.94	**24.96**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.43	**25.52**		I	O	M	924	919
103-65-1	n-propylbenzene	P	25.93	26.00	**26.02**		I	I	H	945	947
620-14-4	3-Ethyltoluene	P	26.17	26.24	**26.31**		I	I	H	957	957
622-96-8	4-Ethyltoluene	P	26.26	26.33						-147	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.52	**26.50**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.68	**26.74**		I	I	H	975	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.15	**27.09**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.33	**27.34**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.62						-5	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.17	**28.13**		I	I	H	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.30	**28.36**		I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	29.91	**30.06**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.51	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					19718		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					19718		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					19718		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	2.96	1.48	1.82	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.86	0.71	1.64	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	9.19	1.53	4.90	9.19	1.53	4.90	4.90	4.90
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	2.86	0.41	1.68	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	27.89	4.6	16.4	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	27.89	27.9	18.3	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **22**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	J	=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
3.0						2.96			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					2.9		2.86		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
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				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			9.2						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
2.9						2.86			
				0.0					0.00
		0.0				0.00			
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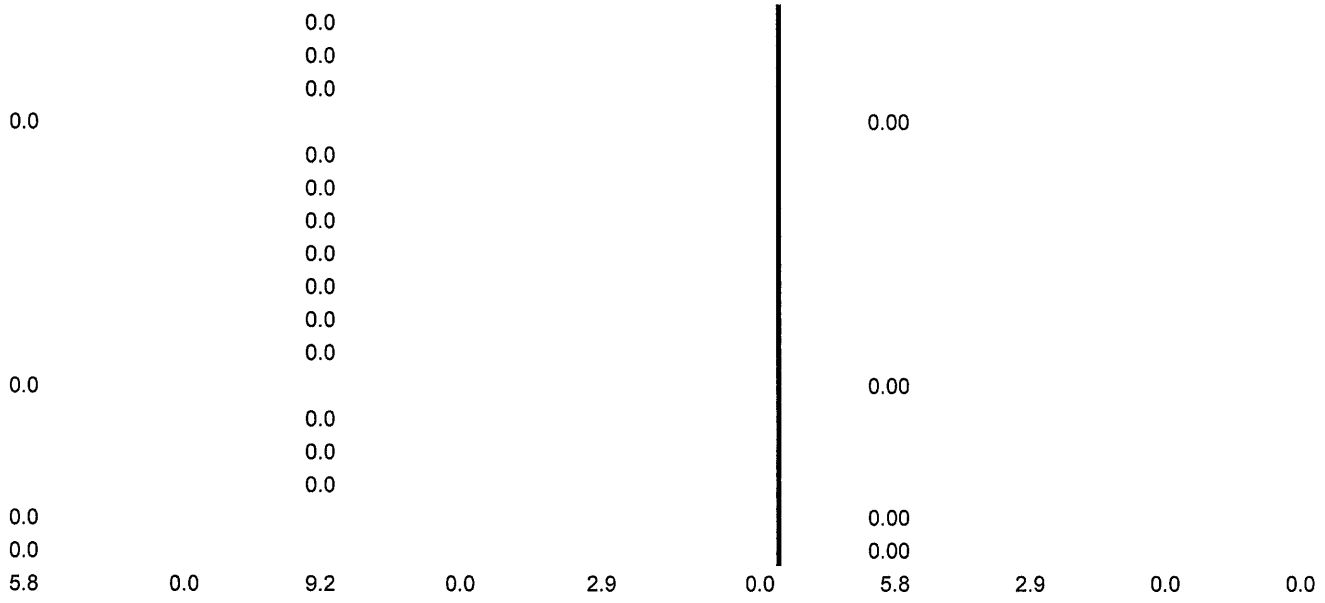
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

9.19

0.00

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0.0	0.0	0.0	0.0	9.2	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Canister: 644
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 11/26/24 **Time:** 18:53
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	1.53	2.13	6.40	4.90	J
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 23

Client ID T-505

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 23

Client: C.E. Schmidt
Client ID: T-505
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 883
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:55
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

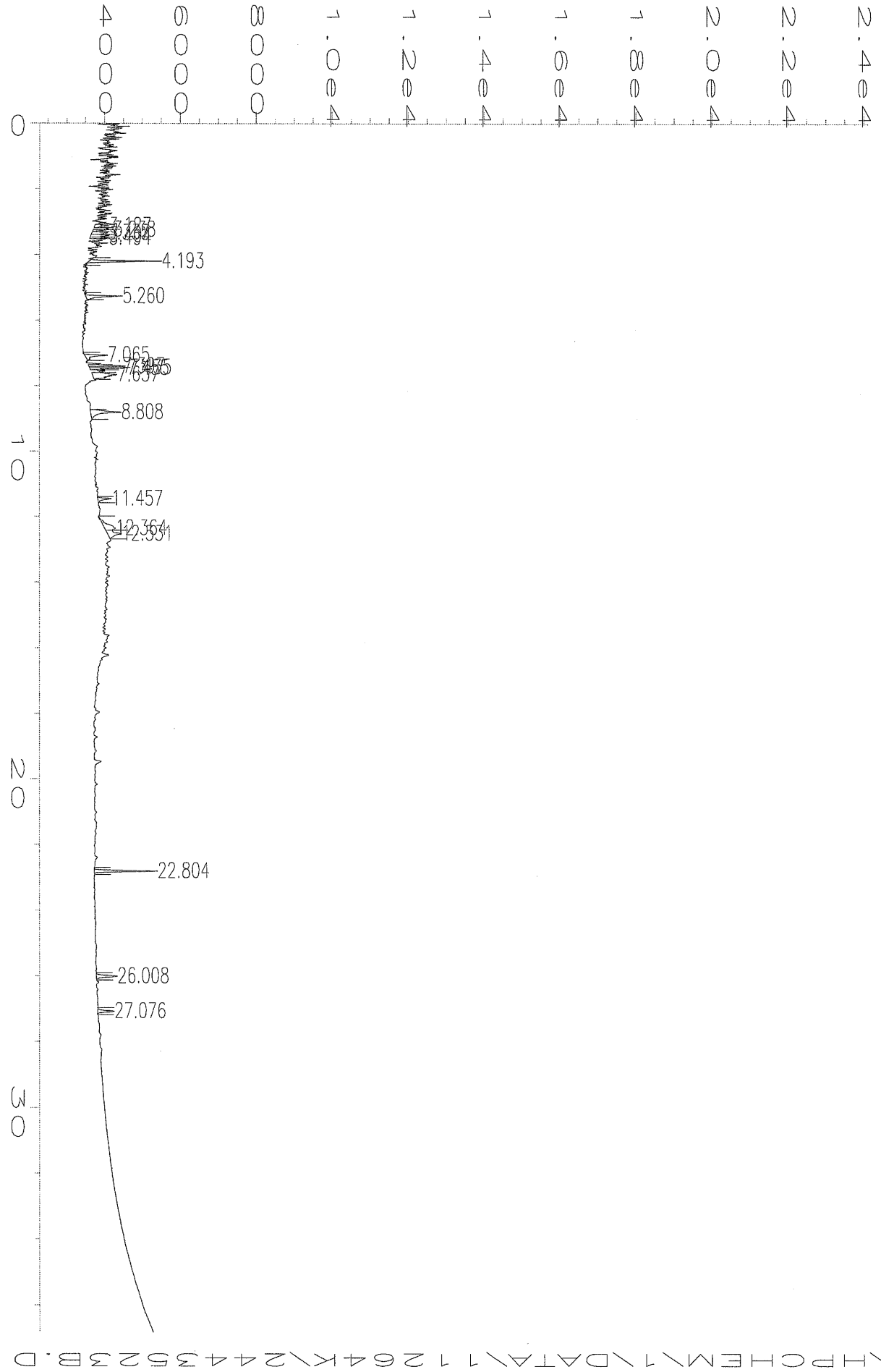
Data File Name : C:\HPCHEM\1\DATA\11264K\2443523B.D
Operator : SS
Instrument : ANALYZER1
Sample Name : T-505
Run Time Bar Code:
Acquired on : 26 Nov 24 08:55 PM
Report Created on: 26 Nov 24 09:32 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443523B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.127	1084	390	VV	0.037	2.3390
2	3.238	992	550	VV	0.030	2.1408
3	3.335	1587	430	VV	0.051	3.4224
4	3.404	1778	491	VV	0.062	3.8353
5	3.494	907	510	VV	0.026	1.9562
6	4.193	4643	1922	BV	0.037	10.0160
7	5.260	2855	973	PV	0.040	6.1594
8	7.065	2107	602	BB	0.050	4.5450
9	7.397	1850	900	VV	0.034	3.9917
10	7.435	2199	1101	VV	0.033	4.7436
11	7.455	2027	974	VV	0.035	4.3717
12	7.657	4542	665	VV	0.084	9.7980
13	8.808	4176	818	BB	0.071	9.0090
14	11.457	1308	366	BB	0.053	2.8219
15	12.364	2810	286	BV	0.125	6.0608
16	12.531	2696	363	VB	0.099	5.8165
17	22.804	4957	1679	BB	0.046	10.6935
18	26.008	2233	565	BB	0.060	4.8178
19	27.076	1604	447	BV	0.052	3.4611

Total area = 46357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26.008
27.076
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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\11264K\2443523A.D
Operator : SS
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-505
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 26 Nov 24 08:06 PM
Instrument Method: KTO3DHC.MTH
Report Created on: 26 Nov 24 08:43 PM
Analysis Method : KTO3DHC.MTH
Sample Info : SCHMIDT, 200 ML

Sig. 1 in C:\HPCHEM\1\DATA\11264K\2443523A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.237	1373	325	VV	0.067	0.9188
2	3.307	1018	506	VV	0.029	0.6814
3	3.471	1053	604	VV	0.024	0.7048
4	3.595	968	351	VV	0.036	0.6480
5	7.451	1432	651	BV	0.031	0.9585
6	7.491	4596	1286	VV	0.047	3.0766
7	7.574	1769	724	VV	0.041	1.1840
8	7.691	3370	717	VV	0.069	2.2562
9	7.730	3888	882	VV	0.059	2.6031
10	11.553	34687	3234	BV	0.130	23.2215
11	11.634	15515	52511	VV	0.005	10.3864
12	11.667	1222	2308	PB	0.019	0.8183
13	33.021	42136	41342	BV	0.017	28.2080
14	33.044	36350	54327	VV	0.011	24.3345

Total area = 149376

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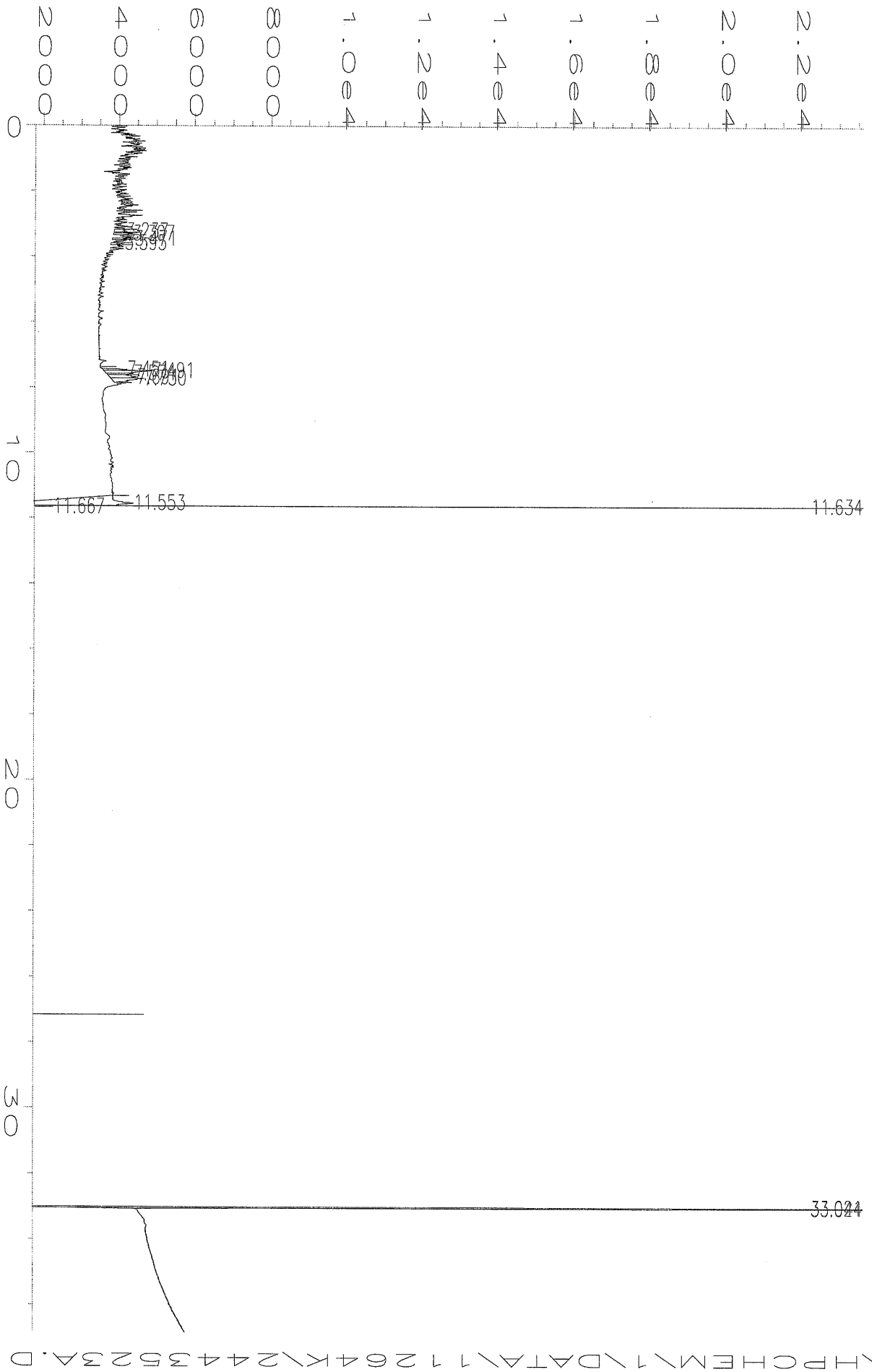
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1.8e4
2.0e4
2.2e4
0
10
20
30
11.667
11.553
11.634
33.024
C:\HPCHEM\1\DATA\1 1 2 6 4 K \2 4 4 3 5 2 3 A . D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **23**
File Name: **2443523B**
Sample ID: **T-505**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/26/24**
QCBatch: **112624-GCK**
Can: **883**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:55** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **20:55** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **343092**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C5 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.08	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.12			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.19	4643	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	O	M	286	290
74-98-6	Propane	P	5.20	**5.20**	5.26	2855	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.66**						130	351
106-98-9	1-Butene	P	7.29	7.35	**7.40**	1850	I	I	H	369	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.81**	4176	I	I	H	411	410
590-18-1	c-2-Butene	P	9.63	9.64						200	431
78-78-4	i-Pentane	P	11.37	11.42	**11.46**	1308	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.35	**12.36**	2810	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.53**	12.53	2696	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.84	**12.92**		I	I	H	510	510
627-20-3	c-2-Pentene	P	13.08	13.13	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.82	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.93	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.11						166	570
107-83-5	2-Methylpentane	P	15.08	15.13	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.60	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.22**	16.28		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						101	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	628	626
71-43-2	Benzene	P	17.87	**17.98**	17.95		I	I	H	651	651
110-82-7	Cyclohexane	P	18.14	18.22	**18.08**		O	I	M	655	658
591-76-4	2-Methylhexane	P	18.38	18.46	**18.51**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.53	**18.57**		I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.74	**18.73**		I	I	H	675	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.17	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.49	19.54		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.17	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.01	**21.06**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.20**	21.19		I	I	H	759	758
592-27-8	2-Methylheptane	P	21.33	21.40	**21.50**		I	I	H	770	768
589-81-1	3-Methylheptane	p	21.55	21.62	**21.68**		I	I	H	776	775
111-65-9	n-Octane	P	22.27	22.34	22.35		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.82	**23.84**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.02	**24.06**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.47						-57	881
95-47-6	o-xylene	P	24.57	24.64	**24.73**		I	O	M	891	886
111-84-2	n-Nonane	P	24.87	24.94	**24.96**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.43	**25.52**		I	O	M	924	919
103-65-1	n-propylbenzene	P	25.93	26.00	**26.01**	2233	I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.24	**26.31**		I	I	H	957	957
622-96-8	4-Ethyltoluene	P	26.26	26.33						-147	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.52	**26.50**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.68	**26.74**		I	I	H	975	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.15	**27.08**	1604	I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.33	**27.34**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.62						-5	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.17	**28.13**		I	I	H	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.30	**28.36**		I	I	H	1038	1037
1120-21-4	Undecane	P	29.86	29.91	**30.06**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.51	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					46357		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					46357		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					46357		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112624-GCK		
Hexane Std Area:	343092		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	6.57	3.28	4.05	6.57	3.28	4.05	4.05	4.05
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	4.04	1.35	2.43	4.04	1.35	2.43	2.43	2.43
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.62	0.65	1.50	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	5.91	1.48	3.39	5.91	1.48	3.39	3.39	3.39
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	1.85	0.37	1.09	ND	ND	ND	0	
1-Pentene	70.1	5	3.97	0.79	2.28	ND	ND	ND	0	
n-Pentane	72.1	5	3.81	0.76	2.25	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	3.16	0.35	1.73	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	2.27	0.25	1.24	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	65.56	10.9	38.6	65.56	10.93	38.60	38.60	38.60
Total Non-Methane Hydrocarbons	16	1.0	65.56	65.6	43.0	65.56	65.56	42.99	42.99	42.99

SDG: **224435**
Laboratory Number: **23**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
	6.6					6.57			
					0.0		0.00		
	4.0					4.04			
		0.0				0.00			
					2.6		2.62		
	0.0					0.00			
					5.9		5.91		
					0.0		0.00		
		1.8				1.85			
					4.0		3.97		
	3.8					3.81			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
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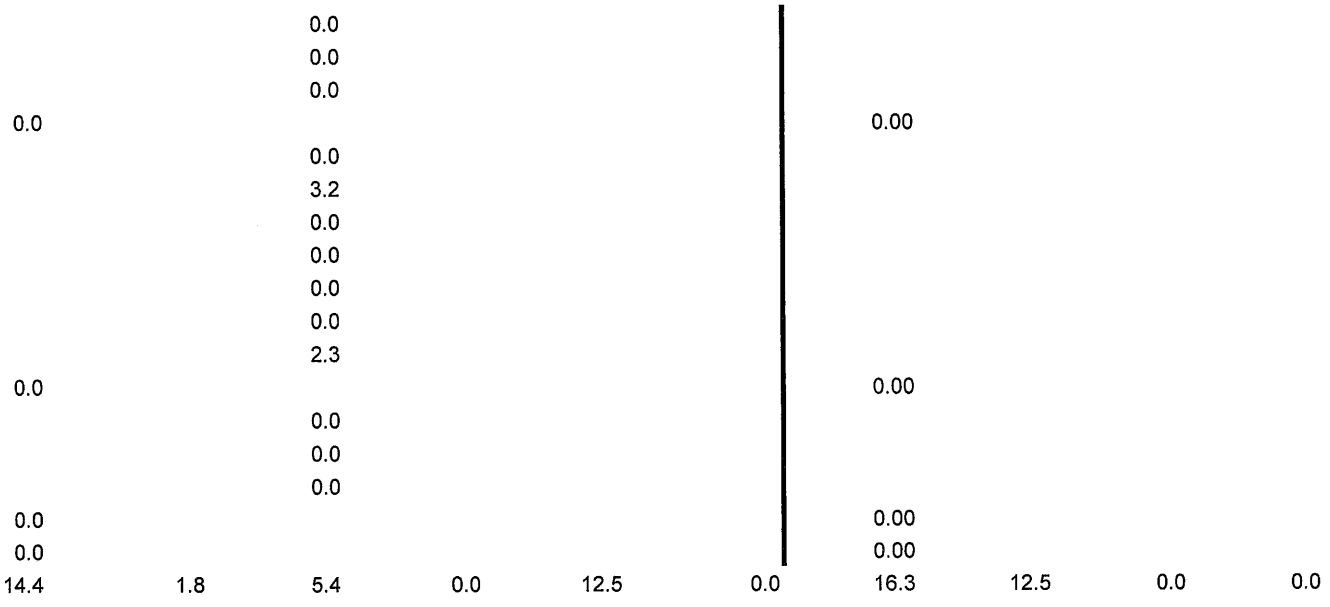
	0.0					0.00			
			0.0						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14.4
1.8
5.4
0.0
12.5
0.0
16.3
12.5
0.0
0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
3.16
0.00
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0.00
0.00
2.27

0.00
0.00
0.00

0.0	0.0	0.0	0.0	5.4	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 23

File Name: 2443523B
Description: T-505
Canister: 883
QC_Batch: 112624-GCK

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 11/26/24 **Time:** 20:55
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.28	2.47	7.40	4.05	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	1.35	2.41	7.23	2.43	J
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.48	2.30	6.90	3.39	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	10.93	26.50	79.49	38.60	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	65.56	29.51	88.52	42.99	J

Sample Data Packages

SDG Number 224435

Lab Id Number 24

Client ID T-506

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 24

Client: C.E. Schmidt
Client ID: T-506
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 784
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:11
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

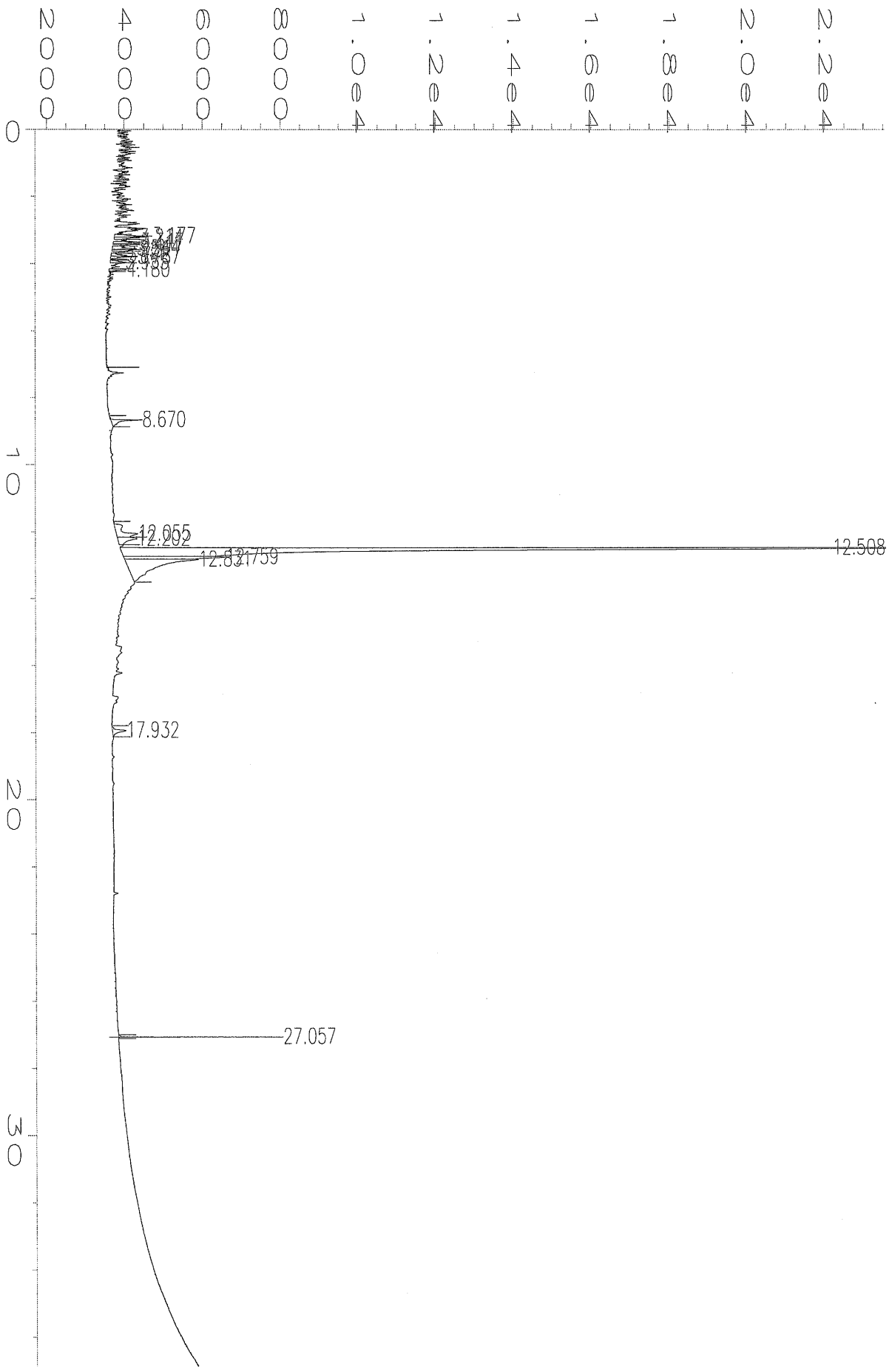
Data File Name : C:\HPCHEM\1\DATA\11274K\2443524A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-506
Run Time Bar Code:
Acquired on : 27 Nov 24 12:02 PM
Report Created on: 27 Nov 24 12:39 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\2443524A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.177	2204	992	PV	0.031	1.1350
2	3.214	1585	644	VV	0.041	0.8162
3	3.347	1747	710	VV	0.041	0.8996
4	3.411	1211	678	VV	0.027	0.6236
5	3.544	2153	614	VV	0.051	1.1087
6	3.577	1486	671	VV	0.037	0.7649
7	3.748	1214	413	VV	0.049	0.6249
8	3.787	1423	675	VV	0.030	0.7326
9	3.955	1142	444	VV	0.043	0.5882
10	4.180	1031	445	VV	0.033	0.5309
11	8.670	2671	807	BB	0.045	1.3751
12	12.055	5716	543	BV	0.134	2.9428
13	12.202	3791	500	VV	0.099	1.9518
14	12.508	125466	22971	PV	0.079	64.6005
15	12.759	11758	2603	VV	0.062	6.0539
16	12.831	26363	1879	VB	0.170	13.5739
17	17.932	1953	344	BB	0.076	1.0057
18	27.057	1305	4482	BB	0.010	0.6717

Total area = 194219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6000
8000
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1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
8.670
12.055
12.202
12.508
17.932
27.057
C:\HPCHEM\1\DATA\1 2 4K\24435 24A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **24**
File Name: **2443524A**
Sample ID: **T-506**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/27/24**
QCBatch: **112724-GCK**
Can: **784**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:11** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **12:02** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **335843**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Wi C2-C C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**	1031	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31						133	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.67**	2671	I	I	H	408	410
590-18-1	c-2-Butene	P	9.63	9.64						199	431
78-78-4	i-Pentane	P	11.37	11.40	**11.46**		I	I	H	475	473
109-67-1	1-Pentene	P	12.30	12.33	**12.39**		I	I	H	497	495
109-66-0	n-Pentane	P	12.48	**12.51**	**12.51**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.82	**12.83**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.11	**13.18**		I	I	H	518	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.80	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.91	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.09						168	570
107-83-5	2-Methylpentane	P	15.08	15.11	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.58	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.20**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.93**	1953	I	I	H	651	651
110-82-7	Cyclohexane	P	18.14	18.20	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.44	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.51	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.72	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.15	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.47	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.15	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.99	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.18**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					194219		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					194219		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					194219		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112724-GCK		
Hexane Std Area:	335843		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	1.46	0.73	0.90	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	3.78	0.94	2.17	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	2.76	0.46	1.47	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	274.68	45.8	161.7	274.68	45.78	161.73	161.73	161.73
Total Non-Methane Hydrocarbons	16	1.0	274.68	274.7	180.1	274.68	274.68	180.12	180.12	180.12

SDG: **224435**
Laboratory Number: **24**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
1.5						1.46			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					3.8		3.78		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			2.8						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
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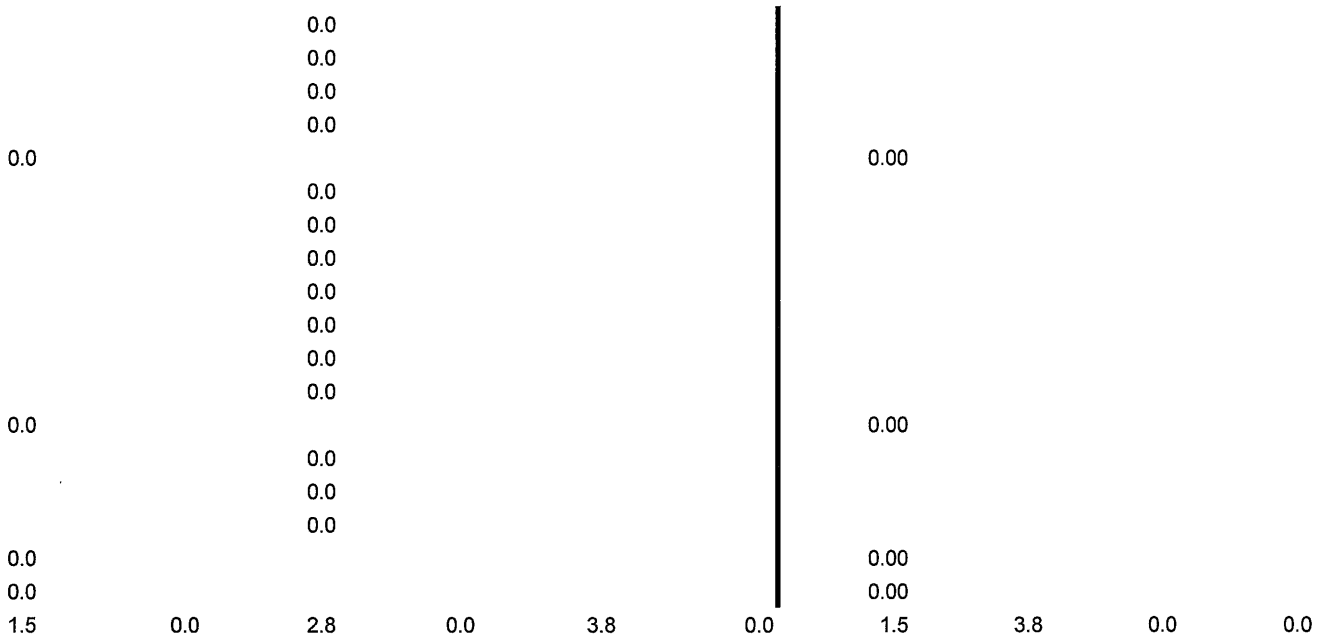
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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0.0	0.0	0.0	0.0	2.8	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		24	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	1.86E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	1.86E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	1.86E+04	1031	1.5	0.73	0.90
Propene	3	TRG	42.1	1.86E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	1.86E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	1.86E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	1.86E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	1.86E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	1.86E+04	2671	3.8	0.94	2.17
c-2-Butene	4	TRG	56.1	1.86E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	1.86E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	1.86E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	1.86E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	1.86E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	1.86E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	1.86E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	1.86E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	1.86E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	1.86E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	1.86E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	1.86E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	1.86E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	1.86E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	1.86E+04	1953	2.8	0.46	1.47
Cyclohexane	6	TRG	84.2	1.86E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	1.86E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	1.86E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	1.86E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	1.86E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	1.86E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	1.86E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	1.86E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	1.86E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	1.86E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	1.86E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	1.86E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	1.86E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	1.86E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	1.86E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	1.86E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	1.86E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	1.86E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	1.86E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	1.86E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	1.86E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	1.86E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	1.86E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	1.86E+04	194219	274.7	45.78	161.73
Total Non-Methane Hydrocarbons	1	TRG	16.0	1.86E+04	194219	274.7	274.68	180.12

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 24

File Name: 2443524A
Description: T-506
Canister: 784
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 11/27/24 **Time:** 12:02
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	45.78	26.50	79.49	161.73	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	274.68	29.51	88.52	180.12	

Sample Data Packages

SDG Number **224435**

Lab Id Number **25**

Client ID T-507

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 25

Client: C.E. Schmidt
Client ID: T-507
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 712
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:56
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

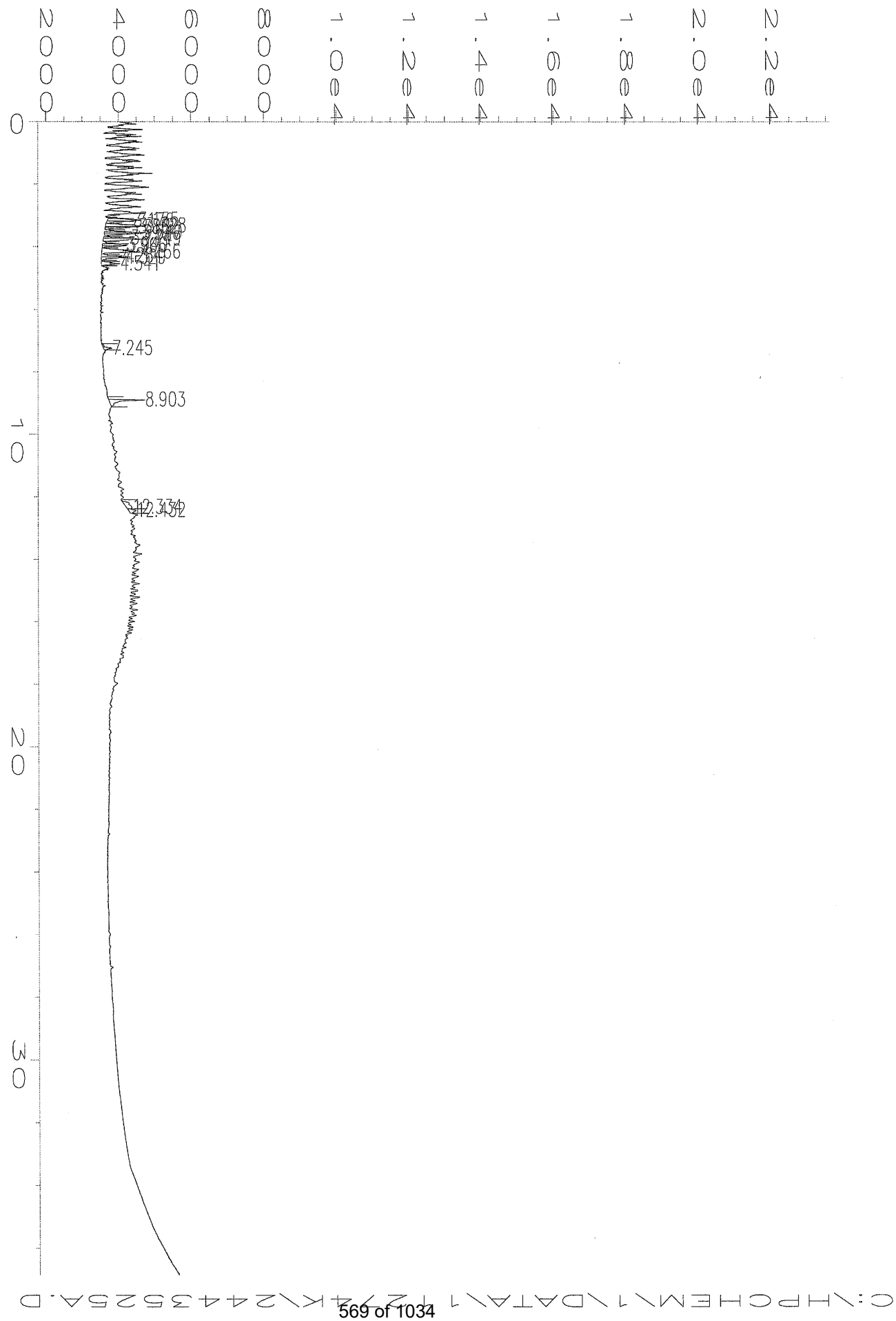
Data File Name : C:\HPCHEM\1\DATA\11274K\2443525A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-507
Run Time Bar Code:
Acquired on : 27 Nov 24 12:48 PM
Report Created on: 27 Nov 24 01:25 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\2443525A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.155	2857	946	VV	0.047	7.0355
2	3.176	1550	800	VV	0.032	3.8160
3	3.328	3586	1116	PV	0.042	8.8307
4	3.362	1280	880	VV	0.024	3.1525
5	3.386	1316	688	VV	0.032	3.2394
6	3.540	1951	1127	VV	0.025	4.8046
7	3.577	2145	1010	VV	0.030	5.2807
8	3.714	1279	741	VV	0.026	3.1501
9	3.749	3607	1120	VV	0.047	8.8805
10	3.940	1838	694	VV	0.038	4.5261
11	3.966	1002	677	VV	0.022	2.4674
12	4.166	5478	1036	PV	0.068	13.4886
13	4.284	1531	575	VV	0.044	3.7708
14	4.329	1944	749	VB	0.040	4.7862
15	4.541	1877	521	VV	0.047	4.6215
16	7.245	964	235	PV	0.061	2.3724
17	8.903	3354	998	BB	0.047	8.2585
18	12.334	1989	166	BV	0.149	4.8972
19	12.432	1065	208	VV	0.076	2.6215

Total area = 40614


2000
4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
7.245
8.903
C:\HPCHEM\1\DATA\1 12 4K\2443525A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **25**
File Name: **2443525A**
Sample ID: **T-507**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/27/24**
QCBatch: **112724-GCK**
Can: **712**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:56** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **12:48** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **335843**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

											RT Win	C2-C4	C5-C12
											RT	**0.3**	**0.1**
											RTI	**3**	**3**
CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.06	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.10			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.17	5478	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	290	290
74-98-6	Propane	P	5.20	**5.20**	5.22		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31	**7.25**	964	I	I	H	365	367
106-97-8	n-Butane	P	8.34	**8.34**	8.35		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						195	410
590-18-1	c-2-Butene	P	9.63	9.64						195	431
78-78-4	i-Pentane	P	11.37	11.32	**11.46**		O	O	L	476	473
109-67-1	1-Pentene	P	12.30	12.25	**12.33**	1989	I	I	H	498	495
109-66-0	n-Pentane	P	12.48	**12.43**	12.43	1065	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.74	**12.83**		I	I	H	510	510
627-20-3	c-2-Pentene	P	13.08	13.03	**13.18**		O	I	M	519	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.72	**13.89**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.83	**15.01**		O	I	M	567	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.01						177	570
107-83-5	2-Methylpentane	P	15.08	15.03	**15.18**		O	I	M	572	571
96-14-0	3-Methylpentane	P	15.55	15.50	**15.61**		O	I	M	583	583
110-54-3	n-Hexane	P	16.17	**16.12**	16.28		O	I	M	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	17.93		I	I	H	651	651
110-82-7	Cyclohexane	P	18.14	18.20	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.44	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.51	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.72	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.15	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.47	19.52		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.15	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.99	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.18**	21.26		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	22.39		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					40614		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					40614		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					40614		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112724-GCK		
Hexane Std Area:	335843		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	7.75	3.87	4.78	7.75	3.87	4.78	4.78	4.78
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.36	0.34	0.78	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	2.81	0.56	1.62	ND	ND	ND	0	
n-Pentane	72.1	5	1.51	0.30	0.89	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	57.44	9.6	33.8	57.44	9.57	33.82	33.82	33.82
Total Non-Methane Hydrocarbons	16	1.0	57.44	57.4	37.7	57.44	57.44	37.67	37.67	37.67

SDG: **224435**
Laboratory Number: **25**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
7.7						7.75			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					1.4		1.36		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					2.8		2.81		
1.5						1.51			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
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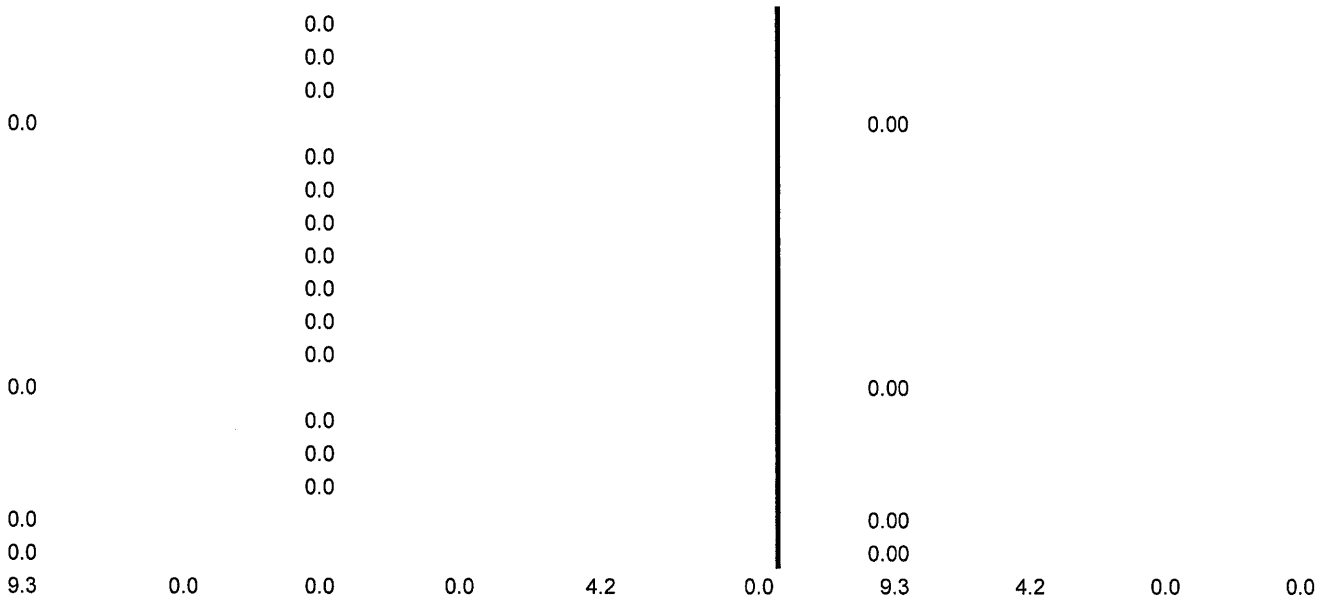
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 25

File Name: 2443525A
Description: T-507
Canister: 712
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 11/27/24 **Time:** 12:48
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.87	2.47	7.40	4.78	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9.57	26.50	79.49	33.82	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	57.44	29.51	88.52	37.67	J

Sample Data Packages

SDG Number 224435

Lab Id Number 26

Client ID T-508

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 26

Client: C.E. Schmidt
Client ID: T-508
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 549
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 10:40
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

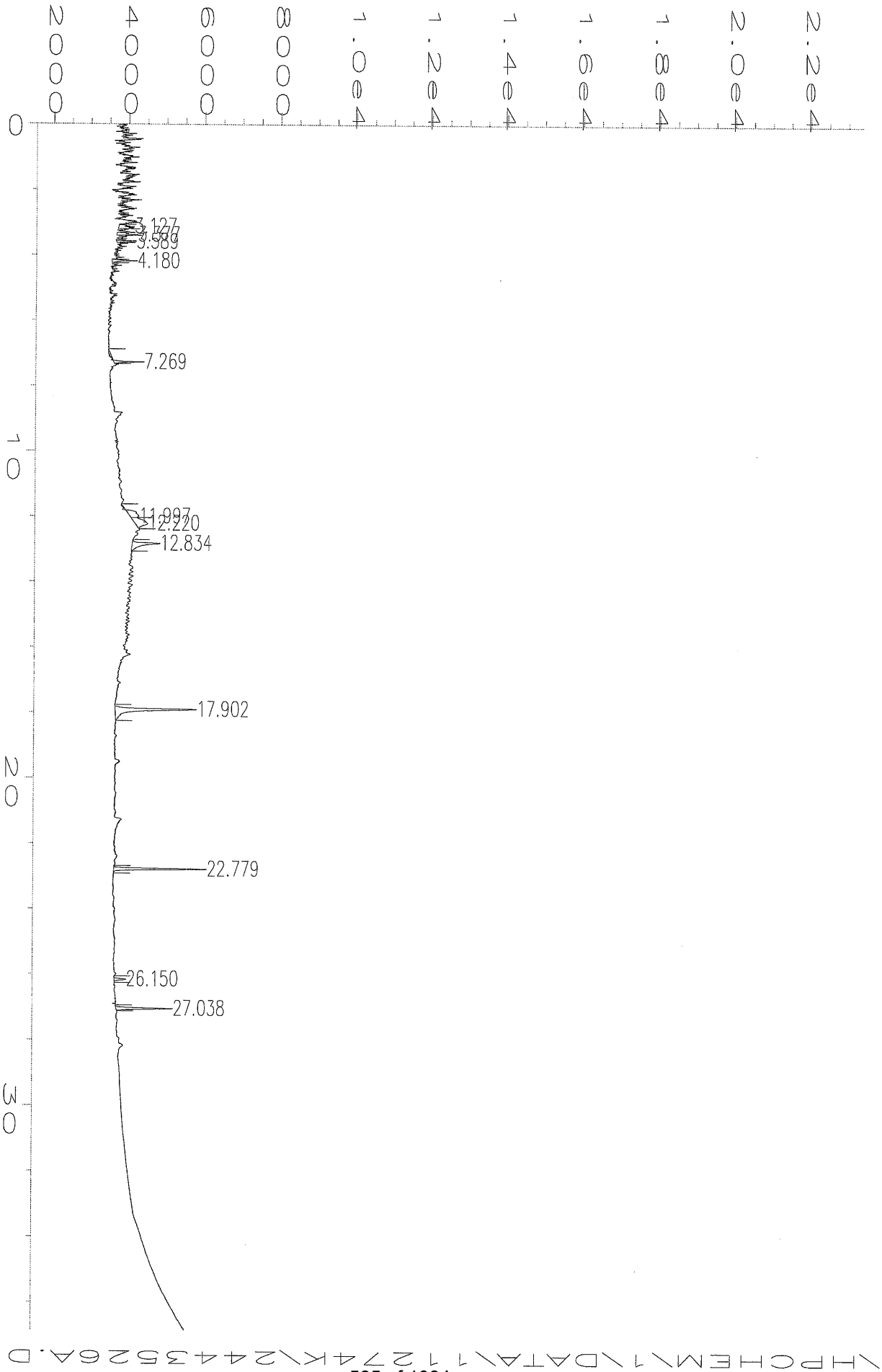
Data File Name : C:\HPCHEM\1\DATA\11274K\2443526A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-508
Run Time Bar Code:
Acquired on : 27 Nov 24 01:38 PM
Report Created on: 27 Nov 24 02:15 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\2443526A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.127	1846	432	PV	0.075	4.4761
2	3.377	1444	559	VV	0.034	3.4995
3	3.589	1043	472	VV	0.030	2.5284
4	4.180	1433	665	BV	0.032	3.4744
5	7.269	982	804	BV	0.021	2.3803
6	11.997	2549	227	BV	0.147	6.1804
7	12.220	4247	327	VB	0.159	10.2958
8	12.834	4090	724	BV	0.079	9.9144
9	17.902	11021	2152	BB	0.073	26.7170
10	22.779	7112	2450	BB	0.045	17.2413
11	26.150	980	311	BB	0.048	2.3764
12	27.038	4503	1491	BB	0.048	10.9160

Total area = 41251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22.779
26.150
27.038
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **26**
File Name: **2443526A**
Sample ID: **T-508**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/27/24**
QCBatch: **112724-GCK**
Can: **549**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **10:40** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **13:38** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **335843**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

										RT Win	C2-C4 C5-C12
										RT	**0.3** **0.1**
										RTI	**3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**	1433	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31	**7.27**	982	I	I	H	366	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						195	410
590-18-1	c-2-Butene	P	9.63	9.64						195	431
78-78-4	i-Pentane	P	11.37	11.32	**11.46**		O	O	L	476	473
109-67-1	1-Pentene	P	12.30	12.25	**12.22**	4247	I	I	H	495	495
109-66-0	n-Pentane	P	12.48	**12.43**	**12.43**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.74	**12.83**	4090	I	I	H	510	510
627-20-3	c-2-Pentene	P	13.08	13.03	**13.18**		O	I	M	519	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.72	**13.89**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.83	**15.01**		O	I	M	567	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.01						177	570
107-83-5	2-Methylpentane	P	15.08	15.03	**15.18**		O	I	M	572	571
96-14-0	3-Methylpentane	P	15.55	15.50	**15.61**		O	I	M	583	583
110-54-3	n-Hexane	P	16.17	**16.12**	**16.28**		O	I	M	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.90**	11021	I	I	H	650	651
110-82-7	Cyclohexane	P	18.14	18.17	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.41	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.48	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.69	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.12	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.44	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.12	**20.23**		O	I	M	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.96	**21.07**		O	I	M	754	753
108-88-3	Toluene	P	21.12	**21.15**	**21.26**		O	I	M	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.15**	980	I	I	H	948	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					41251		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					41251		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					41251		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112724-GCK		
Hexane Std Area:	335843		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	2.03	1.01	1.25	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.39	0.35	0.80	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	6.01	1.20	3.45	6.01	1.20	3.45	3.45	3.45
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	5.78	1.16	3.32	5.78	1.16	3.32	3.32	3.32
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	15.59	2.60	8.32	15.59	2.60	8.32	8.32	8.32
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	1.39	0.15	0.76	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	58.34	9.7	34.4	58.34	9.72	34.35	34.35	34.35
Total Non-Methane Hydrocarbons	16	1.0	58.34	58.3	38.3	58.34	58.34	38.26	38.26	38.26

SDG: **224435**
Laboratory Number: **26**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
2.0						2.03			
					0.0		0.00		
0.0						0.00			
	0.0					0.00			
					1.4		1.39		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
	0.0					0.00			
					6.0		6.01		
0.0						0.00			
					5.8		5.78		
					0.0		0.00		
	0.0					0.00			
			0.0						0.00
	0.0					0.00			
	0.0					0.00			
	0.0					0.00			
0.0						0.00			
			0.0						0.00
	0.0					0.00			
		15.6							
			0.0			0.00			
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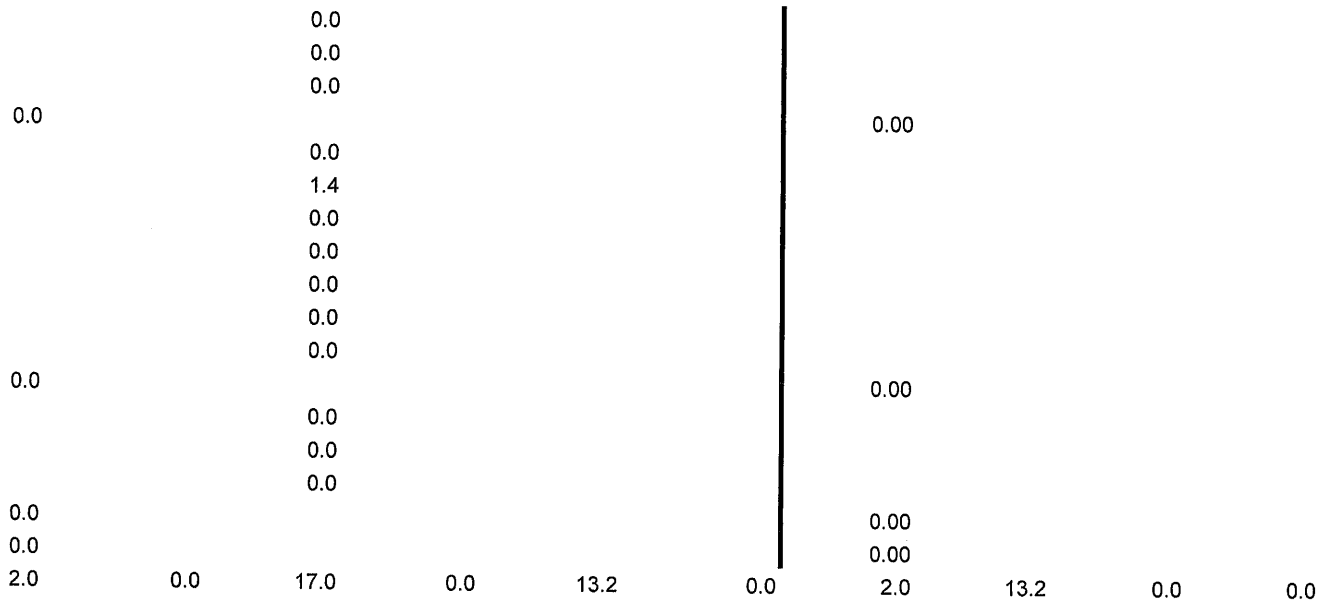
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

15.59

0.00

0.00

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0.0	0.0	0.0	0.0	17.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Canister: 549
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 11/27/24 **Time:** 13:38
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.20	2.30	6.90	3.45	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	1.16	2.30	6.90	3.32	J
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	2.60	2.13	6.40	8.32	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9.72	26.50	79.49	34.35	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	58.34	29.51	88.52	38.26	J

Sample Data Packages

SDG Number 224435

Lab Id Number 27

Client ID T-509

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 27

Client: C.E. Schmidt
Client ID: T-509
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 882
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

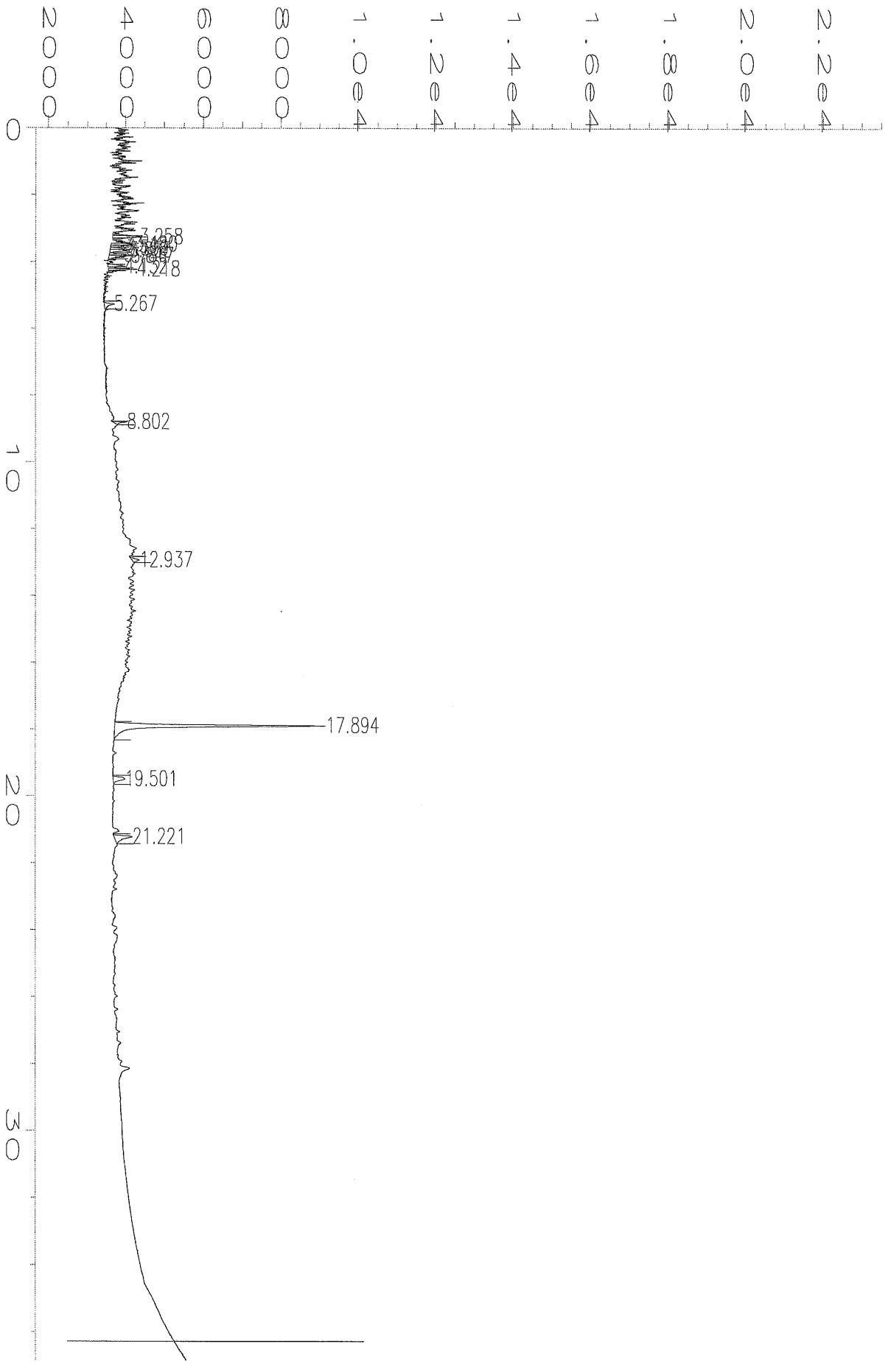
Data File Name : C:\HPCHEM\1\DATA\11274K\2443527A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-509
Run Time Bar Code:
Acquired on : 27 Nov 24 02:26 PM
Report Created on: 27 Nov 24 03:03 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\2443527A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.258	2344	797	VV	0.044	4.9884
2	3.480	1644	591	VV	0.038	3.4988
3	3.512	818	479	VV	0.028	1.7414
4	3.599	1004	425	VV	0.033	2.1381
5	3.655	1574	501	VV	0.045	3.3501
6	3.786	1067	448	PV	0.040	2.2713
7	3.817	1760	562	VV	0.042	3.7453
8	4.132	1240	443	PV	0.040	2.6396
9	4.218	1537	731	VV	0.031	3.2705
10	5.267	1230	251	BB	0.066	2.6183
11	8.802	822	355	BB	0.034	1.7494
12	12.937	942	194	PV	0.068	2.0056
13	17.894	25771	5434	BB	0.068	54.8551
14	19.501	2107	297	BB	0.092	4.4854
15	21.221	3121	469	PB	0.091	6.6427

Total area = 46981


2000
4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
4.248
5.267
8.802
12.937
17.894
19.501
21.221
C:\HPCHEM\1\DATA\12744K\244352 7A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **27**
File Name: **2443527A**
Sample ID: **T-509**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/27/24**
QCBatch: **112724-GCK**
Can: **882**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:20** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **14:26** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **335843**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.11	**4.13**	1240	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.15			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.22**	1537	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	O	M	285	290
74-98-6	Propane	P	5.20	**5.20**	**5.27**	1230	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.67**						129	351
106-98-9	1-Butene	P	7.29	7.36	**7.27**		I	I	H	365	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.80**	822	I	I	H	411	410
590-18-1	c-2-Butene	P	9.63	9.64						195	431
78-78-4	i-Pentane	P	11.37	11.32	**11.46**		O	O	L	476	473
109-67-1	1-Pentene	P	12.30	12.25	**12.22**		I	I	H	495	495
109-66-0	n-Pentane	P	12.48	**12.43**	**12.43**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.74						177	510
627-20-3	c-2-Pentene	P	13.08	13.03	**12.94**	942	I	O	M	513	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.72	**13.89**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.83	**15.01**		O	I	M	567	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.01						177	570
107-83-5	2-Methylpentane	P	15.08	15.03	**15.18**		O	I	M	572	571
96-14-0	3-Methylpentane	P	15.55	15.50	**15.61**		O	I	M	583	583
110-54-3	n-Hexane	P	16.17	**16.12**	**16.28**		O	I	M	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						95	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.89**	25771	I	I	H	650	651
110-82-7	Cyclohexane	P	18.14	18.16	**18.27**		O	O	L	662	658
591-76-4	2-Methylhexane	P	18.38	18.40	**18.51**		O	I	M	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.47	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.68	**18.78**		I	I	H	678	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.11	**19.21**		I	I	H	691	690
142-82-5	n-Heptane	P	19.41	19.43	**19.50**	2107	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.11	**20.23**		O	I	M	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.95	**21.07**		O	I	M	754	753
108-88-3	Toluene	P	21.12	**21.14**	**21.22**	3121	I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.43	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.65	**21.68**		I	I	H	776	775
111-65-9	n-Octane	P	22.27	22.37	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.85	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.05	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.50						-55	881
95-47-6	o-xylene	P	24.57	24.67	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	24.97	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.46	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.03	**26.15**		O	I	M	948	947
620-14-4	3-Ethyltoluene	P	26.17	26.27	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.36	**26.48**		O	I	M	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.55	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.71	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.18						-148	991
124-18-5	n-Decane	P	27.26	27.36	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.65						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.20						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.33	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					46981		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					46981		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					46981		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112724-GCK		
Hexane Std Area:	335843		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.75	0.88	1.01	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	2.17	1.09	1.34	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	1.74	0.58	1.05	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	1.16	0.29	0.67	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	1.33	0.27	0.77	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	36.45	6.07	19.44	36.45	6.07	19.44	19.44	19.44
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	2.98	0.43	1.75	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	4.41	0.63	2.38	4.41	0.63	2.38	2.38	2.38
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	66.44	11.1	39.1	66.44	11.07	39.12	39.12	39.12
Total Non-Methane Hydrocarbons	16	1.0	66.44	66.4	43.6	66.44	66.44	43.57	43.57	43.57

SDG: **224435**
Laboratory Number: **27**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	J	=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.8		1.75		
					0.0			0.00	
	2.2					2.17			
					0.0		0.00		
	1.7					1.74			
		0.0				0.00			
					0.0		0.00		
	0.0					0.00			
					1.2		1.16		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
	0.0					0.00			
					0.0		0.00		
					1.3		1.33		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
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		0.0				0.00			
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		0.0				0.00			
			36.4						
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		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	3.0					2.98			
				0.0					0.00
		0.0				0.00			
			4.4						
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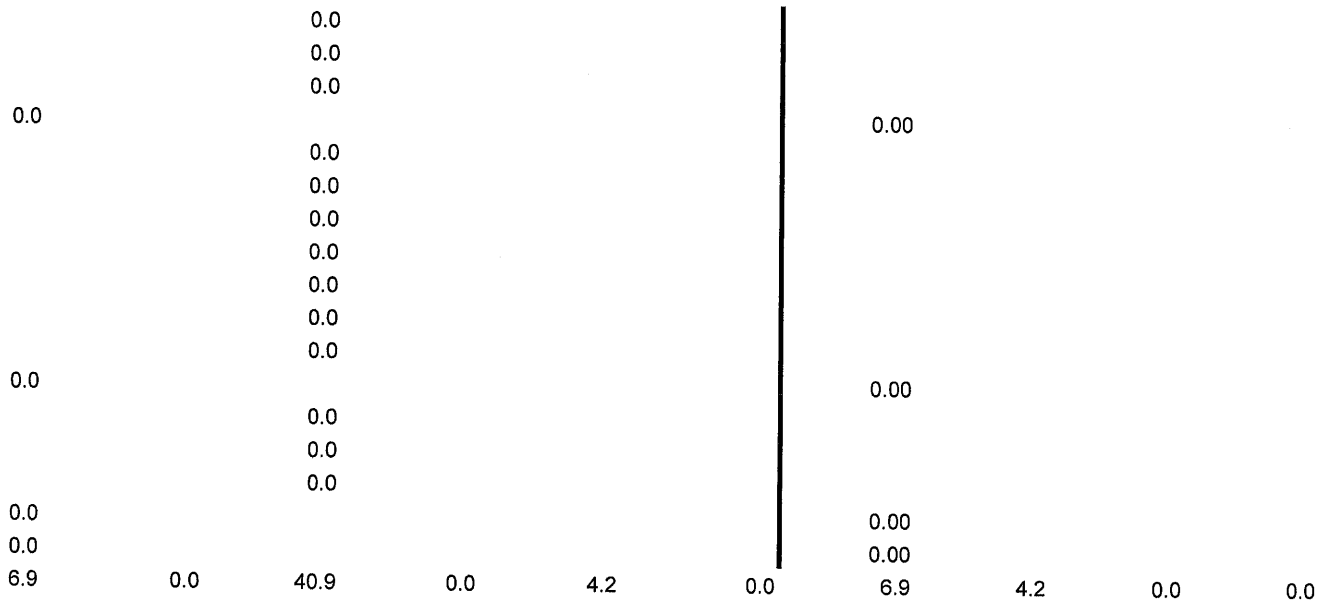
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6.9
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

36.45

4.41

0.00

0.00
0.00
0.00

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0.0	0.0	0.0	0.0	40.9	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 27

File Name: 2443527A
Description: T-509
Canister: 882
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 11/27/24 **Time:** 14:26
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	6.07	2.13	6.40	19.44	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	0.63	2.16	6.47	2.38	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	11.07	26.50	79.49	39.12	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	66.44	29.51	88.52	43.57	J

Sample Data Packages

SDG Number 224435

Lab Id Number 28

Client ID T-510

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 28

Client: C.E. Schmidt
Client ID: T-510
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 860
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:18
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

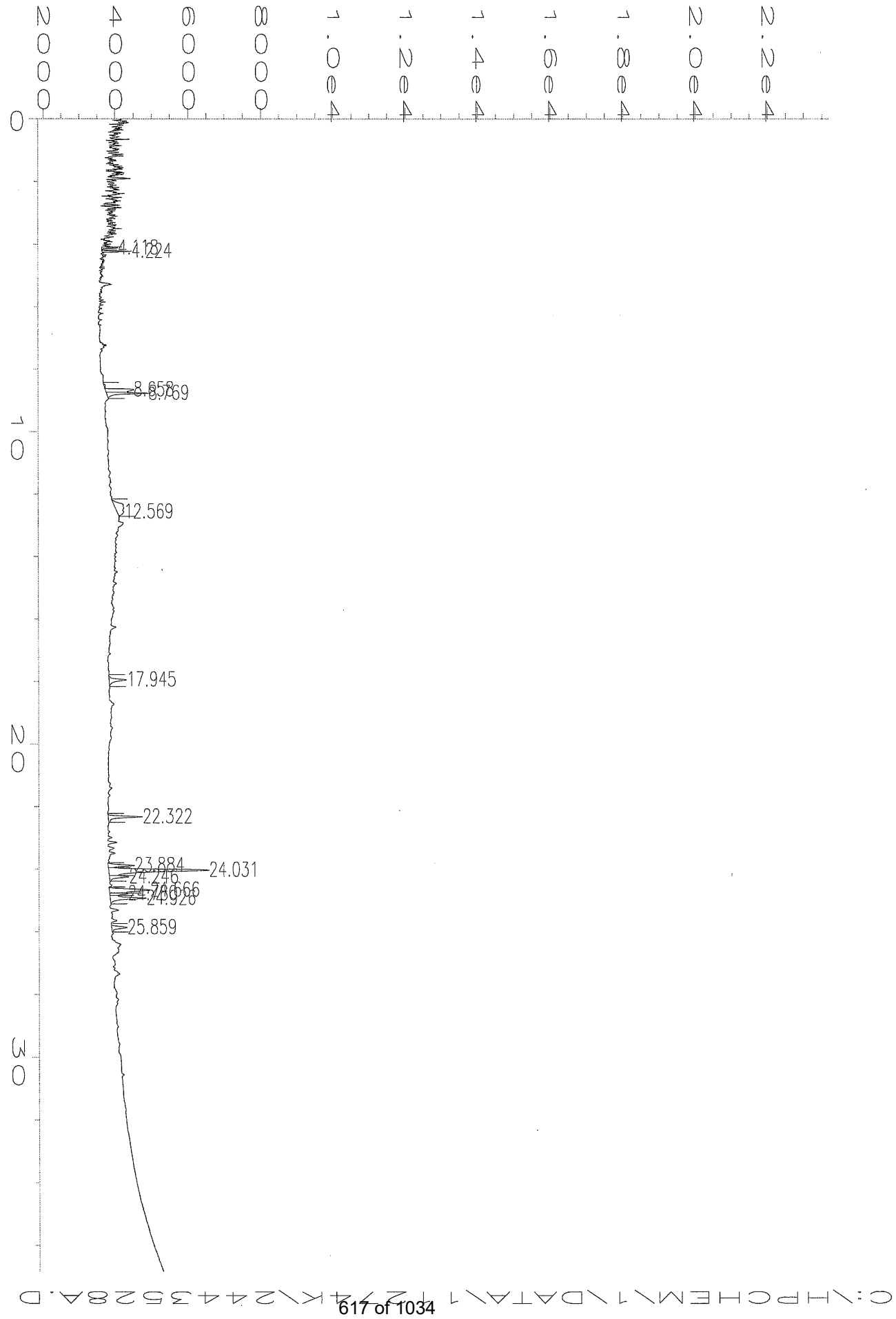
Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11274K\2443528A.D
Operator : DA
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : T-510
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 27 Nov 24 03:21 PM
Instrument Method: KTO3DHC.MTH
Report Created on: 27 Nov 24 03:58 PM
Analysis Method : KTO3DHC.MTH
Sample Info : SCHMIDT, 200 ML

Sig. 1 in C:\HPCHEM\1\DATA\11274K\2443528A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.118	1022	407	VV	0.035	1.7096
2	4.224	1295	809	PV	0.026	2.1645
3	8.658	4684	772	BV	0.089	7.8317
4	8.769	3885	1149	VB	0.048	6.4953
5	12.569	4846	185	BB	0.324	8.1022
6	17.945	2540	471	BB	0.076	4.2463
7	22.322	3766	945	BB	0.061	6.2971
8	23.884	2953	722	PV	0.061	4.9367
9	24.031	17195	2755	VV	0.093	28.7499
10	24.246	2409	527	VB	0.067	4.0278
11	24.666	6412	1118	PV	0.086	10.7210
12	24.780	1772	488	VV	0.055	2.9626
13	24.926	4979	987	VB	0.073	8.3253
14	25.859	2051	421	BB	0.072	3.4298

Total area = 59809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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **28**
File Name: **2443528A**
Sample ID: **T-510**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **11/27/24**
QCBatch: **112724-GCK**
Can: **860**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:18** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **15:21** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **335843**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.11	**4.12**	1022	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.15			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.22**	1295	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	O	M	285	290
74-98-6	Propane	P	5.20	**5.20**	**5.27**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.67**						129	351
106-98-9	1-Butene	P	7.29	7.36	**7.27**		I	I	H	365	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.77**	3885	I	I	H	410	410
590-18-1	c-2-Butene	P	9.63	9.64						195	431
78-78-4	i-Pentane	P	11.37	11.32	**11.46**		O	O	L	476	473
109-67-1	1-Pentene	P	12.30	12.25	**12.22**		I	I	H	495	495
109-66-0	n-Pentane	P	12.48	**12.43**	**12.43**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.74						177	510
627-20-3	c-2-Pentene	P	13.08	13.03	**12.94**		I	O	M	513	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.72	**13.89**		O	I	M	538	537
287-92-3	Cyclopentane	P	14.88	14.83	**15.01**		O	I	M	567	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.01						177	570
107-83-5	2-Methylpentane	P	15.08	15.03	**15.18**		O	I	M	572	571
96-14-0	3-Methylpentane	P	15.55	15.50	**15.61**		O	I	M	583	583
110-54-3	n-Hexane	P	16.17	**16.12**	**16.28**		O	I	M	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						95	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.95**	2540	I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.22	**18.27**		I	O	M	662	658
591-76-4	2-Methylhexane	P	18.38	18.46	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.53	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.74	**18.78**		I	I	H	678	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.17	**19.21**		I	I	H	691	690
142-82-5	n-Heptane	P	19.41	19.49	**19.50**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.17	**20.23**		I	O	M	726	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.01	**21.07**		I	I	H	756	753
108-88-3	Toluene	P	21.12	**21.20**	**21.22**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.43	**21.46**		I	I	H	770	768
589-81-1	3-Methylheptane	p	21.55	21.65	**21.68**		I	I	H	777	775
111-65-9	n-Octane	P	22.27	22.37	**22.32**	3766	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.85	**23.88**	2953	I	O	M	860	855
108-38-3	m,p-xylene	P	23.95	24.05	**24.03**	17195	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.50						-55	881
95-47-6	o-xylene	P	24.57	24.67	**24.67**	6412	I	O	M	890	886
111-84-2	n-Nonane	P	24.87	24.97	**24.93**	4979	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.46	**25.53**		I	O	M	924	919
103-65-1	n-propylbenzene	P	25.93	26.03	**26.15**		O	I	M	950	947
620-14-4	3-Ethyltoluene	P	26.17	26.27	**26.30**		I	I	H	956	957
622-96-8	4-Ethyltoluene	P	26.26	26.36	**26.48**		O	O	L	963	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.55	**26.65**		I	O	M	970	964
611-14-3	2-Ethyltoluene	P	26.61	26.71	**26.74**		I	I	H	974	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.18						-113	991
124-18-5	n-Decane	P	27.26	27.36	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.65						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.20						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.33	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					59809		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					59809		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					59809		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	112724-GCK		
Hexane Std Area:	335843		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.45	0.72	0.83	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	1.83	0.92	1.13	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	5.49	1.37	3.16	5.49	1.37	3.16	3.16	3.16
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	3.59	0.60	1.92	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	5.33	0.67	3.12	5.33	0.67	3.12	3.12	3.12
Ethylbenzene	106.2	8	4.18	0.52	2.27	4.18	0.52	2.27	2.27	2.27

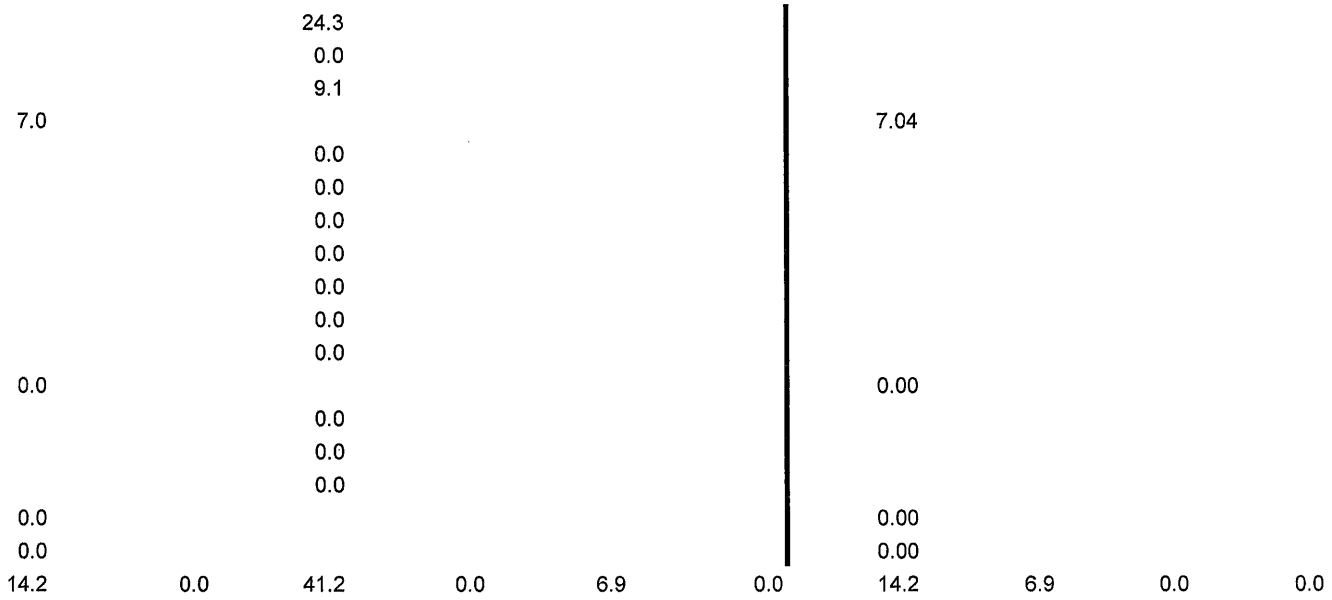
m,p-xylene	106.2	8	24.32	3.04	13.23	24.32	3.04	13.23	13.23	13.23
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	9.07	1.13	4.93	9.07	1.13	4.93	4.93	4.93
n-Nonane	128.3	9	7.04	0.78	4.11	7.04	0.78	4.11	4.11	4.11
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	84.59	14.1	49.8	84.59	14.10	49.80	49.80	49.80
Total Non-Methane Hydrocarbons	16	1.0	84.59	84.6	55.5	84.59	84.59	55.47	55.47	55.47

SDG: **224435**
Laboratory Number: **28**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.4		1.45		
					0.0			0.00	
	1.8					1.83			
					0.0		0.00		
	0.0					0.00			
		0.0				0.00			
					0.0		0.00		
	0.0					0.00			
					5.5		5.49		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
	0.0					0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			3.6						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
	5.3					5.33			
			4.2						


24.3
0.0
9.1
7.0
7.04
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.00
0.0
0.0
0.0
0.0
0.00
0.0
0.00
14.2
0.0
41.2
0.0
6.9
0.0
14.2
6.9
0.0
0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

3.59

0.00

4.18

				24.32	
				0.00	
				9.07	
				0.00	
				0.00	
				0.00	
				0.00	
				0.00	
				0.00	
				0.00	
				0.00	
				0.00	
				0.00	
0.0	0.0	0.0	0.0	41.2	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 28

File Name: 2443528A
Description: T-510
Canister: 860
QC_Batch: 112724-GCK

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 11/27/24 **Time:** 15:21
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.37	2.30	6.90	3.16	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.67	2.34	7.02	3.12	J
100-41-4	Ethylbenzene	0.50	1.50	0.52	2.18	6.53	2.27	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	3.04	2.18	6.53	13.23	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	1.13	2.18	6.53	4.93	J
111-84-2	n-Nonane	0.44	1.33	0.78	2.34	7.01	4.11	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	14.10	26.50	79.49	49.80	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	84.59	29.51	88.52	55.47	J

Sample Data Packages

SDG Number **224435**

Lab Id Number **29**

Client ID T-511

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 29

Client: C.E. Schmidt
Client ID: T-511
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 627
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:31
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

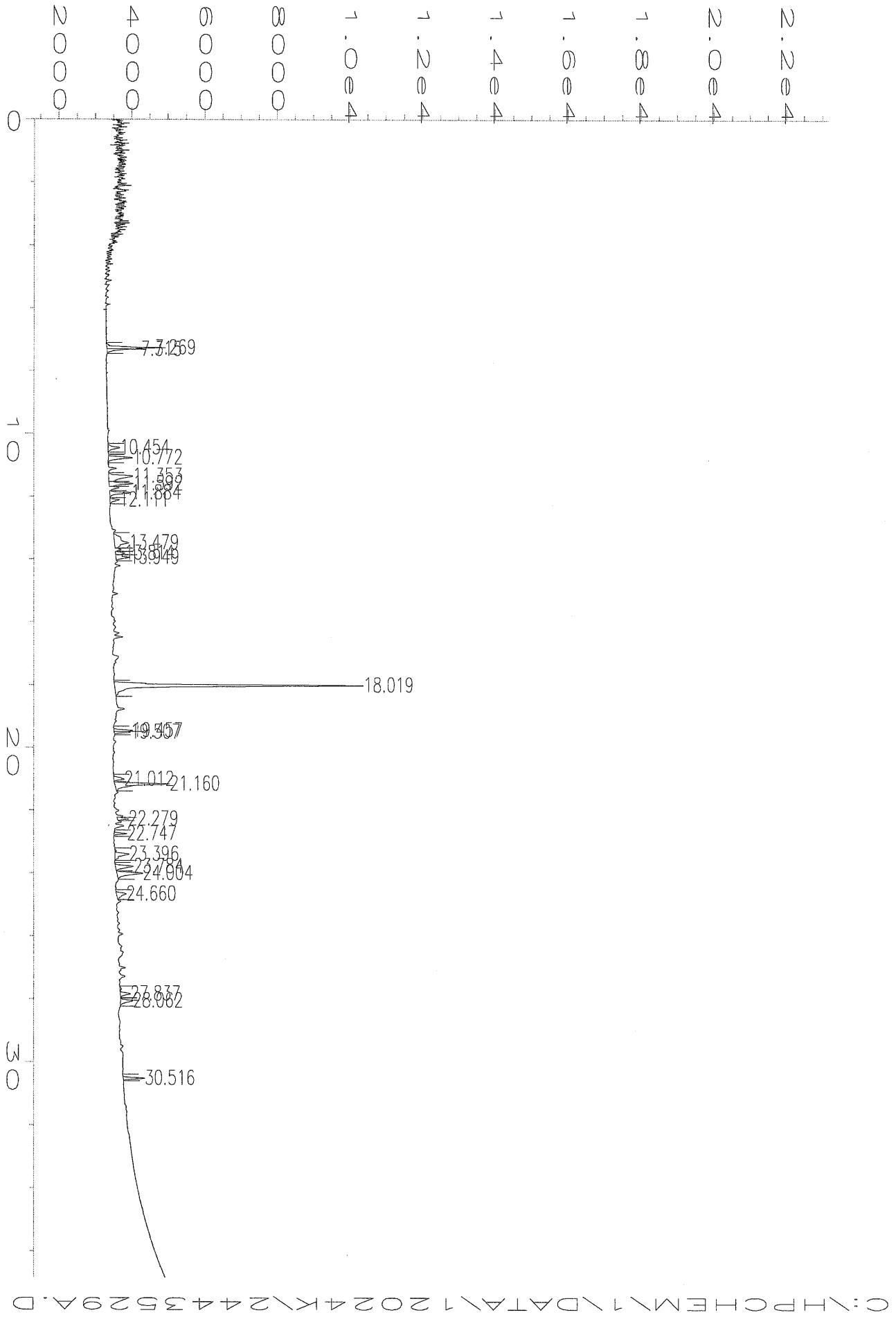
Data File Name : C:\HPCHEM\1\DATA\12024K\2443529A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-511
Run Time Bar Code:
Acquired on : 02 Dec 24 12:34 PM
Report Created on: 02 Dec 24 01:11 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12024K\2443529A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	7.269	4663	1692	BV	0.041	5.0868
2	7.315	2224	960	VB	0.039	2.4265
3	10.454	1751	326	BB	0.074	1.9097
4	10.772	3144	665	BB	0.068	3.4299
5	11.353	5061	665	BV	0.103	5.5209
6	11.592	3183	661	VV	0.072	3.4721
7	11.884	2558	586	VB	0.066	2.7903
8	12.111	1083	257	BB	0.061	1.1816
9	13.479	4832	396	BV	0.159	5.2711
10	13.814	1042	248	VV	0.066	1.1362
11	13.949	2065	373	VV	0.078	2.2523
12	18.019	29435	6857	BB	0.063	32.1109
13	19.457	1614	511	BV	0.048	1.7604
14	19.507	1371	446	VB	0.047	1.4958
15	21.012	1506	287	BV	0.074	1.6430
16	21.160	7684	1508	PV	0.074	8.3830
17	22.279	1081	297	VV	0.056	1.1797
18	22.747	1018	350	BB	0.046	1.1104
19	23.396	2564	386	BB	0.093	2.7972
20	23.784	2688	493	BV	0.080	2.9327
21	24.004	4179	709	PB	0.089	4.5584
22	24.660	1769	268	BV	0.093	1.9294
23	27.837	1472	271	BB	0.082	1.6059
24	28.062	1770	331	BB	0.080	1.9310
25	30.516	1911	587	BB	0.051	2.0848

Total area = 91666


2000
4000
6000
8000
1.0e4
1.2e4
1.4e4
1.6e4
1.8e4
2.0e4
2.2e4
0
10
20
30
10.454
10.772
18.019
21.012
21.160
22.279
22.747
24.004
24.660
28.062
30.516
C:\HPCHEM\1\DATA\1202AK\244352A.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **29**
File Name: **2443529A**
Sample ID: **T-511**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **12/02/24**
QCBatch: **120224-GCK**
Can: **627**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:31** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **12:34** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **364162**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31	**7.32**	2224	I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						202	410
590-18-1	c-2-Butene	P	9.63	9.63						202	431
78-78-4	i-Pentane	P	11.37	11.44	**11.35**	5061	I	I	H	472	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.81**	1042	I	I	H	534	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						96	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**18.02**	29435	I	I	H	654	651
110-82-7	Cyclohexane	P	18.14	18.29	**18.27**		I	O	M	662	658
591-76-4	2-Methylhexane	P	18.38	18.53	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.60	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.81	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.24	**19.21**		I	I	H	691	690
142-82-5	n-Heptane	P	19.41	19.56	**19.51**	1371	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.24	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.08	**21.01**	1506	I	I	H	752	753
108-88-3	Toluene	P	21.12	**21.27**	**21.27**		I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.48	**21.46**		I	I	H	767	768
589-81-1	3-Methylheptane	p	21.55	21.70	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.42	**22.42**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.90	**24.00**	4179	I	O	M	861	855
108-38-3	m,p-xylene	P	23.95	24.10						-62	863
100-42-5	Styrene	P	24.40	24.55						-62	881
95-47-6	o-xylene	P	24.57	24.72	**24.66**	1769	I	I	H	886	886
111-84-2	n-Nonane	P	24.87	25.02	**25.02**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.51	**25.53**		I	I	H	921	919
103-65-1	n-propylbenzene	P	25.93	26.08	**26.13**		I	I	H	946	947
620-14-4	3-Ethyltoluene	P	26.17	26.32	**26.30**		I	O	M	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.41	**26.48**		I	I	H	961	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.60	**26.65**		I	O	M	968	964
611-14-3	2-Ethyltoluene	P	26.61	26.76	**26.74**		I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.23						-147	991
124-18-5	n-Decane	P	27.26	27.41	**27.41**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.70						-34	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.25						-34	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.38	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					91666		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					91666		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					91666		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120224-GCK		
Hexane Std Area:	364162		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	3.15	0.79	1.81	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	7.16	1.43	4.24	7.16	1.43	4.24	4.24	4.24
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	1.47	0.25	0.87	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	41.63	6.94	22.21	41.63	6.94	22.21	22.21	22.21
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	1.94	0.28	1.14	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	2.13	0.27	1.25	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	5.91	0.74	3.22	5.91	0.74	3.22	3.22	3.22

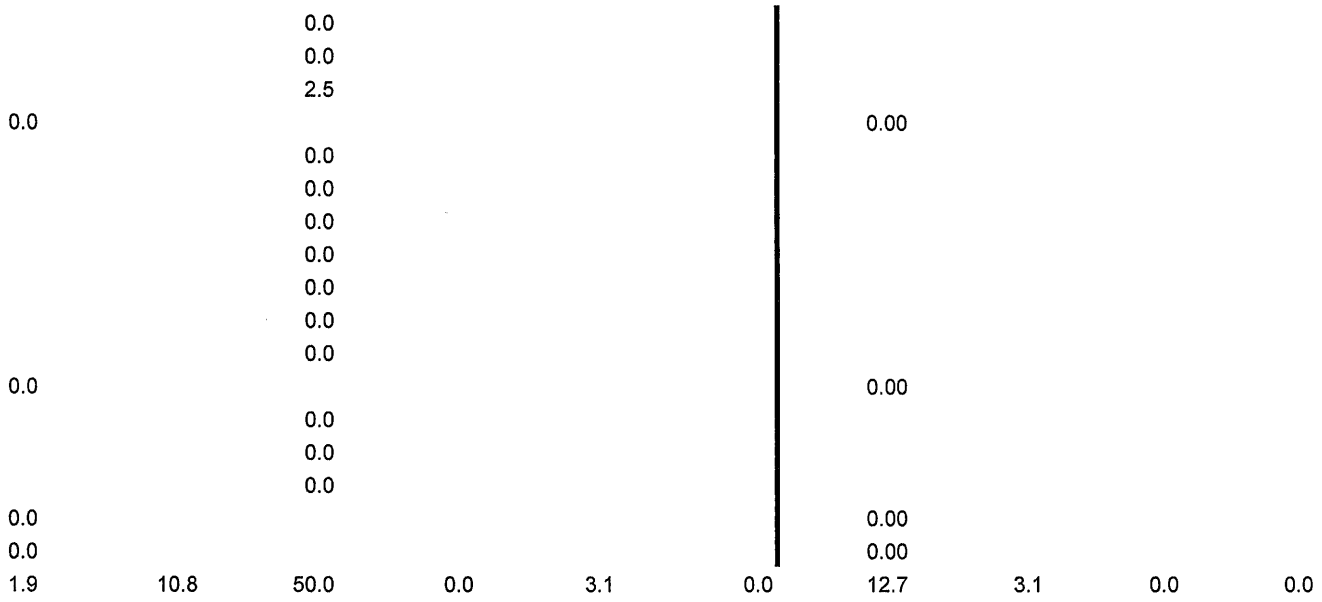
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	2.50	0.31	1.36	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	129.64	21.6	76.3	129.64	21.61	76.33	76.33	76.33
Total Non-Methane Hydrocarbons	16	1.0	129.64	129.6	85.0	129.64	129.64	85.01	85.01	85.01

SDG: **224435**
Laboratory Number: **29**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	J	=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	J	=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					3.1		3.15		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		7.2				7.16			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		1.5				1.47			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			41.6						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
1.9						1.94			
				0.0					0.00
		2.1				2.13			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
			5.9						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12.7
3.1
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

41.63

0.00

5.91

0.00
0.00
2.50

0.00
0.00
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0.0	0.0	0.0	0.0	50.0	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 29

File Name: 2443529A
Description: T-511
Canister: 627
QC_Batch: 120224-GCK

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/02/24 **Time:** 12:34
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	1.43	2.37	7.10	4.24	J
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	6.94	2.13	6.40	22.21	
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	0.74	2.18	6.53	3.22	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	21.61	26.50	79.49	76.33	J
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	129.64	29.51	88.52	85.01	J

Sample Data Packages

SDG Number 224435

Lab Id Number 30

Client ID T-512

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 30

Client: C.E. Schmidt
Client ID: T-512
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 417
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\12034K\2443530A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-512
Run Time Bar Code:
Acquired on : 03 Dec 24 12:49 PM
Report Created on: 03 Dec 24 01:26 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12034K\2443530A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.121	1300	745	VV	0.027	0.3227
2	6.971	2517	679	BV	0.053	0.6247
3	7.274	948	555	PV	0.028	0.2354
4	7.305	1011	853	VV	0.023	0.2510
5	8.346	1402	315	BB	0.062	0.3480
6	8.633	4675	1190	BB	0.052	1.1603
7	12.295	3862	266	BV	0.202	0.9585
8	12.460	1788	296	VB	0.083	0.4436
9	14.906	3319	956	BV	0.052	0.8237
10	15.226	16982	3462	PB	0.068	4.2145
11	16.895	3603	690	BB	0.072	0.8942
12	17.831	22782	5302	BV	0.063	5.6539
13	18.639	1358	347	BB	0.060	0.3370
14	19.001	1726	308	BB	0.076	0.4284
15	19.379	2958	901	BV	0.056	0.7341
16	19.422	2531	827	VB	0.051	0.6281
17	20.970	2691	436	BV	0.083	0.6678
18	21.118	6421	1267	PV	0.073	1.5934
19	22.172	2272	523	VV	0.072	0.5638
20	22.255	4701	1076	VV	0.064	1.1667
21	22.346	2309	502	VV	0.068	0.5731
22	22.478	3148	665	VB	0.075	0.7813
23	23.331	39994	8216	VV	0.070	9.9254
24	23.747	5289	1100	VV	0.069	1.3125
25	23.811	4097	1052	VV	0.058	1.0166
26	23.969	13277	1720	VV	0.108	3.2950
27	24.452	1775	396	VV	0.068	0.4404
28	24.627	6068	1031	VV	0.087	1.5060
29	24.713	4874	846	VV	0.080	1.2095
30	24.862	3718	766	VV	0.069	0.9228
31	25.056	1014	295	PV	0.055	0.2517
32	25.232	4407	910	PV	0.073	1.0938
33	25.397	2816	519	VV	0.080	0.6989
34	25.570	3378	754	VV	0.068	0.8383
35	25.779	5254	858	VV	0.090	1.3039

36	25.909	12558	2024	VV	0.087	3.1165
37	26.300	11368	2015	VV	0.081	2.8213
38	26.487	9313	1757	VV	0.076	2.3113
39	26.571	4926	1061	VV	0.071	1.2226
40	26.844	4551	650	PV	0.095	1.1295
41	26.986	32340	7307	VV	0.064	8.0260
42	27.235	5633	1268	VV	0.066	1.3980
43	27.320	6594	1808	VV	0.054	1.6365
44	27.429	41671	7854	VV	0.079	10.3417
45	27.653	8157	1511	VV	0.079	2.0243
46	27.778	17057	3491	VV	0.074	4.2332
47	27.908	3475	936	VV	0.055	0.8624
48	28.009	14106	2984	VV	0.071	3.5006
49	28.114	4545	845	VV	0.076	1.1279
50	28.304	10865	2527	VV	0.064	2.6965
51	28.515	1624	322	VV	0.081	0.4030
52	28.735	8855	1522	VV	0.081	2.1975
53	28.804	2600	798	VV	0.054	0.6453
54	28.930	2148	526	VV	0.066	0.5332
55	29.159	1792	423	PV	0.063	0.4447
56	29.443	1265	355	BV	0.057	0.3139
57	29.928	2745	289	BV	0.132	0.6813
58	30.176	1677	388	VB	0.068	0.4162
59	30.543	2812	336	BB	0.112	0.6979

Total area = 402944

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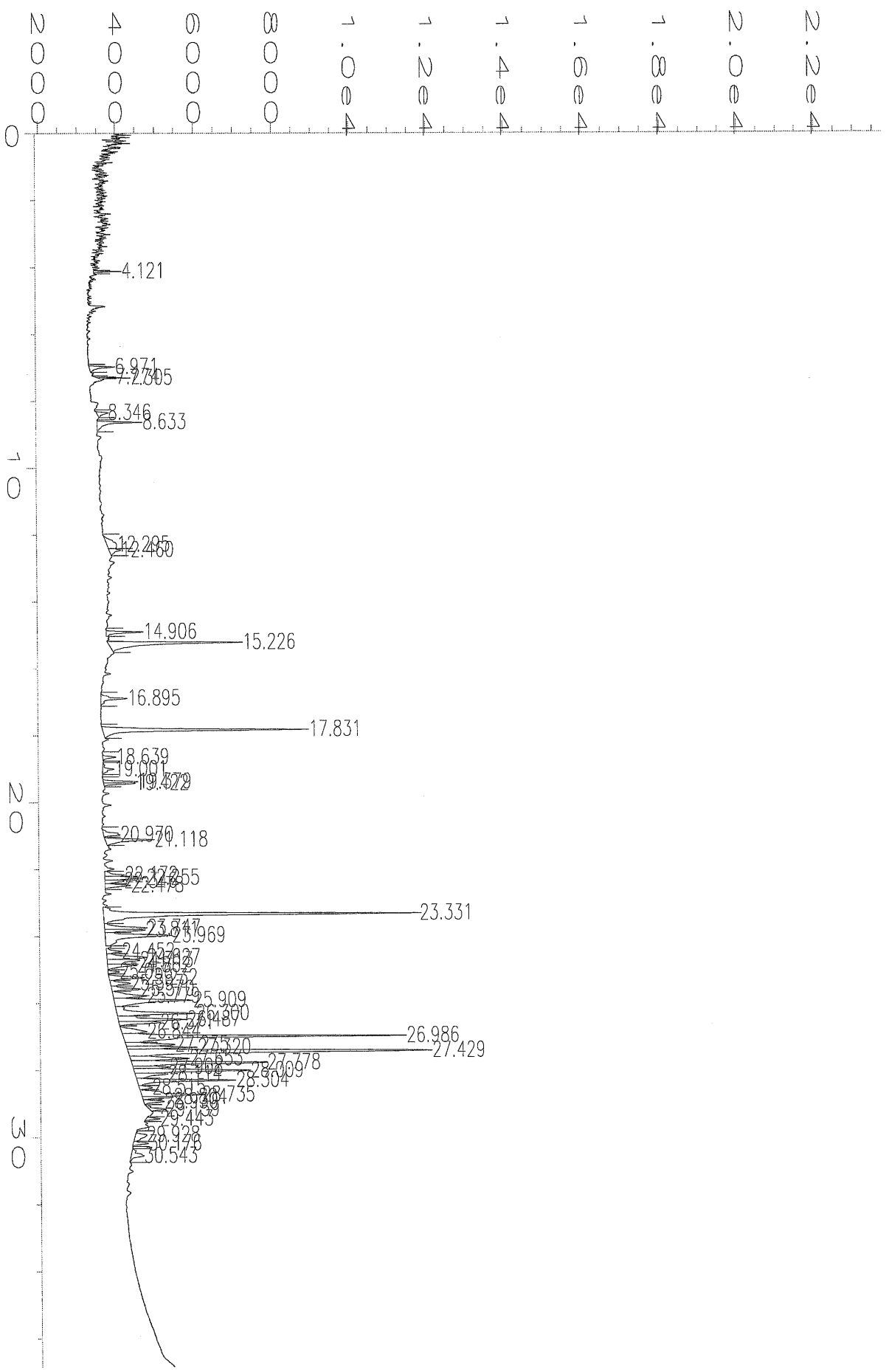
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **30**
File Name: **2443530A**
Sample ID: **T-512**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **417**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:41** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **12:49** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

							RT Win	C2-C	C5-C12		
							RT	**0.3**	**0.1**		
							RTI	**3**	**3**		

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.01	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.05			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.12**	1300	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11						-208	290
74-98-6	Propane	P	5.20	**5.20**	**5.13**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.53**						141	351
106-98-9	1-Butene	P	7.29	7.22	**7.27**	948	I	I	H	366	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**	1402	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76	**8.71**		I	I	H	409	410
590-18-1	c-2-Butene	P	9.63	9.64	**9.54**		O	I	M	429	431
78-78-4	i-Pentane	P	11.37	11.35	**11.35**		I	I	H	473	473
109-67-1	1-Pentene	P	12.30	12.28	**12.29**	3862	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.46**	**12.46**	1788	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.77	**12.76**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.06	**13.06**		I	I	H	516	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.75	**13.75**		I	I	H	535	537
287-92-3	Cyclopentane	P	14.88	14.86	**14.91**	3319	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.04	**15.04**		I	I	H	570	570
107-83-5	2-Methylpentane	P	15.08	15.06	**15.10**		I	I	H	572	571
96-14-0	3-Methylpentane	P	15.55	15.53	**15.53**		I	I	H	583	583
110-54-3	n-Hexane	P	16.17	**16.15**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84	**16.89**	3603	I	I	H	623	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.02**		I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.85**	**17.83**		I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.10	**18.12**		I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.34	**18.36**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.41	**18.43**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.62	**18.64**	1358	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.05	**19.00**	1726	I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.37	**19.38**	2958	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.05	**20.08**		I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.89	**20.97**	2691	I	I	H	755	753
108-88-3	Toluene	P	21.12	**21.08**	**21.12**	6421	I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.33	**21.23**		O	O	L	764	768
589-81-1	3-Methylheptane	p	21.55	21.55	**21.54**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.27	**22.26**	4701	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.75	**23.75**	5289	I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	23.95	**23.97**	13277	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.40	**24.45**	1775	I	I	H	884	881
95-47-6	o-xylene	P	24.57	24.57	**24.63**	6068	I	O	M	891	886
111-84-2	n-Nonane	P	24.87	24.87	**24.86**	3718	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.36	**25.40**	2816	I	O	M	923	919
103-65-1	n-propylbenzene	P	25.93	25.93	**25.91**		I	I	H	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.17	**26.14**		I	O	M	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.26	**26.30**		I	I	H	961	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.45	**26.49**		I	O	M	968	964
611-14-3	2-Ethyltoluene	P	26.61	26.61	**26.57**	4926	I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.08	**26.99**		I	I	H	989	991
124-18-5	n-Decane	P	27.26	27.26	**27.24**	5633	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.55	**27.65**	8157	I	I	H	1015	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.10	**28.01**		I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.23	**28.30**		I	I	H	1039	1037
1120-21-4	Undecane	P	29.86	29.90	**29.93**	2745	I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.50	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					402944		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					402944		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					402944		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	1.84	0.92	1.13	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.34	0.34	0.77	ND	ND	ND	0	
n-Butane	58.1	4	1.98	0.50	1.18	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	5.46	1.09	3.14	5.46	1.09	3.14	3.14	3.14
n-Pentane	72.1	5	2.53	0.51	1.49	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	4.69	0.94	2.70	4.69	0.94	2.70	2.70	2.70
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	5.10	0.85	2.93	5.10	0.85	2.93	2.93	2.93
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	1.92	0.27	1.13	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	2.44	0.31	1.43	ND	ND	ND	0	
n-Heptane	100.2	7	4.18	0.60	2.45	4.18	0.60	2.45	2.45	2.45
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	3.81	0.48	2.23	ND	ND	ND	0	
Toluene	92.1	7	9.08	1.30	4.90	9.08	1.30	4.90	4.90	4.90
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	6.65	0.83	3.89	6.65	0.83	3.89	3.89	3.89

Ethylbenzene	106.2	8	7.48	0.94	4.07	7.48	0.94	4.07	4.07	4.07
m,p-xylene	106.2	8	18.78	2.35	10.22	18.78	2.35	10.22	10.22	10.22
Styrene	104.2	8	2.51	0.31	1.34	ND	ND	ND	0	
o-xylene	106.2	8	8.58	1.07	4.67	8.58	1.07	4.67	4.67	4.67
n-Nonane	128.3	9	5.26	0.58	3.07	5.26	0.58	3.07	3.07	3.07
i-Propylbenzene	120.2	9	3.98	0.44	2.18	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	6.97	0.77	3.81	6.97	0.77	3.81	3.81	3.81
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	7.97	0.80	4.65	7.97	0.80	4.65	4.65	4.65
1,2,3-Trimethylbenzene	120.2	9	11.54	1.28	6.31	11.54	1.28	6.31	6.31	6.31
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	3.88	0.35	2.26	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	569.87	95.0	335.5	569.87	94.98	335.54	335.54	335.54
Total Non-Methane Hydrocarbons	16	1.0	569.87	569.9	373.7	569.87	569.87	373.69	373.69	373.69

SDG: **224435**
Laboratory Number: **30**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	J	=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	J	=		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	J	=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
1.8						1.84			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					1.3		1.34		
2.0						1.98			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					5.5		5.46		
2.5						2.53			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				4.7					4.69
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				5.1					5.10
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		1.9				1.92			
		2.4				2.44			
4.2						4.18			
				0.0					0.00
		3.8				3.81			
			9.1						
		0.0				0.00			
		0.0				0.00			
6.6						6.65			

		7.5							
		18.8							
		2.5							
		8.6							
5.3						5.26			
		4.0							
		0.0							
		0.0							
		0.0							
		0.0							
		7.0							
		0.0							
8.0						7.97			
		11.5							
		0.0							
		0.0							
3.9						3.88			
0.0						0.00			
34.3	8.2	68.9	9.8	6.8	0.0	42.5	6.8	0.0	9.8

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

9.08

				7.48	
				18.78	
				2.51	
				8.58	
				3.98	
				0.00	
				0.00	
				0.00	
				0.00	
				6.97	
				0.00	
				11.54	
				0.00	
				0.00	
0.0	0.0	0.0	0.0	68.9	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		30	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|_i$

2) ppbC = $\frac{6 \text{ Carbons}}{(\text{Avg RFn})} \times \frac{\text{Ansamp}}{\text{SV}} \times \text{CDF} \times 1000 = \textbf{Cn}$

3) Amount ppbv = $\frac{\text{Cn}}{\text{C\#}}$

4) Amount ug/m3 = (amt(ppbv) $\times \frac{\text{MW}}{24.4}$

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.04E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	2.04E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.04E+04	1300	1.8	0.92	1.13
Propene	3	TRG	42.1	2.04E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	2.04E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.04E+04	948	1.3	0.34	0.77
n-Butane	4	TRG	58.1	2.04E+04	1402	2.0	0.50	1.18
t-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.04E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	2.04E+04	3862	5.5	1.09	3.14
n-Pentane	5	TRG	72.1	2.04E+04	1788	2.5	0.51	1.49
t-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.04E+04	3319	4.7	0.94	2.70
2,3-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.04E+04	3603	5.1	0.85	2.93
2,4-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.04E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.04E+04	1358	1.9	0.27	1.13
2,2,4-Trimethylpentane	8	TRG	114.2	2.04E+04	1726	2.4	0.31	1.43
n-Heptane	7	TRG	100.2	2.04E+04	2958	4.2	0.60	2.45
Methylcyclohexane	7	TRG	98.2	2.04E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.04E+04	2691	3.8	0.48	2.23
Toluene	7	TRG	92.1	2.04E+04	6421	9.1	1.30	4.90
2-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.04E+04	4701	6.6	0.83	3.89
Ethylbenzene	8	TRG	106.2	2.04E+04	5289	7.5	0.94	4.07

m,p-xylene	8	TRG	106.2	2.04E+04	13277	18.8	2.35	10.22
Styrene	8	TRG	104.2	2.04E+04	1775	2.5	0.31	1.34
o-xylene	8	TRG	106.2	2.04E+04	6068	8.6	1.07	4.67
n-Nonane	9	TRG	128.3	2.04E+04	3718	5.3	0.58	3.07
i-Propylbenzene	9	TRG	120.2	2.04E+04	2816	4.0	0.44	2.18
n-propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	2.04E+04	4926	7.0	0.77	3.81
1,2,4-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.04E+04	5633	8.0	0.80	4.65
1,2,3-Trimethylbenzene	9	TRG	120.2	2.04E+04	8157	11.5	1.28	6.31
1,3-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.04E+04	2745	3.9	0.35	2.26
Dodecane	12	TRG	170.3	2.04E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.04E+04	402944	569.9	94.98	335.54
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.04E+04	402944	569.9	569.87	373.69

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 30

File Name: 2443530A
Description: T-512
Canister: 417
QC_Batch: 120324-GCK

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/03/24 **Time:** 12:49
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	1.09	2.30	6.90	3.14	J
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	0.94	2.30	6.90	2.70	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	0.85	2.30	6.90	2.93	J
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	0.60	2.35	7.04	2.45	J
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.30	2.16	6.47	4.90	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.83	2.34	7.02	3.89	J
100-41-4	Ethylbenzene	0.50	1.50	0.94	2.18	6.53	4.07	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	2.35	2.18	6.53	10.22	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	1.07	2.18	6.53	4.67	J
111-84-2	n-Nonane	0.44	1.33	0.58	2.34	7.01	3.07	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.77	2.19	6.57	3.81	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.80	2.33	7.00	4.65	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	1.28	2.19	6.57	6.31	J
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	94.98	26.50	79.49	335.54	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	569.87	29.51	88.52	373.69	

Sample Data Packages

SDG Number 224435

Lab Id Number 31

Client ID T-513

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 31

Client: C.E. Schmidt
Client ID: T-513
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 781
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:28
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\12024K\2443531A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-513
Run Time Bar Code:
Acquired on : 02 Dec 24 01:34 PM
Report Created on: 02 Dec 24 02:11 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12024K\2443531A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.371	1080	451	VV	0.038	0.4252
2	3.691	1310	373	VV	0.050	0.5160
3	3.862	1402	489	VV	0.038	0.5519
4	4.016	937	399	VV	0.034	0.3689
5	4.165	1872	797	VV	0.035	0.7371
6	5.206	1406	355	VV	0.053	0.5537
7	7.264	877	1007	BV	0.016	0.3452
8	7.290	1386	828	VV	0.028	0.5458
9	8.574	2115	522	BB	0.053	0.8326
10	11.017	116467	6805	BV	0.214	45.8610
11	11.615	30008	2481	VV	0.150	11.8160
12	12.102	2662	402	VB	0.088	1.0481
13	12.736	893	372	PV	0.038	0.3516
14	17.871	23034	4781	BB	0.069	9.0699
15	19.423	2301	754	BV	0.047	0.9060
16	19.464	2872	760	VB	0.057	1.1308
17	21.016	2439	398	BV	0.084	0.9603
18	21.174	4946	872	PB	0.082	1.9474
19	22.216	1652	430	VV	0.056	0.6505
20	22.303	3887	820	VV	0.068	1.5307
21	22.532	2422	450	VB	0.077	0.9537
22	22.761	1739	559	BB	0.048	0.6847
23	23.456	1406	380	PV	0.061	0.5535
24	23.835	4557	682	BV	0.097	1.7945
25	24.042	8016	750	VB	0.140	3.1566
26	24.713	3096	328	BV	0.137	1.2190
27	24.927	1788	329	VV	0.080	0.7041
28	25.950	2972	659	VB	0.069	1.1704
29	26.342	1680	401	BV	0.065	0.6614
30	26.620	3248	261	VB	0.163	1.2789
31	27.021	1551	300	BV	0.071	0.6106
32	27.093	1631	335	VV	0.073	0.6423
33	27.294	2949	482	VV	0.087	1.1612
34	27.706	1104	251	BV	0.068	0.4348
35	27.845	4562	847	VV	0.081	1.7962

36	28.067	7693	1169	VB	0.095	3.0292

Total area = 253957

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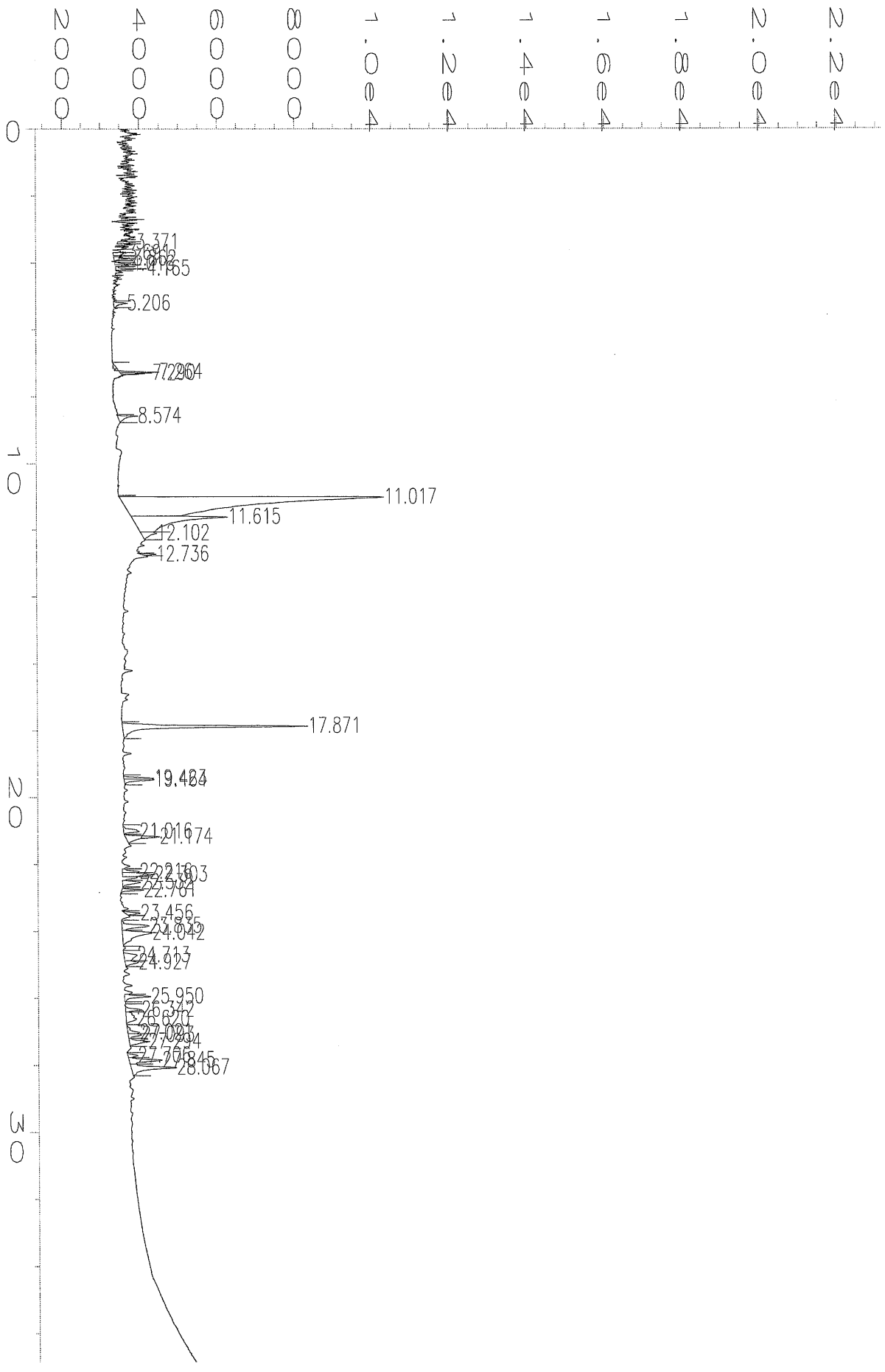
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11.017
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25.950
28.067
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **31**
File Name: **2443531A**
Sample ID: **T-513**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **12/02/24**
QCBatch: **120224-GCK**
Can: **781**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:28** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **13:34** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **364162**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

			PAMS	STD	Corrected	Samp	Sample	RT	RTI	Flag	Calc	EAS
CAS#	Compound			RT	RT	RT	Area	in/out	in/out		RTI	RTI
74-85-1	Ethene		P	4.06	4.06	**4.02**	937	NA	NA	NA		
74-86-2	Acetylene		P	4.10	4.10			NA	NA	NA		
74-84-0	Ethane		P	4.17	**4.17**	**4.17**	1872	I	I	H	200	200
115-07-1	Propene		P	5.11	5.11						-199	290
74-98-6	Propane		P	5.20	**5.20**	**5.21**	1406	I	I	H	300	300
75-28-5	i-Butane		P	6.60	**6.61**						134	351
106-98-9	1-Butene		P	7.29	7.30	**7.29**	1386	I	I	H	366	367
106-97-8	n-Butane		P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene		P	8.75	8.75						202	410
590-18-1	c-2-Butene		P	9.63	9.63						202	431
78-78-4	i-Pentane		P	11.37	11.44	**11.35**		I	I	H	472	473
109-67-1	1-Pentene		P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane		P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene		P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene		P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane		P	13.77	13.84	**13.81**		I	I	H	534	537
287-92-3	Cyclopentane		P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane		P	15.06	15.13						164	570
107-83-5	2-Methylpentane		P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane		P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane		P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane		P	16.86	16.97						88	622
108-08-7	2,4-Dimethylpentane		P	17.05	17.16	**17.20**		I	O	M	629	626
71-43-2	Benzene		P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane		P	18.14	18.25	**18.27**		I	O	M	662	658
591-76-4	2-Methylhexane		P	18.38	18.49	**18.51**		I	I	H	670	670
565-59-3	2,3-Dimethylpentane		P	18.45	18.56	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane		P	18.66	18.77	**18.78**		I	I	H	679	678
540-84-1	2,2,4-Trimethylpentane		P	19.09	19.20	**19.21**		I	I	H	692	690
142-82-5	n-Heptane		P	19.41	19.52	**19.46**	2872	I	I	H	700	700
108-87-2	Methylcyclohexane		P	20.09	20.20	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane		P	20.93	21.04	**21.01**		I	I	H	755	753
108-88-3	Toluene		P	21.12	**21.23**	**21.17**	4946	I	I	H	760	758
592-27-8	2-Methylheptane		P	21.33	21.38	**21.46**		I	I	H	770	768
589-81-1	3-Methylheptane		p	21.55	21.60	**21.68**		I	O	M	778	775
111-65-9	n-Octane		P	22.27	22.32	**22.30**	3887	I	I	H	800	800

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.80	**23.84**	4557	I	O	M	859	855
108-38-3	m,p-xylene	P	23.95	24.00	**24.04**	8016	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.45						-48	881
95-47-6	o-xylene	P	24.57	24.62	**24.71**	3096	I	O	M	892	886
111-84-2	n-Nonane	P	24.87	24.92	**24.93**	1788	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.41	**25.53**		O	O	L	926	919
103-65-1	n-propylbenzene	P	25.93	25.98	**25.95**	2972	I	O	M	943	947
620-14-4	3-Ethyltoluene	P	26.17	26.22	**26.30**		I	I	H	958	957
622-96-8	4-Ethyltoluene	P	26.26	26.31	**26.34**	1680	I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.50	**26.65**		O	O	L	973	964
611-14-3	2-Ethyltoluene	P	26.61	26.66	**26.62**	3248	I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.13	**27.09**	1631	I	I	H	992	991
124-18-5	n-Decane	P	27.26	27.31	**27.29**	2949	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.60						15	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.15	**28.07**	7693	I	O	M	1028	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.28	**28.36**		I	I	H	1039	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					253957		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					253957		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					253957		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120224-GCK		
Hexane Std Area:	364162		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	1.33	0.66	0.76	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	2.65	1.32	1.63	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	1.99	0.66	1.20	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.96	0.49	1.13	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	4.06	0.58	2.38	4.06	0.58	2.38	2.38	2.38
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	6.99	1.00	3.77	6.99	1.00	3.77	3.77	3.77
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	5.50	0.69	3.22	5.50	0.69	3.22	3.22	3.22
Ethylbenzene	106.2	8	6.44	0.81	3.51	6.44	0.81	3.51	3.51	3.51

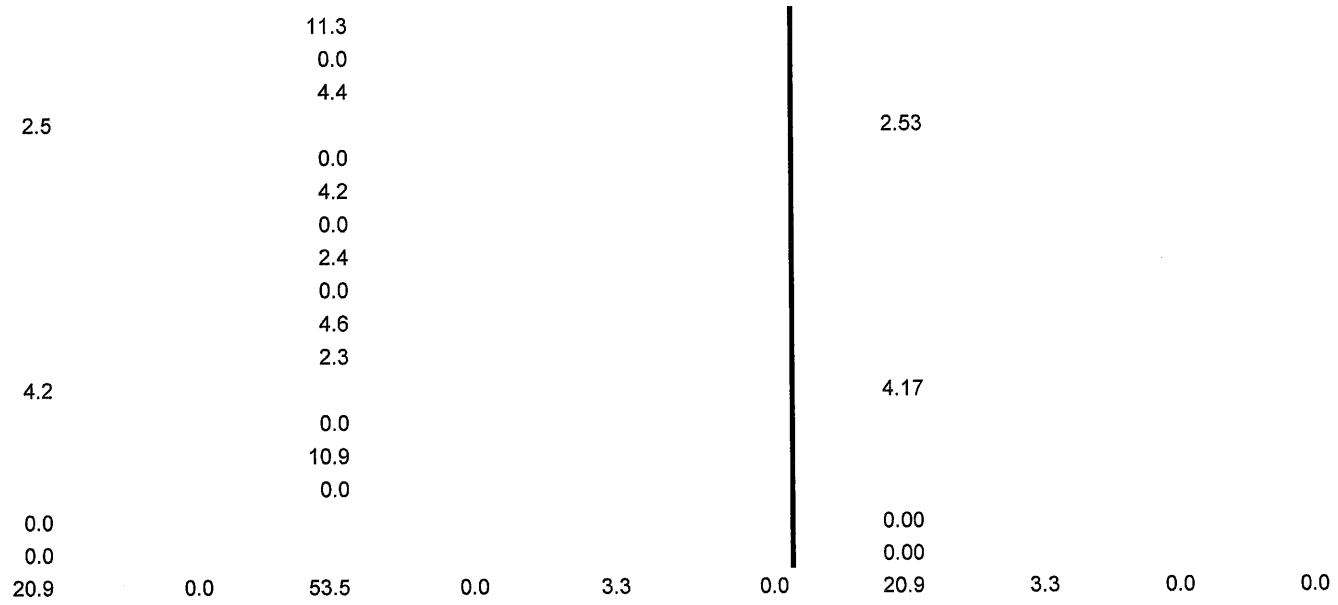
m,p-xylene	106.2	8	11.34	1.42	6.17	11.34	1.42	6.17	6.17	6.17
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	4.38	0.55	2.38	4.38	0.55	2.38	2.38	2.38
n-Nonane	128.3	9	2.53	0.28	1.48	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	4.20	0.47	2.30	4.20	0.47	2.30	2.30	2.30
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	2.38	0.26	1.30	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	4.59	0.51	2.51	4.59	0.51	2.51	2.51	2.51
1,2,4-Trimethylbenzene	120.2	9	2.31	0.26	1.26	ND	ND	ND	0	
n-Decane	142.3	10	4.17	0.42	2.43	4.17	0.42	2.43	2.43	2.43
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	10.88	1.09	5.98	10.88	1.09	5.98	5.98	5.98
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	359.16	59.9	211.5	359.16	59.86	211.47	211.47	211.47
Total Non-Methane Hydrocarbons	16	1.0	359.16	359.2	235.5	359.16	359.16	235.52	235.52	235.52

SDG: 224435
Laboratory Number: 31

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	J	=		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	J	=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	J	=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					1.3		1.33		
					0.0			0.00	
2.6						2.65			
					0.0		0.00		
2.0						1.99			
		0.0				0.00			
					2.0		1.96		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
4.1						4.06			
				0.0					0.00
		0.0				0.00			
			7.0						
		0.0				0.00			
		0.0				0.00			
5.5						5.50			
			6.4						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4.2
4.17
0.0
10.9
0.0
0.0
0.00
0.0
0.00
20.9
0.0
53.5
0.0
3.3
0.0
20.9
3.3
0.0
0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

6.99

6.44

				11.34	
				0.00	
				4.38	
				0.00	
				4.20	
				0.00	
				2.38	
				0.00	
				4.59	
				2.31	
				0.00	
				10.88	
				0.00	
0.0	0.0	0.0	0.0	53.5	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 31

File Name: 2443531A
Description: T-513
Canister: 781
QC_Batch: 120224-GCK

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/02/24 **Time:** 13:34
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	0.58	2.35	7.04	2.38	J
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.00	2.16	6.47	3.77	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	0.69	2.34	7.02	3.22	J
100-41-4	Ethylbenzene	0.50	1.50	0.81	2.18	6.53	3.51	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	1.42	2.18	6.53	6.17	J
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	0.55	2.18	6.53	2.38	J
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.47	2.19	6.57	2.30	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.51	2.19	6.57	2.51	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.42	2.33	7.00	2.43	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	1.09	2.20	6.60	5.98	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	59.86	26.50	79.49	211.47	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	359.16	29.51	88.52	235.52	

Sample Data Packages

SDG Number 224435

Lab Id Number 32

Client ID T-514

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 32

Client: C.E. Schmidt
Client ID: T-514
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 506
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:45
Received: 11/21/2024 Time: 13:00

Date:

LABORATORY

InstrumentMethod:	Analytical Test:	Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Sample Location:

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions

EAS QC Criteria

Report Types: PDF Only

EDD Instructions

EDD Type:

Area Percent Report

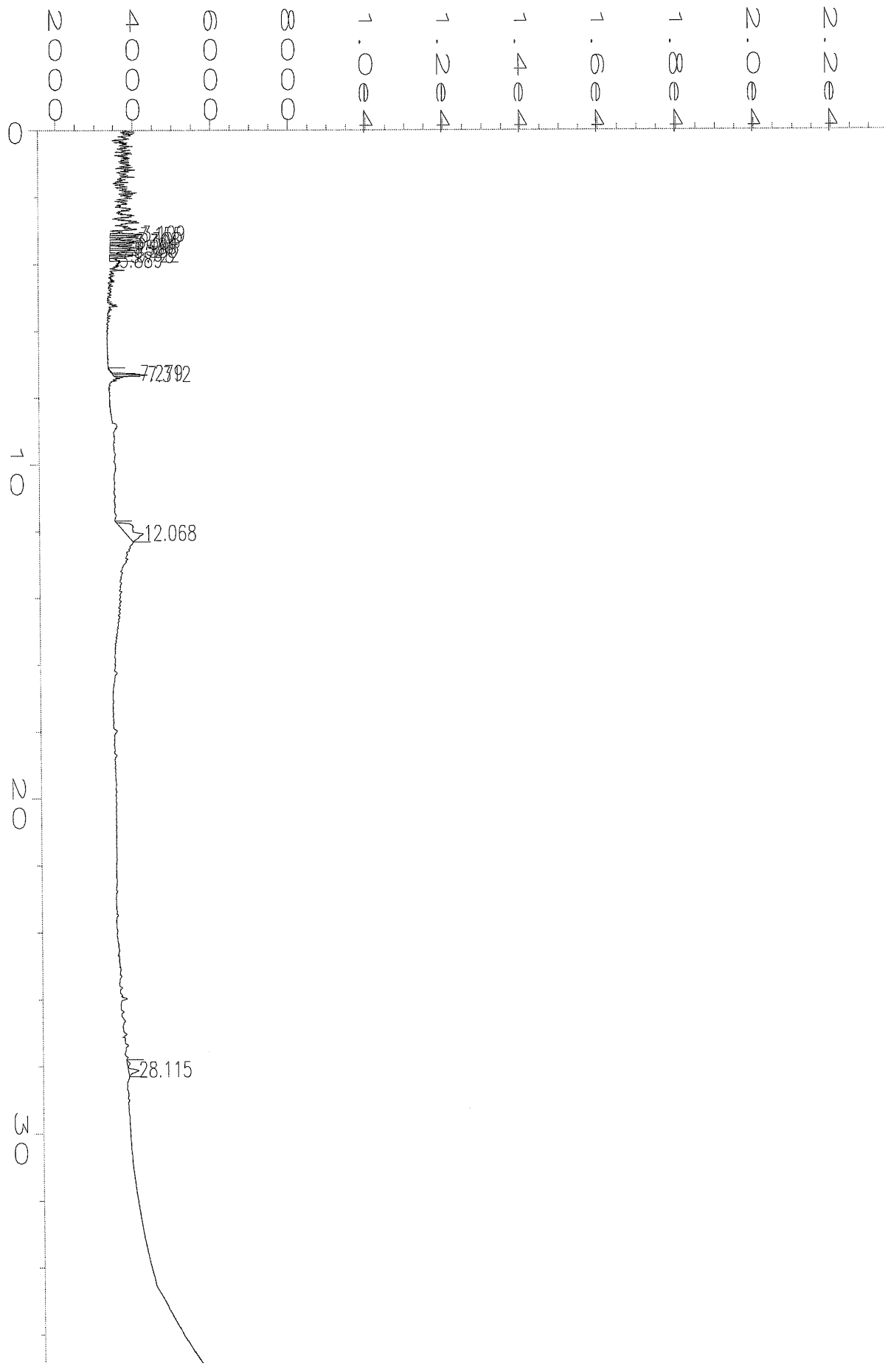
Data File Name : C:\HPCHEM\1\DATA\12024K\2443532A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-514
Run Time Bar Code:
Acquired on : 02 Dec 24 02:31 PM
Report Created on: 02 Dec 24 03:08 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12024K\2443532A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.109	2388	816	VV	0.042	7.6229
2	3.155	1935	762	VV	0.042	6.1778
3	3.308	1874	697	VV	0.038	5.9836
4	3.344	954	651	VV	0.024	3.0446
5	3.364	1309	647	VV	0.029	4.1800
6	3.486	1952	598	VV	0.043	6.2303
7	3.537	1349	538	VV	0.042	4.3061
8	3.588	1821	635	VV	0.048	5.8139
9	3.722	982	688	VV	0.023	3.1361
10	3.748	1365	550	VV	0.036	4.3591
11	3.889	890	278	PV	0.044	2.8419
12	7.279	1321	709	BV	0.031	4.2174
13	7.312	1905	893	VV	0.031	6.0819
14	12.068	8967	431	BB	0.249	28.6268
15	28.115	2311	258	BB	0.117	7.3777

Total area = 31324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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **32**
File Name: **2443532A**
Sample ID: **T-514**
Sampled: **11/20/2024**
Received: **11/21/24**
Analyzed: **12/02/24**
QCBatch: **120224-GCK**
Can: **506**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **12:45** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **14:31** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **364162**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

							RT Win	C2-C4	C5-C12		
							RT	**0.3**	**0.1**		
							RTI	**3**	**3**		
CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.06	**4.02**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.10			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.17**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11						-199	290
74-98-6	Propane	P	5.20	**5.20**	**5.21**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.61**						134	351
106-98-9	1-Butene	P	7.29	7.30	**7.28**	1321	I	I	H	366	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						202	410
590-18-1	c-2-Butene	P	9.63	9.63						202	431
78-78-4	i-Pentane	P	11.37	11.44	**11.35**		I	I	H	472	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.81**		I	I	H	534	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						88	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	O	M	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	662	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	670	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	672	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	679	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	692	690
142-82-5	n-Heptane	P	19.41	19.52	**19.46**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	O	M	727	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.01**		I	I	H	755	753
108-88-3	Toluene	P	21.12	**21.23**	**21.17**		I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.38	**21.46**		I	I	H	770	768
589-81-1	3-Methylheptane	p	21.55	21.60	**21.68**		I	O	M	778	775
111-65-9	n-Octane	P	22.27	22.32	**22.30**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.80	**23.84**		I	O	M	859	855
108-38-3	m,p-xylene	P	23.95	24.00	**24.04**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.45						-48	881
95-47-6	o-xylene	P	24.57	24.62	**24.71**		I	O	M	892	886
111-84-2	n-Nonane	P	24.87	24.92	**24.93**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.41	**25.53**		O	O	L	926	919
103-65-1	n-propylbenzene	P	25.93	25.98	**25.95**		I	O	M	943	947
620-14-4	3-Ethyltoluene	P	26.17	26.22	**26.30**		I	I	H	958	957
622-96-8	4-Ethyltoluene	P	26.26	26.31	**26.34**		I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.50	**26.65**		O	O	L	973	964
611-14-3	2-Ethyltoluene	P	26.61	26.66	**26.62**		I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.13	**27.09**		I	I	H	992	991
124-18-5	n-Decane	P	27.26	27.31	**27.29**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.60						15	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.15	**28.12**	2311	I	I	H	1030	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.28	**28.36**		I	I	H	1039	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					31324		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					31324		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					31324		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120224-GCK		
Hexane Std Area:	364162		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.87	0.47	1.07	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	3.27	0.33	1.80	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	44.30	7.4	26.1	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	44.30	44.3	29.0	ND	ND	ND	0

SDG: **224435**
Laboratory Number: **32**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
	0.0					0.00			
					1.9		1.87		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
	0.0					0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
	0.0					0.00			
				0.0					0.00
	0.0					0.00			
	0.0					0.00			
	0.0					0.00			
0.0						0.00			
				0.0					
	0.0					0.00			
			0.0						
				0.0		0.00			
	0.0					0.00			
	0.0					0.00			
	0.0					0.00			
	0.0					0.00			
0.0						0.00			
				0.0					0.00
	0.0					0.00			
			0.0						
	0.0					0.00			
	0.0					0.00			
0.0						0.00			
			0.0						

		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		3.3							
		0.0							
0.0						0.00			
0.0						0.00			
0.0	0.0	3.3	0.0	1.9	0.0	0.0	1.9	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
3.27
0.00

0.0	0.0	0.0	0.0	3.3	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Canister: 506
QC_Batch: 120224-GCK

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/02/24 **Time:** 14:31
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 33

Client ID T-601

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 33

Client: C.E. Schmidt
Client ID: T-601
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 700
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\GCK\12024K\2443533A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-601
Run Time Bar Code:
Acquired on : 02 Dec 24 03:25 PM
Report Created on: 10 Dec 24 02:30 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12024K\2443533A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.043	25790	10462	VF	0.038	2.1249
2	4.169	23484	9923	FV	0.036	1.9349
3	4.314	230	159	VV	0.022	0.0189
4	4.347	313	196	VV	0.025	0.0258
5	4.567	12414	4528	PV	0.038	1.0228
6	4.896	3430	782	PV	0.062	0.2826
7	5.107	26540	11824	VV	0.033	2.1867
8	5.207	37522	15752	VV	0.036	3.0916
9	7.005	36781	14267	BV	0.039	3.0305
10	7.277	1461	1028	VV	0.024	0.1203
11	7.300	1086	1106	VV	0.016	0.0895
12	7.329	1380	709	VV	0.029	0.1137
13	8.018	8514	1310	BV	0.086	0.7015
14	8.330	48233	15053	VV	0.046	3.9741
15	8.686	1681	645	VV	0.043	0.1385
16	8.737	4185	1206	VV	0.047	0.3448
17	8.868	1266	335	VV	0.052	0.1043
18	8.987	1271	213	VB	0.082	0.1047
19	9.497	1420	273	BB	0.067	0.1170
20	10.733	3570	679	BV	0.073	0.2942
21	11.401	36873	13524	BV	0.042	3.0381
22	11.512	7669	948	VV	0.107	0.6319
23	11.754	32951	3205	VV	0.139	2.7149
24	12.021	9068	1598	VV	0.078	0.7471
25	12.134	5990	739	VV	0.105	0.4935
26	12.326	7858	1774	VV	0.062	0.6474
27	12.475	9979	2588	VV	0.055	0.8222
28	12.674	1929	609	VV	0.047	0.1589
29	12.735	6314	1468	VV	0.060	0.5202
30	12.818	2582	669	VV	0.054	0.2128
31	13.282	4523	1167	PV	0.057	0.3727
32	13.398	555	135	VV	0.054	0.0457
33	13.797	3535	1224	VV	0.045	0.2913
34	14.799	10130	3395	PV	0.046	0.8347
35	14.906	3190	1015	VV	0.048	0.2628
36	15.088	5712	1202	VV	0.067	0.4707
37	15.298	7424	1025	VV	0.095	0.6117
38	15.578	6399	1202	VV	0.073	0.5272
39	15.800	2590	256	VV	0.128	0.2134
40	16.184	5401	1739	BV	0.048	0.4450
41	16.871	2522	472	BV	0.078	0.2078
42	16.992	1604	484	VV	0.048	0.1321
43	17.067	5618	1706	VV	0.050	0.4629
44	17.204	2589	699	VV	0.056	0.2133
45	17.919	829	220	BV	0.053	0.0683
46	18.022	1514	437	VV	0.052	0.1247
47	18.159	15508	4905	VV	0.049	1.2777
48	18.407	6063	2102	VV	0.044	0.4996
49	18.473	7429	2334	VV	0.048	0.6121
50	18.588	2584	832	VV	0.049	0.2129
51	18.681	12152	3931	VV	0.047	1.0012
52	18.917	5855	1806	VV	0.050	0.4824
53	19.043	22394	5556	VV	0.056	1.8451
54	19.095	11088	3378	VB	0.055	0.9136
55	19.420	11480	3064	BV	0.056	0.9459
56	19.773	3362	979	VB	0.052	0.2770

57	20.126	27634	7496	BV	0.054	2.2768
58	20.182	10926	3870	VV	0.047	0.9002
59	20.388	2089	760	VV	0.041	0.1721
60	20.457	9332	2273	VV	0.061	0.7689
61	20.686	12828	3765	VV	0.052	1.0570
62	20.897	18864	5741	VV	0.050	1.5543
63	20.964	8253	2632	VV	0.047	0.6800
64	21.125	7078	2094	VV	0.052	0.5832
65	21.240	3746	1072	VV	0.052	0.3086
66	21.292	3113	1009	VV	0.046	0.2565
67	21.370	9072	1834	VV	0.068	0.7475
68	21.511	2774	797	VV	0.052	0.2286
69	21.595	5922	1126	VV	0.073	0.4880
70	21.730	7928	2824	VV	0.047	0.6532
71	21.781	30164	5088	VV	0.080	2.4853
72	22.049	7180	1832	VV	0.059	0.5916
73	22.147	11244	2430	VV	0.069	0.9265
74	22.251	1966	559	VV	0.054	0.1620
75	22.360	9686	2798	VV	0.054	0.7980
76	22.439	12638	3688	VV	0.053	1.0412
77	22.537	7510	1985	VV	0.058	0.6188
78	22.720	8347	2410	PV	0.053	0.6877
79	22.803	2826	819	VV	0.050	0.2329
80	22.875	2671	741	VV	0.053	0.2200
81	22.963	6382	1569	VV	0.061	0.5258
82	23.127	6188	1683	VV	0.056	0.5098
83	23.220	6142	1703	VV	0.054	0.5060
84	23.377	65138	12365	VV	0.075	5.3669
85	23.460	23542	6437	VV	0.054	1.9397
86	23.542	19529	3802	VV	0.071	1.6090
87	23.731	12136	2905	VV	0.063	0.9999
88	23.866	18603	3541	VV	0.075	1.5327
89	24.196	4022	804	VV	0.078	0.3314
90	24.279	4403	1112	VV	0.058	0.3628
91	24.354	6060	1323	VV	0.069	0.4993
92	24.502	8744	1556	VV	0.080	0.7204
93	24.594	3102	872	VV	0.052	0.2556
94	24.719	17335	2104	VV	0.108	1.4283
95	24.841	4506	983	VV	0.065	0.3713
96	24.962	3706	744	VV	0.070	0.3053
97	25.108	6435	1773	VV	0.057	0.5302
98	25.282	13894	2517	VV	0.080	1.1447
99	25.407	3482	578	VV	0.080	0.2869
100	25.625	14147	2989	VV	0.071	1.1656
101	25.735	3498	911	VV	0.056	0.2882
102	25.833	9226	1846	VV	0.077	0.7601
103	25.960	129029	33058	VV	0.060	10.6311
104	26.171	3423	690	VV	0.072	0.2820
105	26.353	34448	6773	VV	0.075	2.8382
106	26.546	2340	598	VV	0.058	0.1928
107	26.631	3871	723	VV	0.079	0.3190
108	26.916	3453	507	VV	0.091	0.2845
109	27.093	10942	1292	VV	0.114	0.9015
110	27.254	2157	366	VV	0.088	0.1777
111	27.373	3442	771	VV	0.067	0.2836
112	27.715	4442	1004	PV	0.068	0.3660
113	27.848	2980	339	VV	0.118	0.2455
114	28.138	4176	563	VV	0.106	0.3441
115	28.363	1153	181	VV	0.088	0.0950

Total area = 1213698

User Modified

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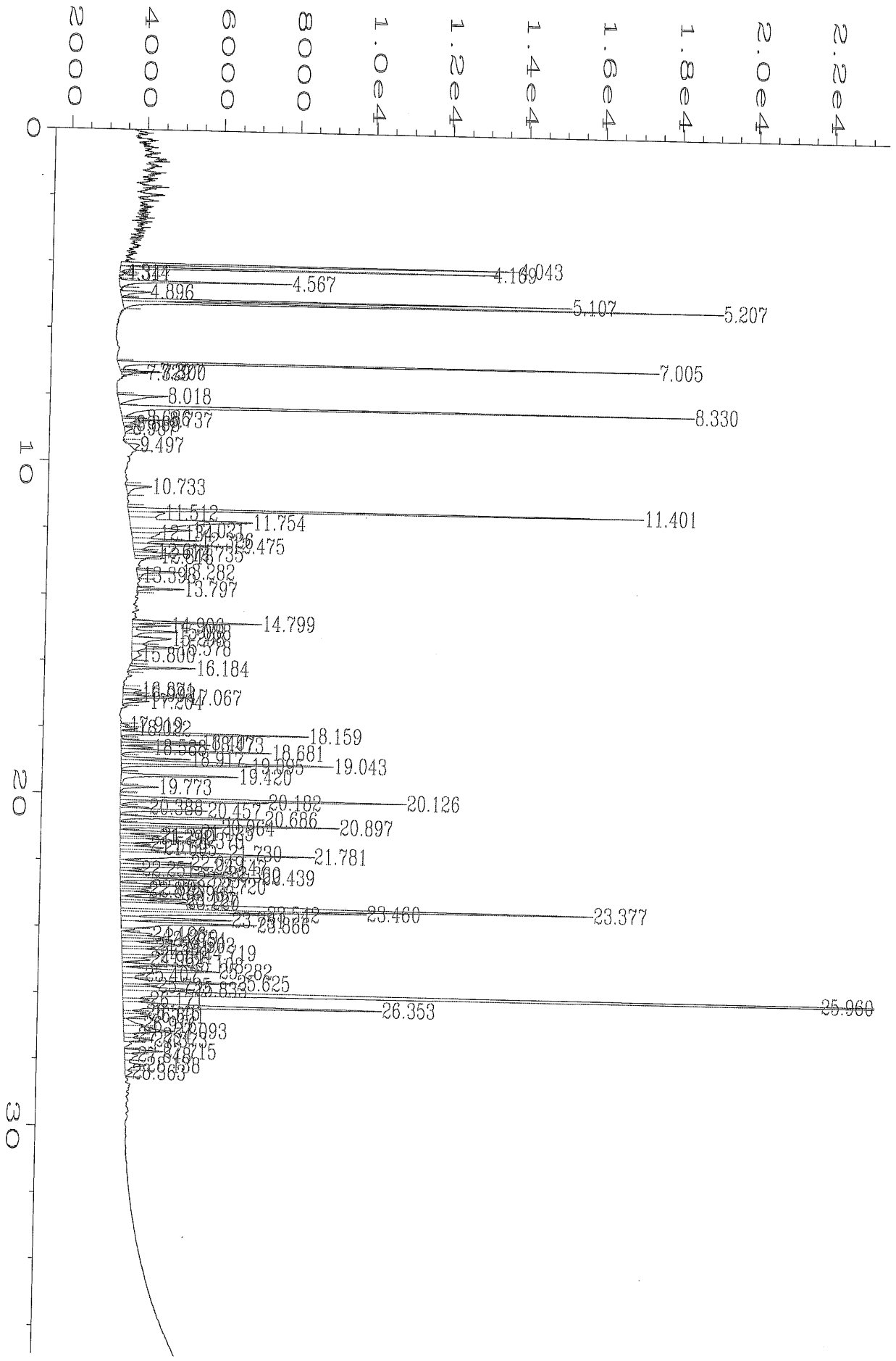
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **33**
File Name: **2443533A**
Sample ID: **T-601**
Sampled: **11/21/2024**
Received: **11/21/24**
Analyzed: **12/02/24**
QCBatch: **120224-GCK**
Can: **700**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:18** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **15:25** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **364162**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

									RT Win	C2-C4 C5-C12
									RT	**0.3** **0.1**
									RTI	**3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.06	**4.04**	25790	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.10			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.17**	23484	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**	26540	I	I	H	290	290
74-98-6	Propane	P	5.20	**5.20**	**5.21**	37522	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.61**						133	351
106-98-9	1-Butene	P	7.29	7.30	**7.30**	1086	I	I	H	367	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.33**	48233	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.74	**8.74**	4185	I	I	H	410	410
590-18-1	c-2-Butene	P	9.63	9.62						199	431
78-78-4	i-Pentane	P	11.37	11.37	**11.40**	36873	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.30	**12.33**		I	I	H	497	495
109-66-0	n-Pentane	P	12.48	**12.48**	**12.48**	9979	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.79	**12.82**	2582	I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.08	**13.18**		O	I	M	519	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.77	**13.79**	3535	I	I	H	535	537
287-92-3	Cyclopentane	P	14.88	14.88	**14.91**	3190	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.06	**15.09**		I	I	H	571	570
107-83-5	2-Methylpentane	P	15.08	15.08	**15.09**	5712	I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.55	**15.58**	6399	I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.17**	**16.18**	5401	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.87	**16.87**	2522	I	I	H	621	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.06	**17.07**	5618	I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.88**	**17.92**	829	I	I	H	654	651
110-82-7	Cyclohexane	P	18.14	18.19	**18.16**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.43	**18.41**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.50	**18.47**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.71	**18.68**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.14	**19.10**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.46	**19.42**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.14	**20.13**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.98	**20.96**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.17**	**21.13**	7078	I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.34	**21.37**	9072	I	I	H	769	768
589-81-1	3-Methylheptane	p	21.55	21.56	**21.51**	2774	I	I	H	774	775
111-65-9	n-Octane	P	22.27	22.28	**22.25**	1966	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.76	**23.73**	12136	I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	23.96	**24.04**		I	O	M	869	863
100-42-5	Styrene	P	24.40	24.41	**24.35**	6060	I	I	H	881	881
95-47-6	o-xylene	P	24.57	24.58	**24.59**	3102	I	O	M	890	886
111-84-2	n-Nonane	P	24.87	24.88	**24.84**	4506	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.37	**25.41**	3482	I	O	M	924	919
103-65-1	n-propylbenzene	P	25.93	25.94	**25.96**		I	I	H	946	947
620-14-4	3-Ethyltoluene	P	26.17	26.18	**26.17**	3423	I	I	H	955	957
622-96-8	4-Ethyltoluene	P	26.26	26.27	**26.35**		I	O	M	963	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.46	**26.55**	2340	I	O	M	971	964
611-14-3	2-Ethyltoluene	P	26.61	26.62	**26.63**	3871	I	I	H	974	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.09	**27.09**		I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.27	**27.25**	2157	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.56						30	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.11	**28.14**	4176	I	I	H	1032	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.24	**28.36**		O	I	M	1040	1037
1120-21-4	Undecane	P	29.86	29.96	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.56	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					1213698		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					1213698		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					1213698		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120224-GCK		
Hexane Std Area:	364162		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	36.47	18.24	21.00	36.47	18.24	21.00	21.00	21.00
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	33.21	16.61	20.49	33.21	16.61	20.49	20.49	20.49
Propene	42.1	3	37.53	12.51	21.59	37.53	12.51	21.59	21.59	21.59
Propane	44.1	3	53.07	17.69	31.97	53.07	17.69	31.97	31.97	31.97
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.54	0.38	0.88	ND	ND	ND	0	
n-Butane	58.1	4	68.21	17.05	40.61	68.21	17.05	40.61	40.61	40.61
t-2-Butene	56.1	4	5.92	1.48	3.40	5.92	1.48	3.40	3.40	3.40
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	52.15	10.43	30.86	52.15	10.43	30.86	30.86	30.86
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	14.11	2.82	8.34	14.11	2.82	8.34	8.34	8.34
t-2-Pentene	70.1	5	3.65	0.73	2.10	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	5.00	0.83	2.94	5.00	0.83	2.94	2.94	2.94
Cyclopentane	70.1	5	4.51	0.90	2.59	4.51	0.90	2.59	2.59	2.59
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	8.08	1.35	4.76	8.08	1.35	4.76	4.76	4.76
3-Methylpentane	86.2	6	9.05	1.51	5.33	9.05	1.51	5.33	5.33	5.33
n-Hexane	86.2	6	7.64	**1.27**	4.50	7.64	1.27	4.50	4.50	4.50
Methylcyclopentane	84.2	6	3.57	0.59	2.05	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	7.95	1.14	4.66	7.95	1.14	4.66	4.66	4.66
Benzene	78.1	6	1.17	0.20	0.63	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	10.01	1.43	5.40	10.01	1.43	5.40	5.40	5.40
2-Methylheptane	114.2	8	12.83	1.60	7.51	12.83	1.60	7.51	7.51	7.51
3-Methylheptane	114.2	8	3.92	0.49	2.30	ND	ND	ND	0	
n-Octane	114.2	8	2.78	0.35	1.63	ND	ND	ND	0	

Ethylbenzene	106.2	8	17.16	2.15	9.34	17.16	2.15	9.34	9.34	9.34
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	8.57	1.07	4.58	8.57	1.07	4.58	4.58	4.58
o-xylene	106.2	8	4.39	0.55	2.39	4.39	0.55	2.39	2.39	2.39
n-Nonane	128.3	9	6.37	0.71	3.72	6.37	0.71	3.72	3.72	3.72
i-Propylbenzene	120.2	9	4.92	0.55	2.70	4.92	0.55	2.70	2.70	2.70
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	4.84	0.54	2.65	4.84	0.54	2.65	2.65	2.65
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	3.31	0.37	1.81	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	5.47	0.61	3.00	5.47	0.61	3.00	3.00	3.00
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	3.05	0.31	1.78	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	5.91	0.59	3.25	5.91	0.59	3.25	3.25	3.25
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	1716.50	286.1	1010.7	1,716.50	286.08	1,010.67	1,010.67	1,010.67
Total Non-Methane Hydrocarbons	16	1.0	1716.50	1716.5	1125.6	1,716.50	1,716.50	1,125.57	1,125.57	1,125.57

SDG: **224435**
Laboratory Number: **33**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0		=		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0		=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0		=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0		=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0		=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	J	=		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	J	=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	J	=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	J	=	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					36.5		36.47		
					0.0			0.00	
	33.2					33.21			
					37.5		37.53		
	53.1					53.07			
		0.0				0.00			
					1.5		1.54		
	68.2					68.21			
					5.9		5.92		
					0.0		0.00		
		52.1				52.15			
					0.0		0.00		
	14.1					14.11			
					3.7		3.65		
					0.0		0.00		
		5.0				5.00			
				4.5					4.51
		0.0				0.00			
		8.1				8.08			
		9.0				9.05			
	7.6					7.64			
				3.6					3.57
		7.9				7.95			
			1.2						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			10.0						
		12.8				12.83			
		3.9				3.92			
	2.8					2.78			

		17.2							
		0.0							
		8.6							
		4.4							
6.4						6.37			
		4.9							
		0.0							
		4.8							
		0.0							
		3.3							
		5.5							
		0.0							
3.1						3.05			
		0.0							
		5.9							
		0.0							
0.0						0.00			
0.0						0.00			
188.4	99.0	65.8	8.1	85.1	0.0	287.4	85.1	0.0	8.1

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

1.17

10.01

17.16
0.00
8.57
4.39

4.92
0.00
4.84
0.00
3.31
5.47
0.00

0.00
5.91
0.00

0.0	0.0	0.0	0.0	65.8	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		33	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = $\text{Sum} \left| \frac{(\text{Astdni})}{(\text{Cstdni})} \right|_i$

2) ppbC = $\frac{6 \text{ Carbons} \times \text{Ansamp} \times \text{CDF} \times 1000}{(\text{Avg RFn}) \times \text{SV}} = \textbf{Cn}$

3) Amount ppbv = $\frac{\text{Cn}}{\text{C\#}}$

4) Amount ug/m3 = $\frac{(\text{amt(ppbv)} \times \text{MW}}{24.4}$

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.02E+04	25790	36.5	18.24	21.00
Acetylene	2	TRG	26.0	2.02E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.02E+04	23484	33.2	16.61	20.49
Propene	3	TRG	42.1	2.02E+04	26540	37.5	12.51	21.59
Propane	3	TRG	44.1	2.02E+04	37522	53.1	17.69	31.97
i-Butane	4	TRG	58.1	2.02E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.02E+04	1086	1.5	0.38	0.88
n-Butane	4	TRG	58.1	2.02E+04	48233	68.2	17.05	40.61
t-2-Butene	4	TRG	56.1	2.02E+04	4185	5.9	1.48	3.40
c-2-Butene	4	TRG	56.1	2.02E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.02E+04	36873	52.1	10.43	30.86
1-Pentene	5	TRG	70.1	2.02E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	2.02E+04	9979	14.1	2.82	8.34
t-2-Pentene	5	TRG	70.1	2.02E+04	2582	3.7	0.73	2.10
c-2-Pentene	5	TRG	70.1	2.02E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.02E+04	3535	5.0	0.83	2.94
Cyclopentane	5	TRG	70.1	2.02E+04	3190	4.5	0.90	2.59
2,3-Dimethylbutane	6	TRG	86.2	2.02E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.02E+04	5712	8.1	1.35	4.76
3-Methylpentane	6	TRG	86.2	2.02E+04	6399	9.0	1.51	5.33
n-Hexane	6	TRG	86.2	2.02E+04	5401	7.6	1.27	4.50
Methylcyclopentane	6	TRG	84.2	2.02E+04	2522	3.6	0.59	2.05
2,4-Dimethylpentane	7	TRG	100.2	2.02E+04	5618	7.9	1.14	4.66
Benzene	6	TRG	78.1	2.02E+04	829	1.2	0.20	0.63
Cyclohexane	6	TRG	84.2	2.02E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.02E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.02E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.02E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	2.02E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.02E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.02E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.02E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	2.02E+04	7078	10.0	1.43	5.40
2-Methylheptane	8	TRG	114.2	2.02E+04	9072	12.8	1.60	7.51
3-Methylheptane	8	TRG	114.2	2.02E+04	2774	3.9	0.49	2.30
n-Octane	8	TRG	114.2	2.02E+04	1966	2.8	0.35	1.63
Ethylbenzene	8	TRG	106.2	2.02E+04	12136	17.2	2.15	9.34

m,p-xylene	8	TRG	106.2	2.02E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	2.02E+04	6060	8.6	1.07	4.58
o-xylene	8	TRG	106.2	2.02E+04	3102	4.4	0.55	2.39
n-Nonane	9	TRG	128.3	2.02E+04	4506	6.4	0.71	3.72
i-Propylbenzene	9	TRG	120.2	2.02E+04	3482	4.9	0.55	2.70
n-propylbenzene	9	TRG	120.2	2.02E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.02E+04	3423	4.8	0.54	2.65
4-Ethyltoluene	9	TRG	120.2	2.02E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.02E+04	2340	3.3	0.37	1.81
2-Ethyltoluene	9	TRG	120.2	2.02E+04	3871	5.5	0.61	3.00
1,2,4-Trimethylbenzene	9	TRG	120.2	2.02E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.02E+04	2157	3.1	0.31	1.78
1,2,3-Trimethylbenzene	9	TRG	120.2	2.02E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.02E+04	4176	5.9	0.59	3.25
1,4-Diethylbenzene	10	TRG	134.2	2.02E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.02E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.02E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.02E+04	1213698	1716.5	286.08	1010.67
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.02E+04	1213698	1716.5	1716.50	1125.57

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Canister: 700
QC_Batch: 120224-GCK

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/02/24 **Time:** 15:25
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	18.24	2.30	6.91	21.00	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	16.61	2.47	7.40	20.49	
115-07-1	Propene	1.33	4.00	12.51	2.30	6.90	21.59	
74-98-6	Propane	1.33	4.00	17.69	2.41	7.23	31.97	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	17.05	2.38	7.14	40.61	
624-64-6	t-2-Butene	1.00	3.00	1.48	2.30	6.90	3.40	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	10.43	2.37	7.10	30.86	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	2.82	2.36	7.09	8.34	
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	0.83	2.36	7.07	2.94	J
287-92-3	Cyclopentane	0.80	2.40	0.90	2.30	6.90	2.59	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	1.35	2.36	7.07	4.76	J
96-14-0	3-Methylpentane	0.67	2.00	1.51	2.36	7.07	5.33	J
110-54-3	n-Hexane	0.67	2.00	1.27	2.36	7.07	4.50	J
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	1.14	2.35	7.04	4.66	J
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.43	2.16	6.47	5.40	J
592-27-8	2-Methylheptane	0.50	1.50	1.60	2.34	7.02	7.51	
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	2.15	2.18	6.53	9.34	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	1.07	2.14	6.41	4.58	J
95-47-6	o-xylene	0.50	1.50	0.55	2.18	6.53	2.39	J
111-84-2	n-Nonane	0.44	1.33	0.71	2.34	7.01	3.72	J
98-82-8	i-Propylbenzene	0.44	1.33	0.55	2.19	6.57	2.70	J
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	0.54	2.19	6.57	2.65	J
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.61	2.19	6.57	3.00	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	0.59	2.20	6.60	3.25	J
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	286.08	26.50	79.49	1,010.67	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	1,716.50	29.51	88.52	1,125.57	

Staples

Thank you for your order, Steve!

A confirmation email has been sent to
TEAMEAS@EASLAB.COM

Order Number: 9927239570

Shipping & Billing address
Steve Hoyt
173 Cross Street
San Luis Obispo, CA 93401-
(805) 781-3585

Payment method(s)
Amex···· 1016
$92.74 charged

Order summary

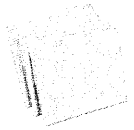
Items (2)	$85.28
Coupons	$0.00
Shipping	FREE
Estimated Tax	$7.46
Total	**$92.74**

You saved $10.60 on this order!

2 items ordered

Delivery by Thursday, January 02

TRU RED™ 8.5" x 11" Multipurpose Paper, 20 lbs., 96 Brightness, 500 Sheets/Ream, 10 Reams/Carton (TR56962)
Item #: 513096 | Model #: 513096/TR56962
1 @ $75.29 — **$75.29**



Staples 30% Recycled File Folders, 1/3-Cut Tab, Letter Size, Manila, 100/Box (ST56675)
Item #: 116657 | Model #: ST56675
1 @ $9.99 — **$9.99**

Sample Data Packages

SDG Number 224435

Lab Id Number 34

Client ID T-602

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 | 34

Client: C.E. Schmidt
Client ID: T-602
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 673
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 8:29
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

==========

Area Percent Report

==========

Data File Name : C:\HPCHEM\1\DATA\12034K\2443534A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-602
Run Time Bar Code:
Acquired on : 03 Dec 24 01:41 PM
Report Created on: 03 Dec 24 02:18 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12034K\2443534A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.249	1348	648	PV	0.035	0.0602
2	3.270	1350	576	VV	0.038	0.0604
3	3.315	1292	590	VV	0.037	0.0578
4	3.407	4533	918	VV	0.063	0.2026
5	3.529	2222	697	VV	0.043	0.0993
6	3.613	1440	633	VV	0.030	0.0644
7	3.656	1766	629	VV	0.037	0.0789
8	3.786	1458	517	VV	0.037	0.0652
9	3.857	3729	1305	VV	0.039	0.1667
10	3.970	57356	15470	VV	0.050	2.5643
11	4.093	19812	11283	VV	0.027	0.8857
12	4.491	6265	2400	PV	0.036	0.2801
13	4.776	12850	4110	PV	0.043	0.5745
14	5.000	715706	361794	VV	0.030	31.9973
15	5.115	173571	74502	VV	0.036	7.7599
16	5.829	158137	41517	PV	0.055	7.0699
17	6.157	3924	712	VV	0.092	0.1754
18	6.309	8417	1620	VB	0.071	0.3763
19	6.919	67539	24989	BV	0.041	3.0195
20	7.267	3010	875	VV	0.046	0.1346
21	7.885	117079	38353	BV	0.044	5.2343
22	8.117	1626	491	VV	0.055	0.0727
23	8.246	185548	69412	VV	0.040	8.2954
24	8.586	4276	1026	VV	0.054	0.1912
25	8.820	10349	1266	VB	0.105	0.4627
26	9.394	4729	804	BV	0.087	0.2114
27	10.664	9243	2168	BB	0.060	0.4132
28	11.358	23054	7596	BB	0.046	1.0307
29	12.011	9303	1766	BV	0.074	0.4159
30	12.099	9886	1775	VV	0.076	0.4420
31	12.282	12695	3657	VV	0.051	0.5676
32	12.431	17325	5400	VV	0.048	0.7745
33	12.649	2571	546	VV	0.071	0.1150
34	12.792	2860	559	VB	0.070	0.1279
35	13.238	10726	3024	PV	0.053	0.4795

36	13.759	6173	2023	BV	0.046	0.2760
37	14.592	2115	441	PV	0.068	0.0945
38	14.767	8523	2911	VV	0.046	0.3810
39	14.876	2585	876	VV	0.045	0.1156
40	14.947	957	334	VV	0.041	0.0428
41	15.049	9340	2941	VV	0.047	0.4176
42	15.117	4089	1149	VV	0.051	0.1828
43	15.288	5109	712	VV	0.097	0.2284
44	15.544	8109	2385	VV	0.051	0.3625
45	16.154	4312	1299	VV	0.050	0.1928
46	16.408	1442	320	PB	0.066	0.0645
47	17.033	11202	3592	BV	0.048	0.5008
48	17.190	2185	618	VB	0.054	0.0977
49	17.855	9255	2169	BV	0.063	0.4138
50	18.124	15028	4634	VV	0.050	0.6719
51	18.381	1302	423	PV	0.046	0.0582
52	18.441	3138	940	VV	0.050	0.1403
53	18.552	1019	336	VV	0.047	0.0456
54	18.652	4456	1362	VB	0.051	0.1992
55	18.885	3085	945	BV	0.050	0.1379
56	19.008	41354	10567	VB	0.056	1.8488
57	19.731	6427	1978	BV	0.050	0.2873
58	20.086	18614	4619	PV	0.060	0.8322
59	20.424	2333	530	PB	0.066	0.1043
60	20.651	2646	765	BV	0.054	0.1183
61	20.859	5710	1741	PV	0.050	0.2553
62	20.925	3404	1041	VV	0.050	0.1522
63	21.084	12044	1577	PV	0.100	0.5385
64	21.325	1571	391	VB	0.059	0.0702
65	21.739	12393	2547	VV	0.069	0.5541
66	22.000	1497	359	PV	0.065	0.0669
67	22.108	3405	857	VV	0.061	0.1522
68	22.314	9182	2584	VV	0.055	0.4105
69	22.395	2447	737	VV	0.049	0.1094
70	22.491	4914	1199	VV	0.062	0.2197
71	22.732	3375	675	PV	0.070	0.1509
72	22.931	1504	351	VV	0.067	0.0672
73	23.171	3854	1011	PV	0.056	0.1723
74	23.327	156032	35416	VV	0.065	6.9758
75	23.685	5820	1360	VV	0.065	0.2602
76	23.817	17430	3484	VV	0.072	0.7792
77	24.156	2158	356	VV	0.085	0.0965
78	24.302	3198	504	VV	0.090	0.1430
79	24.450	11522	2557	VV	0.068	0.5151
80	24.621	16304	2290	VV	0.102	0.7289
81	24.713	10997	1827	VV	0.082	0.4916
82	24.924	3095	590	VV	0.077	0.1384
83	25.058	3925	988	VV	0.061	0.1755
84	25.230	14762	2803	VV	0.079	0.6600
85	25.574	5602	1131	VV	0.073	0.2505
86	25.775	7714	1116	VV	0.098	0.3449

87	25.900	4940	1085	VV	0.068	0.2209
88	25.978	6771	1108	VV	0.084	0.3027
89	26.298	6897	1437	VV	0.072	0.3083
90	26.405	1852	537	VV	0.052	0.0828
91	26.490	5943	1514	VV	0.059	0.2657
92	26.573	5607	1157	VB	0.073	0.2507
93	26.848	2743	497	BV	0.082	0.1226
94	26.981	9728	1524	VV	0.087	0.4349
95	27.217	3311	588	VV	0.085	0.1480
96	27.320	5213	1277	VV	0.061	0.2330
97	27.655	3807	484	VV	0.108	0.1702
98	27.776	3012	601	VV	0.074	0.1347
99	28.302	7181	1702	VV	0.064	0.3210
100	28.739	4116	679	BV	0.085	0.1840

Total area = 2236771

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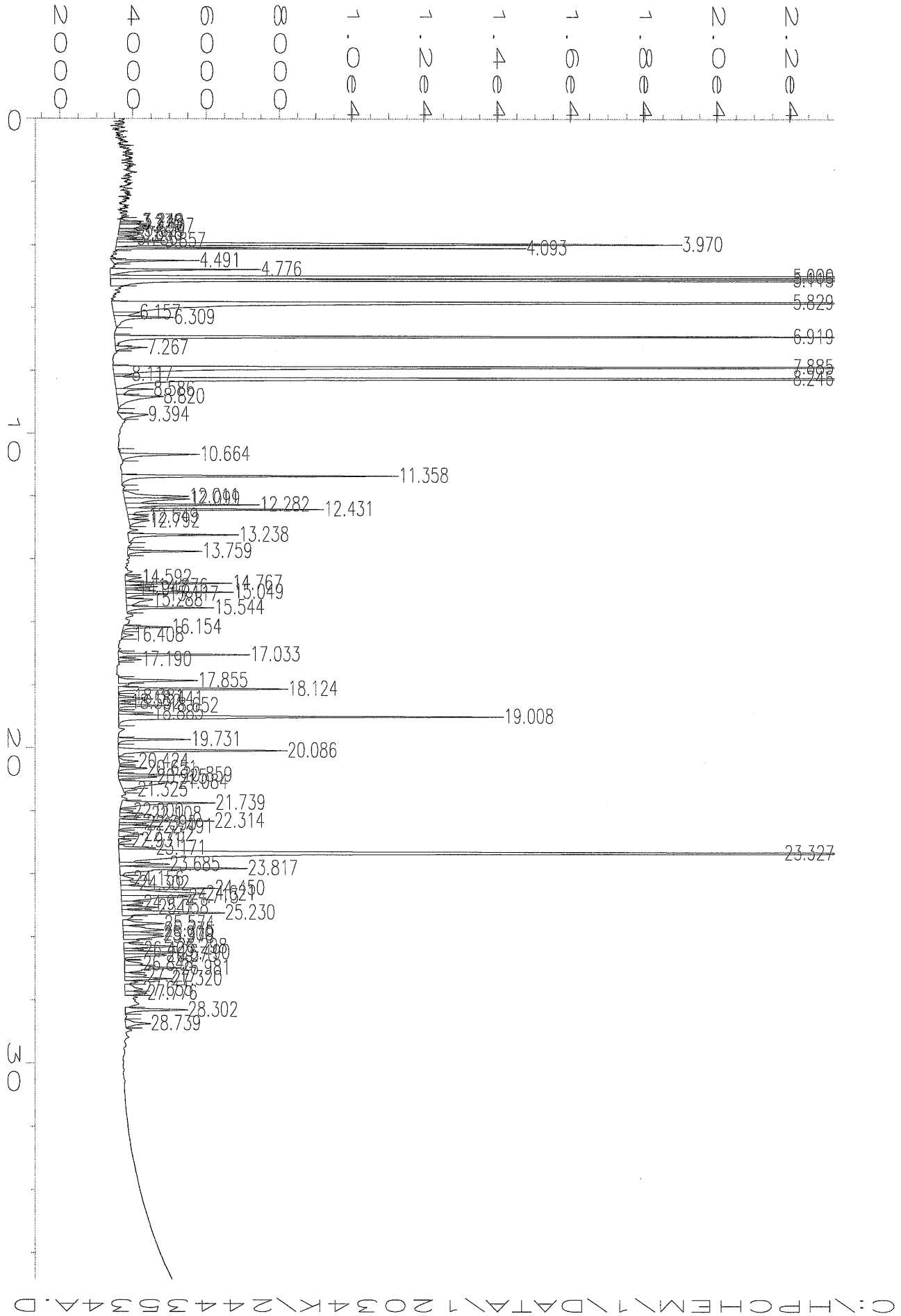
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **34**
File Name: **2443534A**
Sample ID: **T-602**
Sampled: **11/21/2024**
Received: **11/21/24**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **673**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:29** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **13:41** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

									RT Win	C2-C5 C5-C12
									RT	**0.3** **0.1**
									RTI	**3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	3.98	**3.97**	57356	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.02			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.09**	19812	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.12**	173571	I	I	H	292	290
74-98-6	Propane	P	5.20	**5.20**	**5.20**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.60**						130	351
106-98-9	1-Butene	P	7.29	7.29	**7.27**	3010	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.25**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.66	**8.59**	4276	I	I	H	408	410
590-18-1	c-2-Butene	P	9.63	9.54						203	431
78-78-4	i-Pentane	P	11.37	11.32	**11.36**	23054	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.25	**12.28**	12695	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.43**	**12.43**	17325	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.74	**12.79**	2860	I	I	H	510	510
627-20-3	c-2-Pentene	P	13.08	13.03	**13.06**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.72	**13.76**	6173	I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.83	**14.88**	2585	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.01						166	570
107-83-5	2-Methylpentane	P	15.08	15.03	**15.05**	9340	I	I	H	570	571
96-14-0	3-Methylpentane	P	15.55	15.50	**15.54**	8109	I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.12**	**16.15**	4312	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						103	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.03**	11202	I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.85**	**17.86**	9255	I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.13	**18.12**	15028	I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.37	**18.38**	1302	I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.44	**18.44**	3138	I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.65	**18.65**	4456	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.08	**19.01**		I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.40	**19.40**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.08	**20.09**	18614	I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.92	**20.93**	3404	I	I	H	753	753
108-88-3	Toluene	P	21.12	**21.11**	**21.08**	12044	I	I	H	758	758
592-27-8	2-Methylheptane	P	21.33	21.29	**21.23**		I	O	M	763	768
589-81-1	3-Methylheptane	p	21.55	21.51	**21.54**		I	I	H	774	775
111-65-9	n-Octane	P	22.27	22.23	**22.31**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.71	**23.69**	5820	I	I	H	853	855
108-38-3	m,p-xylene	P	23.95	23.91	**23.82**	17430	I	O	M	858	863
100-42-5	Styrene	P	24.40	24.36	**24.30**	3198	I	O	M	876	881
95-47-6	o-xylene	P	24.57	24.53	**24.62**	16304	I	I	H	889	886
111-84-2	n-Nonane	P	24.87	24.83	**24.92**	3095	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.32	**25.23**		I	O	M	913	919
103-65-1	n-propylbenzene	P	25.93	25.89	**25.90**	4940	I	O	M	943	947
620-14-4	3-Ethyltoluene	P	26.17	26.13	**26.14**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.22	**26.30**	6897	I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.41	**26.41**	1852	I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.57	**26.57**	5607	I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.04	**26.98**		I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.22	**27.22**	3311	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.51	**27.65**		O	I	M	1016	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.06	**28.01**		I	I	H	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.19	**28.30**		O	I	M	1040	1037
1120-21-4	Undecane	P	29.86	29.82	**29.93**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.42	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					2236771		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					2236771		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					2236771		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	81.12	40.56	46.71	81.12	40.56	46.71	46.71	46.71
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	28.02	14.01	17.28	28.02	14.01	17.28	17.28	17.28
Propene	42.1	3	245.48	81.83	141.18	245.48	81.83	141.18	141.18	141.18
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	4.26	1.06	2.45	4.26	1.06	2.45	2.45	2.45
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	6.05	1.51	3.48	6.05	1.51	3.48	3.48	3.48
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	32.60	6.52	19.30	32.60	6.52	19.30	19.30	19.30
1-Pentene	70.1	5	17.95	3.59	10.32	17.95	3.59	10.32	10.32	10.32
n-Pentane	72.1	5	24.50	4.90	14.48	24.50	4.90	14.48	14.48	14.48
t-2-Pentene	70.1	5	4.04	0.81	2.32	4.04	0.81	2.32	2.32	2.32
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	8.73	1.46	5.14	8.73	1.46	5.14	5.14	5.14
Cyclopentane	70.1	5	3.66	0.73	2.10	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	13.21	2.20	7.78	13.21	2.20	7.78	7.78	7.78
3-Methylpentane	86.2	6	11.47	1.91	6.75	11.47	1.91	6.75	6.75	6.75
n-Hexane	86.2	6	6.10	**1.02**	3.59	6.10	1.02	3.59	3.59	3.59
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	15.84	2.26	9.29	15.84	2.26	9.29	9.29	9.29
Benzene	78.1	6	13.09	2.18	6.98	13.09	2.18	6.98	6.98	6.98
Cyclohexane	84.2	6	21.25	3.54	12.22	21.25	3.54	12.22	12.22	12.22
2-Methylhexane	100.2	7	1.84	0.26	1.08	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	4.44	0.63	2.60	4.44	0.63	2.60	2.60	2.60
3-Methylhexane	100.2	7	6.30	0.90	3.70	6.30	0.90	3.70	3.70	3.70
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	26.33	3.76	15.14	26.33	3.76	15.14	15.14	15.14
2,3,4-Trimethylpentane	114.2	8	4.81	0.60	2.82	4.81	0.60	2.82	2.82	2.82
Toluene	92.1	7	17.03	2.43	9.18	17.03	2.43	9.18	9.18	9.18
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	8.23	1.03	4.48	8.23	1.03	4.48	4.48	4.48
m,p-xylene	106.2	8	24.65	3.08	13.41	24.65	3.08	13.41	13.41	13.41
Styrene	104.2	8	4.52	0.57	2.41	4.52	0.57	2.41	2.41	2.41
o-xylene	106.2	8	23.06	2.88	12.55	23.06	2.88	12.55	12.55	12.55
n-Nonane	128.3	9	4.38	0.49	2.56	4.38	0.49	2.56	2.56	2.56
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	6.99	0.78	3.82	6.99	0.78	3.82	3.82	3.82
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	9.75	1.08	5.34	9.75	1.08	5.34	5.34	5.34
1,3,5-Trimethylbenzene	120.2	9	2.62	0.29	1.43	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	7.93	0.88	4.34	7.93	0.88	4.34	4.34	4.34
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	4.68	0.47	2.73	4.68	0.47	2.73	2.73	2.73
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	3163.40	527.2	1862.6	3,163.40	527.23	1,862.60	1,862.60	1,862.60
Total Non-Methane Hydrocarbons	16	1.0	3163.40	3163.4	2074.4	3,163.40	3,163.40	2,074.36	2,074.36	2,074.36

SDG: **224435**
Laboratory Number: **34**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0		=		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0		=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0		=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	J	=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	J	=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	J	=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	J	=		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	J	=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					81.1		81.12		
					0.0			0.00	
28.0						28.02			
					245.5		245.48		
0.0						0.00			
		0.0				0.00			
					4.3		4.26		
0.0						0.00			
					6.0		6.05		
					0.0		0.00		
		32.6				32.60			
					18.0		17.95		
24.5						24.50			
					4.0		4.04		
					0.0		0.00		
		8.7				8.73			
				3.7					3.66
		0.0				0.00			
		13.2				13.21			
		11.5				11.47			
6.1						6.10			
				0.0					0.00
		15.8				15.84			
			13.1						
				21.3		21.25			
		1.8				1.84			
		4.4				4.44			
		6.3				6.30			
		0.0				0.00			
0.0						0.00			
				26.3					26.33
		4.8				4.81			
			17.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			

		8.2							
		24.7							
		4.5							
		23.1							
4.4						4.38			
		0.0							
		7.0							
		0.0							
		9.8							
		2.6							
		7.9							
		0.0							
4.7						4.68			
		0.0							
		0.0							
		0.0							
0.0						0.00			
0.0						0.00			
67.7	99.3	117.9	51.2	358.9	0.0	188.2	358.9	0.0	30.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

13.09

17.03

				8.23	
				24.65	
				4.52	
				23.06	
				0.00	
				6.99	
				0.00	
				9.75	
				2.62	
				7.93	
				0.00	
				0.00	
				0.00	
				0.00	
0.0	0.0	0.0	0.0	117.9	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		34	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.04E+04	57356	81.1	40.56	46.71
Acetylene	2	TRG	26.0	2.04E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.04E+04	19812	28.0	14.01	17.28
Propene	3	TRG	42.1	2.04E+04	173571	245.5	81.83	141.18
Propane	3	TRG	44.1	2.04E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.04E+04	3010	4.3	1.06	2.45
n-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	2.04E+04	4276	6.0	1.51	3.48
c-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.04E+04	23054	32.6	6.52	19.30
1-Pentene	5	TRG	70.1	2.04E+04	12695	18.0	3.59	10.32
n-Pentane	5	TRG	72.1	2.04E+04	17325	24.5	4.90	14.48
t-2-Pentene	5	TRG	70.1	2.04E+04	2860	4.0	0.81	2.32
c-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.04E+04	6173	8.7	1.46	5.14
Cyclopentane	5	TRG	70.1	2.04E+04	2585	3.7	0.73	2.10
2,3-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.04E+04	9340	13.2	2.20	7.78
3-Methylpentane	6	TRG	86.2	2.04E+04	8109	11.5	1.91	6.75
n-Hexane	6	TRG	86.2	2.04E+04	4312	6.1	1.02	3.59
Methylcyclopentane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	2.04E+04	11202	15.8	2.26	9.29
Benzene	6	TRG	78.1	2.04E+04	9255	13.1	2.18	6.98
Cyclohexane	6	TRG	84.2	2.04E+04	15028	21.3	3.54	12.22
2-Methylhexane	7	TRG	100.2	2.04E+04	1302	1.8	0.26	1.08
2,3-Dimethylpentane	7	TRG	100.2	2.04E+04	3138	4.4	0.63	2.60
3-Methylhexane	7	TRG	100.2	2.04E+04	4456	6.3	0.90	3.70
2,2,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.04E+04	18614	26.3	3.76	15.14
2,3,4-Trimethylpentane	8	TRG	114.2	2.04E+04	3404	4.8	0.60	2.82
Toluene	7	TRG	92.1	2.04E+04	12044	17.0	2.43	9.18
2-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	2.04E+04	5820	8.2	1.03	4.48

m,p-xylene	8	TRG	106.2	2.04E+04	17430	24.7	3.08	13.41
Styrene	8	TRG	104.2	2.04E+04	3198	4.5	0.57	2.41
o-xylene	8	TRG	106.2	2.04E+04	16304	23.1	2.88	12.55
n-Nonane	9	TRG	128.3	2.04E+04	3095	4.4	0.49	2.56
i-Propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.04E+04	4940	7.0	0.78	3.82
3-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.04E+04	6897	9.8	1.08	5.34
1,3,5-Trimethylbenzene	9	TRG	120.2	2.04E+04	1852	2.6	0.29	1.43
2-Ethyltoluene	9	TRG	120.2	2.04E+04	5607	7.9	0.88	4.34
1,2,4-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.04E+04	3311	4.7	0.47	2.73
1,2,3-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.04E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.04E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.04E+04	2236771	3163.4	527.23	1862.60
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.04E+04	2236771	3163.4	3163.40	2074.36

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 34

File Name: 2443534A
Description: T-602
Canister: 673
QC_Batch: 120324-GCK

Date Sampled: 11/21/24 **Time:** 8:29
Date Analyzed: 12/03/24 **Time:** 13:41
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	40.56	2.30	6.91	46.71	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	14.01	2.47	7.40	17.28	
115-07-1	Propene	1.33	4.00	81.83	2.30	6.90	141.18	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.06	2.30	6.90	2.45	J
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	1.51	2.30	6.90	3.48	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	6.52	2.37	7.10	19.30	
109-67-1	1-Pentene	0.80	2.40	3.59	2.30	6.90	10.32	
109-66-0	n-Pentane	0.80	2.40	4.90	2.36	7.09	14.48	
646-04-8	t-2-Pentene	0.80	2.40	0.81	2.30	6.90	2.32	J
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	1.46	2.36	7.07	5.14	J
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	2.20	2.36	7.07	7.78	
96-14-0	3-Methylpentane	0.67	2.00	1.91	2.36	7.07	6.75	J
110-54-3	n-Hexane	0.67	2.00	1.02	2.36	7.07	3.59	J
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	2.26	2.35	7.04	9.29	
71-43-2	Benzene	0.67	2.00	2.18	2.13	6.40	6.98	
110-82-7	Cyclohexane	0.67	2.00	3.54	2.30	6.90	12.22	
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	0.63	2.35	7.04	2.60	J
589-34-4	3-Methylhexane	0.57	1.71	0.90	2.35	7.04	3.70	J
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	3.76	2.30	6.90	15.14	
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	0.60	2.34	7.02	2.82	J
108-88-3	Toluene	0.57	1.71	2.43	2.16	6.47	9.18	
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	1.03	2.18	6.53	4.48	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	3.08	2.18	6.53	13.41	
100-42-5	Styrene	0.50	1.50	0.57	2.14	6.41	2.41	J
95-47-6	o-xylene	0.50	1.50	2.88	2.18	6.53	12.55	
111-84-2	n-Nonane	0.44	1.33	0.49	2.34	7.01	2.56	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	0.78	2.19	6.57	3.82	J
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	1.08	2.19	6.57	5.34	J
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	0.88	2.19	6.57	4.34	J
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.47	2.33	7.00	2.73	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	527.23	26.50	79.49	1,862.60	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	3,163.40	29.51	88.52	2,074.36	

Sample Data Packages

SDG Number 224435

Lab Id Number 35

Client ID T-603

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 35

Client: C.E. Schmidt
Client ID: T-603
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 550
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:31
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

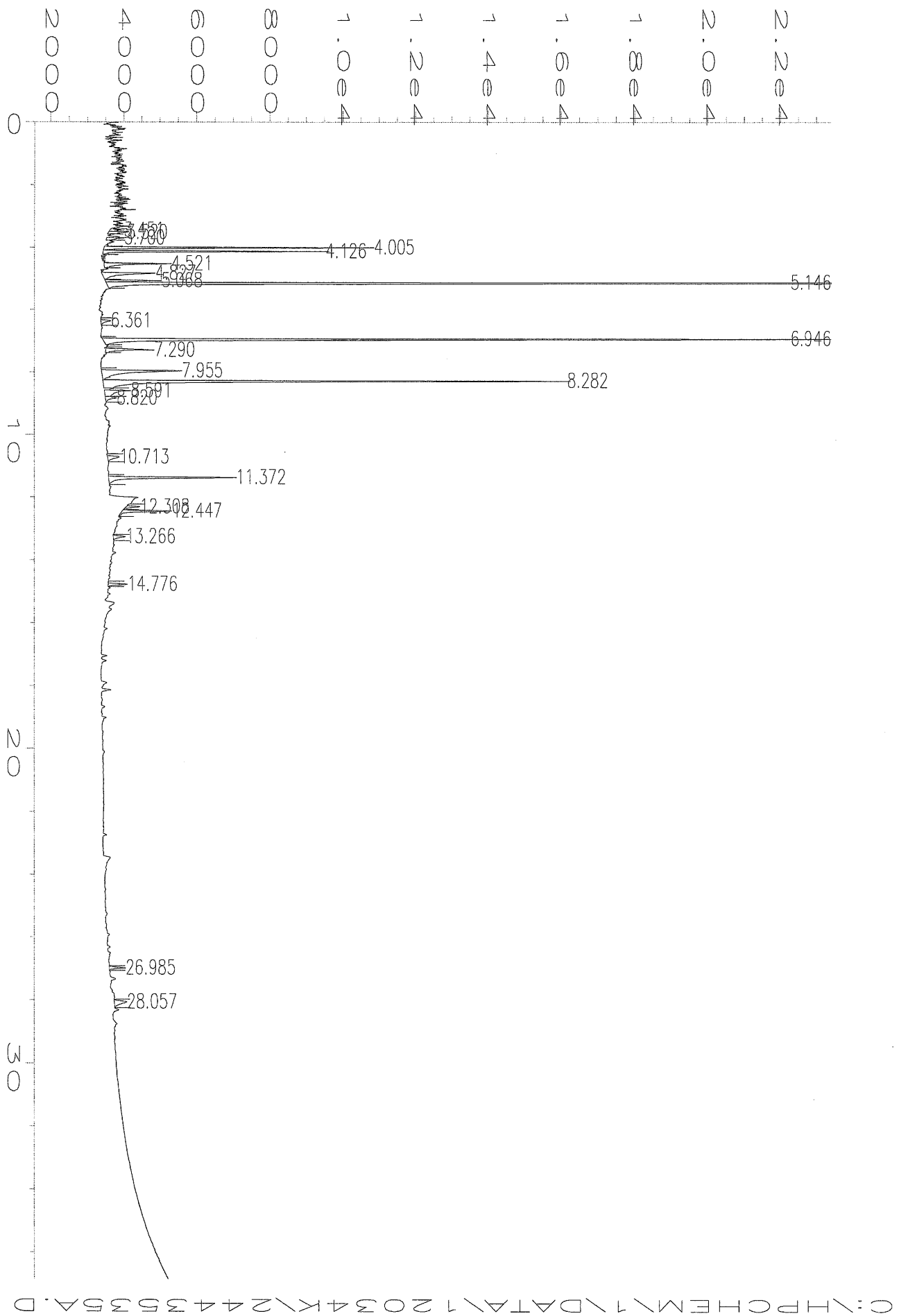
Data File Name : C:\HPCHEM\1\DATA\12034K\2443535A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-603
Run Time Bar Code:
Acquired on : 03 Dec 24 02:37 PM
Report Created on: 03 Dec 24 03:14 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12034K\2443535A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.451	948	383	VV	0.041	0.3468
2	3.520	1563	511	VV	0.042	0.5719
3	3.700	1424	496	VV	0.038	0.5212
4	4.005	16209	7403	VV	0.033	5.9305
5	4.126	12241	6236	VV	0.029	4.4785
6	4.521	5394	1866	VV	0.040	1.9736
7	4.827	6392	1480	PV	0.059	2.3387
8	5.068	3558	1563	VV	0.033	1.3018
9	5.146	89226	43445	VV	0.032	32.6452
10	6.361	1111	276	BB	0.057	0.4064
11	6.946	50011	20169	BV	0.037	18.2975
12	7.290	3840	1372	BV	0.043	1.4048
13	7.955	11735	2218	BV	0.072	4.2935
14	8.282	40144	12868	VV	0.045	14.6876
15	8.591	3750	734	VV	0.065	1.3718
16	8.820	1367	312	VB	0.062	0.5003
17	10.713	1681	322	BB	0.073	0.6149
18	11.372	11071	3515	BB	0.046	4.0506
19	12.308	1052	371	BV	0.045	0.3848
20	12.447	4091	1360	PB	0.045	1.4969
21	13.266	1288	332	BB	0.054	0.4712
22	14.776	1577	535	BV	0.046	0.5772
23	26.985	1399	452	BB	0.049	0.5119
24	28.057	2248	342	BV	0.091	0.8225

Total area = 273321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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **35**
File Name: **2443535A**
Sample ID: **T-603**
Sampled: **11/21/2024**
Received: **11/21/24**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **550**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:31** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **14:37** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

		PAMS	STD	Corrected	Samp	Sample	RT	RTI	Flag	Calc	EAS
CAS#	Compound		RT	RT	RT	Area	in/out	in/out		RTI	RTI
74-85-1	Ethene	P	4.06	4.02	**4.01**	16209	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.06			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.13**	12241	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.07**	89226	I	I	H	292	290
74-98-6	Propane	P	5.20	**5.20**	**5.15**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.55**						135	351
106-98-9	1-Butene	P	7.29	7.24	**7.29**	3840	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.28**	40144	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.69	**8.59**		O	I	M	407	410
590-18-1	c-2-Butene	P	9.63	9.57						201	431
78-78-4	i-Pentane	P	11.37	11.34	**11.37**	11071	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.27	**12.31**	1052	I	I	H	497	495
109-66-0	n-Pentane	P	12.48	**12.45**	**12.45**	4091	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.76	**12.79**		I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.05	**13.06**		I	I	H	516	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.74	**13.76**		I	I	H	535	537
287-92-3	Cyclopentane	P	14.88	14.85	**14.78**	1577	I	O	M	563	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.03						164	570
107-83-5	2-Methylpentane	P	15.08	15.05	**15.05**		I	I	H	570	571
96-14-0	3-Methylpentane	P	15.55	15.52	**15.54**		I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.14**	**16.15**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						103	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.03**		I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.85**	**17.86**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.13	**18.12**		I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.37	**18.38**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.44	**18.44**		I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.65	**18.65**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.08	**19.01**		I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.40	**19.40**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.08	**20.09**		I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.92	**20.93**		I	I	H	753	753
108-88-3	Toluene	P	21.12	**21.11**	**21.08**		I	I	H	758	758
592-27-8	2-Methylheptane	P	21.33	21.29	**21.23**		I	O	M	763	768
589-81-1	3-Methylheptane	p	21.55	21.51	**21.54**		I	I	H	774	775
111-65-9	n-Octane	P	22.27	22.23	**22.31**		I	I	H	800	800

RT Win C2-C C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.71	**23.69**		I	I	H	853	855
108-38-3	m,p-xylene	P	23.95	23.91	**23.82**		I	O	M	858	863
100-42-5	Styrene	P	24.40	24.36	**24.30**		I	O	M	876	881
95-47-6	o-xylene	P	24.57	24.53	**24.62**		I	I	H	889	886
111-84-2	n-Nonane	P	24.87	24.83	**24.92**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.32	**25.23**		I	O	M	913	919
103-65-1	n-propylbenzene	P	25.93	25.89	**25.90**		I	O	M	943	947
620-14-4	3-Ethyltoluene	P	26.17	26.13	**26.14**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.22	**26.30**		I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.41	**26.41**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.57	**26.57**		I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.04	**26.99**	1399	I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.22	**27.22**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.51	**27.65**		O	I	M	1016	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.06	**28.01**	2248	I	I	H	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.19	**28.30**		O	I	M	1040	1037
1120-21-4	Undecane	P	29.86	29.82	**29.93**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.42	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					273321		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					273321		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					273321		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	22.92	11.46	13.20	22.92	11.46	13.20	13.20	13.20
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	17.31	8.66	10.68	17.31	8.66	10.68	10.68	10.68
Propene	42.1	3	126.19	42.06	72.58	126.19	42.06	72.58	72.58	72.58
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	5.43	1.36	3.12	5.43	1.36	3.12	3.12	3.12
n-Butane	58.1	4	56.77	14.19	33.80	56.77	14.19	33.80	33.80	33.80
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	15.66	3.13	9.27	15.66	3.13	9.27	9.27	9.27
1-Pentene	70.1	5	1.49	0.30	0.85	ND	ND	ND	0	
n-Pentane	72.1	5	5.79	1.16	3.42	5.79	1.16	3.42	3.42	3.42
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	2.23	0.45	1.28	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

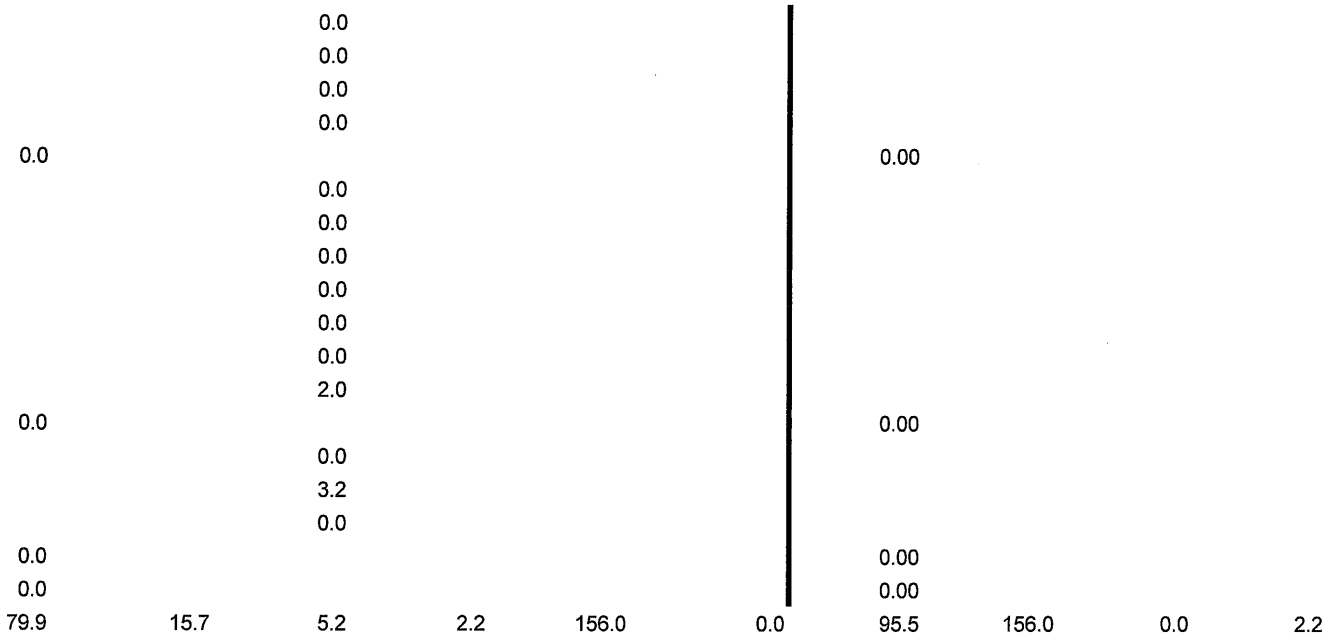
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	1.98	0.22	1.08	ND	ND	ND	0	
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	3.18	0.32	1.75	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	386.55	64.4	227.6	386.55	64.42	227.60	227.60	227.60
Total Non-Methane Hydrocarbons	16	1.0	386.55	386.5	253.5	386.55	386.55	253.48	253.48	253.48

SDG: **224435**
Laboratory Number: **35**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0		=		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0		=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0		=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0		=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					22.9		22.92		
					0.0			0.00	
17.3						17.31			
					126.2		126.19		
0.0						0.00			
		0.0				0.00			
					5.4		5.43		
56.8						56.77			
					0.0		0.00		
					0.0		0.00		
		15.7				15.66			
					1.5		1.49		
5.8						5.79			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				2.2					2.23
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
0.0						0.00			



		0.0							
		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		2.0							
0.0						0.00			
		0.0							
		3.2							
		0.0							
0.0						0.00			
0.0						0.00			
79.9	15.7	5.2	2.2	156.0	0.0	95.5	156.0	0.0	2.2

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00
0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
1.98

0.00
3.18
0.00

0.0	0.0	0.0	0.0	5.2	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		35	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|_i$

2) ppbC = $\frac{6 \text{ Carbons} \times Ansamp \times CDF \times 1000}{(Avg\ RFn) \times SV}$ = **Cn**

3) Amount ppbv = $\frac{Cn}{C\#}$

4) Amount ug/m3 = $\frac{(amt(ppbv) \times MW}{24.4}$

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.04E+04	16209	22.9	11.46	13.20
Acetylene	2	TRG	26.0	2.04E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.04E+04	12241	17.3	8.66	10.68
Propene	3	TRG	42.1	2.04E+04	89226	126.2	42.06	72.58
Propane	3	TRG	44.1	2.04E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.04E+04	3840	5.4	1.36	3.12
n-Butane	4	TRG	58.1	2.04E+04	40144	56.8	14.19	33.80
t-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.04E+04	11071	15.7	3.13	9.27
1-Pentene	5	TRG	70.1	2.04E+04	1052	1.5	0.30	0.85
n-Pentane	5	TRG	72.1	2.04E+04	4091	5.8	1.16	3.42
t-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.04E+04	1577	2.2	0.45	1.28
2,3-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.04E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.04E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	2.04E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	2.04E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	2.04E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	2.04E+04	1399	2.0	0.22	1.08
n-Decane	10	TRG	142.3	2.04E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.04E+04	2248	3.2	0.32	1.75
1,4-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.04E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.04E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.04E+04	273321	386.5	64.42	227.60
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.04E+04	273321	386.5	386.55	253.48

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Canister: 550
QC_Batch: 120324-GCK

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/03/24 **Time:** 14:37
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	11.46	2.30	6.91	13.20	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	8.66	2.47	7.40	10.68	
115-07-1	Propene	1.33	4.00	42.06	2.30	6.90	72.58	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	1.36	2.30	6.90	3.12	J
106-97-8	n-Butane	1.00	3.00	14.19	2.38	7.14	33.80	
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	3.13	2.37	7.10	9.27	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	1.16	2.36	7.09	3.42	J
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	64.42	26.50	79.49	227.60	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	386.55	29.51	88.52	253.48	

Sample Data Packages

SDG Number 224435

Lab Id Number 36

Client ID T-604

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 36

Client: C.E. Schmidt
Client ID: T-604
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 738
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCK	TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

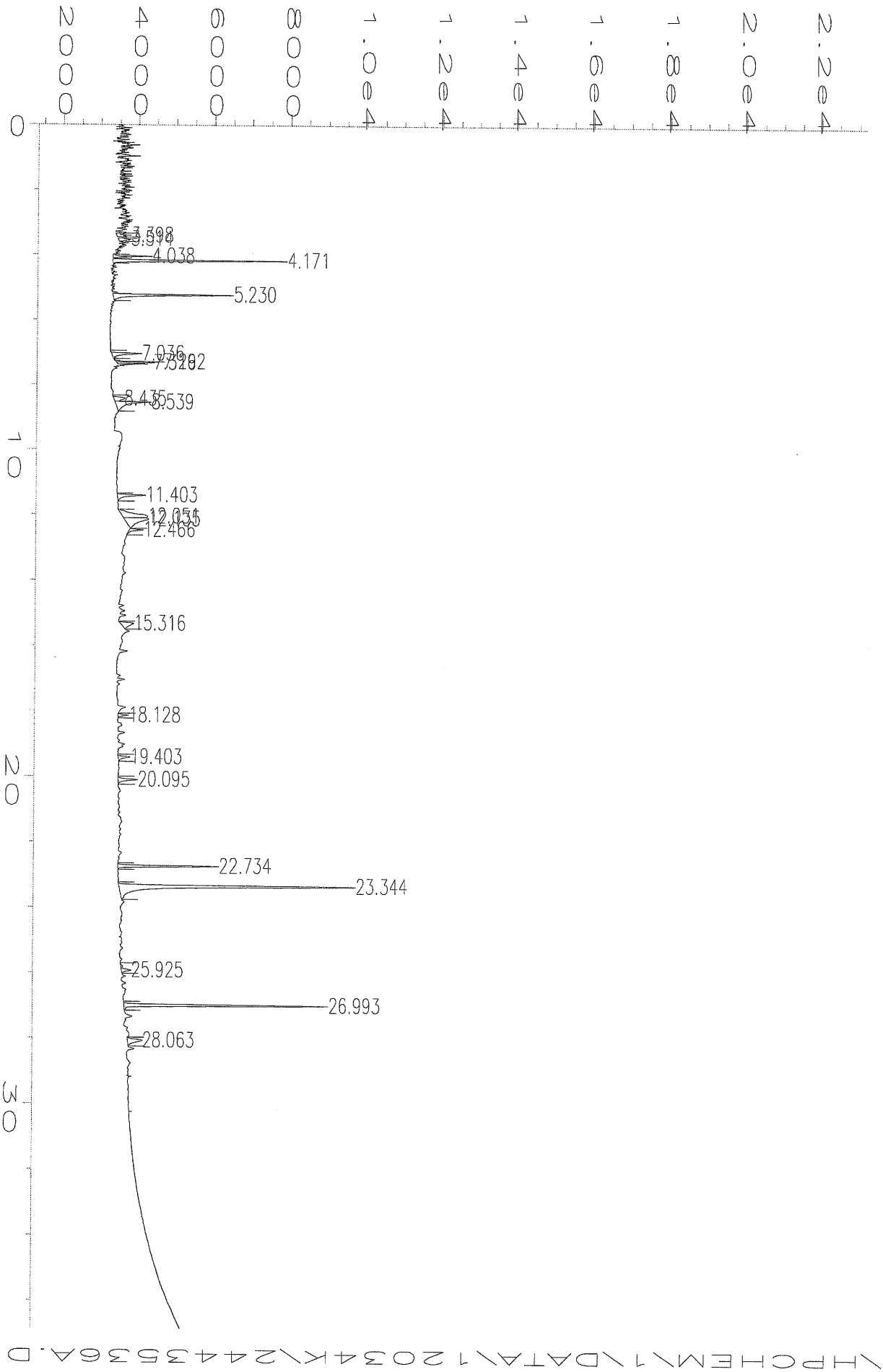
Data File Name : C:\HPCHEM\1\DATA\12034K\2443536A.D
Operator : DA
Instrument : ANALYZER1
Sample Name : T-604
Run Time Bar Code:
Acquired on : 03 Dec 24 03:38 PM
Report Created on: 03 Dec 24 04:57 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12034K\2443536A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.398	1480	403	VV	0.068	1.2356
2	3.514	1207	348	VV	0.055	1.0080
3	4.038	1969	1050	PV	0.029	1.6439
4	4.171	12282	4616	VV	0.039	10.2565
5	5.230	9127	3189	VV	0.042	7.6214
6	7.036	2925	804	BV	0.052	2.4429
7	7.292	1935	1269	PV	0.024	1.6158
8	7.316	1978	1010	VV	0.033	1.6516
9	8.435	1717	295	BV	0.086	1.4337
10	8.539	4449	954	VB	0.060	3.7149
11	11.403	2863	757	BB	0.055	2.3909
12	12.051	5772	671	BV	0.109	4.8204
13	12.135	6092	641	VB	0.120	5.0869
14	12.466	1161	358	BB	0.050	0.9693
15	15.316	2392	360	BV	0.091	1.9971
16	18.128	933	284	BB	0.051	0.7794
17	19.403	1272	319	BB	0.060	1.0622
18	20.095	2004	524	BB	0.058	1.6739
19	22.734	7644	2667	BB	0.045	6.3836
20	23.344	30179	6216	BB	0.071	25.2017
21	25.925	1279	262	BB	0.072	1.0684
22	26.993	16491	5366	BB	0.049	13.7708
23	28.063	2600	389	VV	0.098	2.1714

Total area = 119750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20
30
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5.230
8.539
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19.403
20.095
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26.993
28.063
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **36**
File Name: **2443536A**
Sample ID: **T-604**
Sampled: **11/21/2024**
Received: **11/21/24**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **738**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **8:18** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **15:38** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

			RT Win	C2-C4	C5-C12
		RT		**0.3**	**0.1**
		RTI		**3**	**3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.06	**4.04**	1969	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.10			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	4.17	12282	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11						-193	290
74-98-6	Propane	P	5.20	**5.20**	5.23	9127	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.63**						137	351
106-98-9	1-Butene	P	7.29	7.32	**7.32**	1978	I	I	H	365	367
106-97-8	n-Butane	P	8.34	**8.34**	8.44	1717	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.85	**8.59**		O	O	L	404	410
590-18-1	c-2-Butene	P	9.63	9.73						191	431
78-78-4	i-Pentane	P	11.37	11.36	**11.40**	2863	I	I	H	473	473
109-67-1	1-Pentene	P	12.30	12.29	**12.31**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.47**	12.47	1161	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.78	**12.79**		I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.07	**13.06**		I	I	H	516	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.76	**13.76**		I	I	H	535	537
287-92-3	Cyclopentane	P	14.88	14.87	**14.78**		I	O	M	563	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.05						161	570
107-83-5	2-Methylpentane	P	15.08	15.07	**15.05**		I	I	H	570	571
96-14-0	3-Methylpentane	P	15.55	15.54	**15.54**		I	I	H	583	583
110-54-3	n-Hexane	P	16.17	**16.16**	16.15		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.84						103	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.03	**17.03**		I	I	H	627	626
71-43-2	Benzene	P	17.87	**17.85**	17.86		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.13	**18.13**	933	I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.37	**18.38**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.44	**18.44**		I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.65	**18.65**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.08	**19.01**		I	I	H	688	690
142-82-5	n-Heptane	P	19.41	19.40	19.40	1272	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.08	**20.09**	2004	I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.92	**20.93**		I	I	H	753	753
108-88-3	Toluene	P	21.12	**21.11**	21.08		I	I	H	758	758
592-27-8	2-Methylheptane	P	21.33	21.29	**21.23**		I	O	M	763	768
589-81-1	3-Methylheptane	p	21.55	21.51	**21.54**		I	I	H	774	775
111-65-9	n-Octane	P	22.27	22.23	**22.31**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.71	**23.34**		O	O	L	839	855
108-38-3	m,p-xylene	P	23.95	23.91	**23.82**		I	O	M	858	863
100-42-5	Styrene	P	24.40	24.36	**24.30**		I	O	M	876	881
95-47-6	o-xylene	P	24.57	24.53	**24.62**		I	I	H	889	886
111-84-2	n-Nonane	P	24.87	24.83	**24.92**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.32	**25.23**		I	O	M	913	919
103-65-1	n-propylbenzene	P	25.93	25.89	**25.93**	1279	I	O	M	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.13	**26.14**		I	O	M	953	957
622-96-8	4-Ethyltoluene	P	26.26	26.22	**26.30**		I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.41	**26.41**		I	I	H	965	964
611-14-3	2-Ethyltoluene	P	26.61	26.57	**26.57**		I	O	M	972	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.04	**26.99**	16491	I	I	H	990	991
124-18-5	n-Decane	P	27.26	27.22	**27.22**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.51	**27.65**		O	I	M	1016	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.06	**28.06**	2600	I	I	H	1031	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.19	**28.30**		O	I	M	1040	1037
1120-21-4	Undecane	P	29.86	29.82	**29.93**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.42	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					119750		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					119750		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					119750		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	2.78	1.39	1.60	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	17.37	8.69	10.71	17.37	8.69	10.71	10.71	10.71
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	12.91	4.30	7.78	12.91	4.30	7.78	7.78	7.78
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.80	0.70	1.61	ND	ND	ND	0	
n-Butane	58.1	4	2.43	0.61	1.45	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	4.05	0.81	2.40	4.05	0.81	2.40	2.40	2.40
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	1.64	0.33	0.97	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	1.32	0.22	0.76	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	1.80	0.26	1.06	ND	ND	ND	0	
Methylcyclohexane	98.2	7	2.83	0.40	1.63	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	

m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0	
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	1.81	0.20	0.99	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	23.32	2.59	12.77	23.32	2.59	12.77	12.77	12.77
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0	
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	3.68	0.37	2.02	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	169.36	28.2	99.7	169.36	28.23	99.72	99.72	99.72
Total Non-Methane Hydrocarbons	16	1.0	169.36	169.4	111.1	169.36	169.36	111.06	111.06	111.06

SDG: **224435**
Laboratory Number: **36**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0		=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0		=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	J	=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					2.8		2.78		
					0.0			0.00	
	17.4					17.37			
					0.0		0.00		
	12.9					12.91			
		0.0				0.00			
					2.8		2.80		
	2.4					2.43			
					0.0		0.00		
					0.0		0.00		
		4.0				4.05			
					0.0		0.00		
	1.6					1.64			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				1.3		1.32			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
	1.8					1.80			
				2.8					2.83
		0.0				0.00			
			0.0						
		0.0				0.00			
		0.0				0.00			
	0.0					0.00			
			0.0						

		0.0							
		0.0							
		0.0							
0.0						0.00			
		0.0							
		1.8							
		0.0							
		0.0							
		0.0							
		0.0							
		23.3							
0.0						0.00			
		0.0							
		3.7							
		0.0							
0.0						0.00			
0.0						0.00			
36.1	4.0	28.8	4.2	5.6	0.0	41.5	5.6	0.0	2.8

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00

0.00
0.00
0.00

0.00
1.81
0.00
0.00
0.00
0.00
23.32

0.00
3.68
0.00

0.0	0.0	0.0	0.0	28.8	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Canister: 738
QC_Batch: 120324-GCK

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/03/24 **Time:** 15:38
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	8.69	2.47	7.40	10.71	
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	4.30	2.41	7.23	7.78	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	0.81	2.37	7.10	2.40	J
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	2.59	2.19	6.57	12.77	
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	28.23	26.50	79.49	99.72	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	169.36	29.51	88.52	111.06	

Sample Data Packages

SDG Number 224435

Lab Id Number 37

Client ID T-605

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 37

Client: C.E. Schmidt
Client ID: T-605
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 892
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\12044K\2443537A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-605
Run Time Bar Code:
Acquired on : 04 Dec 24 12:10 PM
Report Created on: 04 Dec 24 12:47 PM
Sample Info : SCHMIDT, 200 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12044K\2443537A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.108	2590	701	BV	0.048	0.0063
2	3.294	1543	704	PV	0.036	0.0038
3	3.323	2307	668	VV	0.044	0.0056
4	3.524	5611	1049	PV	0.070	0.0136
5	3.687	3985	951	VV	0.055	0.0097
6	3.856	2734	665	VV	0.067	0.0066
7	4.003	60149	19517	VV	0.042	0.1463
8	4.135	90021	38793	VV	0.035	0.2190
9	4.521	40476	16861	PV	0.036	0.0985
10	4.795	99657	42149	PV	0.036	0.2424
11	5.051	803930	306733	VV	0.039	1.9555
12	5.164	494643	192137	VV	0.038	1.2032
13	5.938	47206	11538	BV	0.056	0.1148
14	6.107	3777	1104	VV	0.047	0.0092
15	6.270	64354	11904	VV	0.069	0.1565
16	6.952	633256	206648	PV	0.050	1.5404
17	7.122	1091	333	VV	0.043	0.0027
18	7.256	891	282	PV	0.042	0.0022
19	7.924	92192	20528	BV	0.061	0.2243
20	8.274	384086	149722	VV	0.040	0.9343
21	8.554	3534	1167	VV	0.042	0.0086
22	8.606	5387	1423	VV	0.050	0.0131
23	8.807	31491	5436	VV	0.089	0.0766
24	9.177	12048	2993	PV	0.059	0.0293
25	9.274	1510	771	VV	0.033	0.0037
26	9.346	27682	6102	VV	0.064	0.0673
27	9.736	6846	1429	VV	0.069	0.0167
28	10.673	20110	5714	BB	0.051	0.0489
29	11.225	122806	32983	BV	0.058	0.2987
30	11.370	420077	155167	VV	0.042	1.0218
31	11.689	3939040	376318	VV	0.133	9.5816
32	12.030	64527	17723	VV	0.056	0.1570
33	12.123	34270	9735	VV	0.052	0.0834
34	12.294	86019	31600	VV	0.042	0.2092
35	12.443	116909	43917	VV	0.041	0.2844

36	12.760	468457	73673	VV	0.085	1.1395
37	12.899	310669	45936	VV	0.092	0.7557
38	13.044	42224	6676	VV	0.092	0.1027
39	13.238	48709	13990	VV	0.051	0.1185
40	13.366	17284	1762	VV	0.125	0.0420
41	13.727	77893	13245	VV	0.077	0.1895
42	14.392	2109	623	VV	0.051	0.0051
43	14.585	3836	876	PV	0.063	0.0093
44	14.770	177592	62595	VV	0.044	0.4320
45	14.876	10297	3547	VV	0.045	0.0250
46	15.050	41095	12279	VV	0.049	0.1000
47	15.576	4304449	504322	VV	0.111	10.4705
48	15.766	33519	6787	VV	0.068	0.0815
49	15.982	42423	12890	VV	0.050	0.1032
50	16.155	737824	110072	VV	0.094	1.7947
51	16.313	50572	11674	VV	0.064	0.1230
52	16.393	32680	5500	VV	0.079	0.0795
53	16.629	2501	1042	VV	0.040	0.0061
54	16.695	196307	56731	VV	0.053	0.4775
55	16.836	9770	2335	VV	0.059	0.0238
56	16.966	3430	1157	VV	0.044	0.0083
57	17.084	113315	26129	VV	0.063	0.2756
58	17.169	20356	4772	VV	0.060	0.0495
59	17.363	6322	1511	VV	0.059	0.0154
60	17.616	31843	7703	VV	0.060	0.0775
61	17.849	122329	35799	VV	0.052	0.2976
62	17.998	16030	4411	VV	0.055	0.0390
63	18.131	107149	34551	VV	0.049	0.2606
64	18.226	42475	11903	VV	0.054	0.1033
65	18.375	72439	31934	VV	0.035	0.1762
66	18.428	271438	64808	VV	0.062	0.6603
67	18.651	173091	54898	VV	0.049	0.4210
68	18.789	19452	5070	VV	0.056	0.0473
69	18.885	23951	6840	VV	0.052	0.0583
70	19.029	157409	40147	VV	0.055	0.3829
71	19.079	82208	26889	VV	0.045	0.2000
72	19.305	35749	9686	VV	0.055	0.0870
73	19.391	447188	146222	VV	0.047	1.0878
74	19.525	17474	3511	VV	0.070	0.0425
75	19.743	28359	6915	VV	0.060	0.0690
76	19.900	4289	1180	VV	0.054	0.0104
77	20.099	195672	50268	VV	0.057	0.4760
78	20.287	292834	70661	VV	0.063	0.7123
79	20.419	70140	17049	VV	0.059	0.1706
80	20.656	28224	6077	VV	0.067	0.0687
81	20.777	5180	1513	VV	0.051	0.0126
82	20.933	114920	30745	VV	0.056	0.2795
83	21.140	2373512	545645	VV	0.071	5.7735
84	21.332	82919	24349	VV	0.051	0.2017
85	21.384	60505	17215	VV	0.051	0.1472
86	21.474	12312	4755	VV	0.038	0.0299

87	21.551	85255	21589	VV	0.058	0.2074
88	21.751	125802	29827	VV	0.062	0.3060
89	21.863	104865	29355	VV	0.053	0.2551
90	21.952	50866	8404	VV	0.081	0.1237
91	22.114	27183	5954	VV	0.067	0.0661
92	22.169	15278	5648	VV	0.040	0.0372
93	22.258	257218	77876	VV	0.051	0.6257
94	22.324	46168	15867	VV	0.048	0.1123
95	22.419	21708	6340	VV	0.051	0.0528
96	22.500	60083	15684	VV	0.059	0.1462
97	22.685	7403	2408	VV	0.046	0.0180
98	22.762	56763	14546	VV	0.058	0.1381
99	22.924	204701	61944	VV	0.052	0.4979
100	23.081	70804	17721	VV	0.059	0.1722
101	23.180	41310	12297	VV	0.050	0.1005
102	23.276	157212	38637	VV	0.061	0.3824
103	23.409	2429379	507649	VV	0.072	5.9094
104	23.637	7638	2873	VV	0.039	0.0186
105	23.760	655984	160208	VV	0.064	1.5957
106	23.851	156756	44999	VV	0.052	0.3813
107	24.000	1763955	388370	VV	0.070	4.2908
108	24.199	174928	41987	VV	0.062	0.4255
109	24.328	24458	6375	VV	0.057	0.0595
110	24.475	284217	56007	VV	0.075	0.6914
111	24.596	633394	132070	VV	0.071	1.5407
112	24.739	156581	38026	VV	0.061	0.3809
113	24.884	538099	118614	VV	0.068	1.3089
114	25.078	27741	6885	VV	0.062	0.0675
115	25.242	254051	42648	VV	0.091	0.6180
116	25.414	113680	21758	VV	0.079	0.2765
117	25.597	171094	34886	VV	0.072	0.4162
118	25.696	141947	31312	VV	0.067	0.3453
119	25.818	264903	64387	VV	0.061	0.6444
120	26.016	6384948	1079075	VV	0.090	15.5312
121	26.178	71288	15244	VV	0.070	0.1734
122	26.362	1005931	160129	VV	0.088	2.4469
123	26.526	169045	42447	VV	0.059	0.4112
124	26.617	196725	44956	VV	0.065	0.4785
125	26.876	180919	24376	VV	0.102	0.4401
126	26.993	1114857	177109	VV	0.095	2.7119
127	27.256	247273	58802	VV	0.063	0.6015
128	27.350	225942	57351	VV	0.060	0.5496
129	27.446	89059	13323	VV	0.090	0.2166
130	27.676	393502	94489	VV	0.065	0.9572
131	27.789	314899	61111	VV	0.077	0.7660
132	28.062	1878372	388253	VV	0.074	4.5691
133	28.216	57675	12956	VV	0.066	0.1403
134	28.329	70912	11723	VV	0.085	0.1725
135	28.556	29184	5538	VV	0.076	0.0710
136	28.650	48970	10300	VV	0.070	0.1191
137	28.754	55630	6548	VV	0.111	0.1353

138	28.960	21276	3587	VV	0.086	0.0518
139	29.168	22611	2635	VV	0.116	0.0550
140	29.361	11651	1434	VV	0.109	0.0283
141	29.472	9945	1707	VV	0.085	0.0242
142	29.591	8852	1093	VV	0.110	0.0215

Total area = 4.11104E+007

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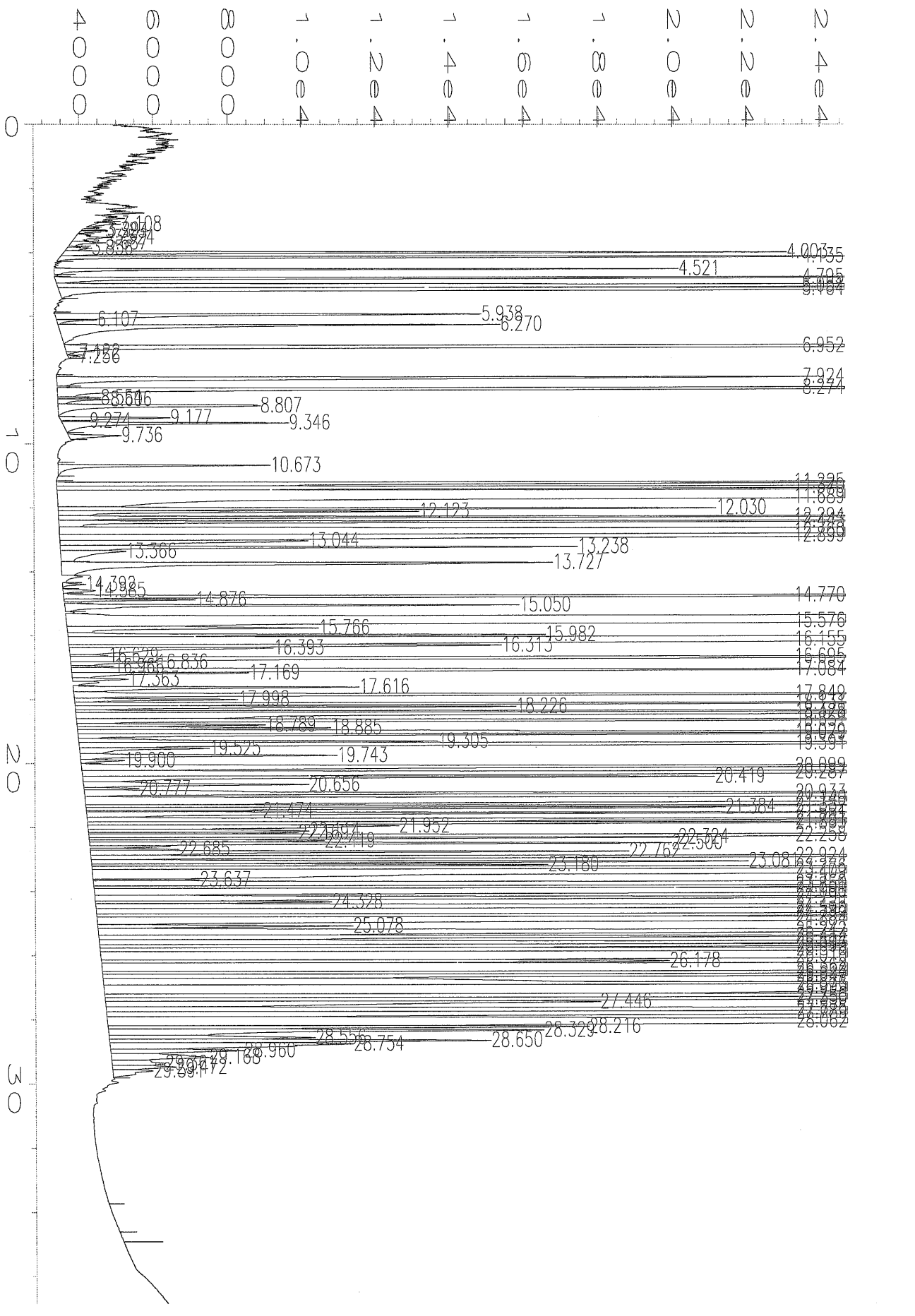
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QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **37**
File Name: **2443537A**
Sample ID: **T-605**
Sampled: **11/21/2024**
Received: **11/21/24**
Analyzed: **12/04/24**
QCBatch: **120424-GCK**
Can: **892**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **9:41** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **12:10** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **366002**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.03	**4.00**	60149	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.07			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.14**	90021	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.05**	804932	I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.16**	0	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.56**						134	351
106-98-9	1-Butene	P	7.29	7.25	**7.26**	891	I	I	H	368	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.27**	384086	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.68	**8.61**	5387	I	I	H	408	410
590-18-1	c-2-Butene	P	9.63	9.56						202	431
78-78-4	i-Pentane	P	11.37	11.33	**11.37**	420077	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.26	**12.29**	86019	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.44**	**12.44**	116909	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.75	**12.76**	468457	I	I	H	509	510
627-20-3	c-2-Pentene	P	13.08	13.04	**13.04**	42224	I	I	H	516	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.73	**13.73**	77893	I	I	H	535	537
287-92-3	Cyclopentane	P	14.88	14.84	**14.88**	10297	I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.02						165	570
107-83-5	2-Methylpentane	P	15.08	15.04	**15.05**	41095	I	I	H	570	571
96-14-0	3-Methylpentane	P	15.55	15.51	**15.58**	0	I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.13**	**16.16**	0	I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.85	**16.84**	9770	I	I	H	621	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.04	**17.08**	113315	I	I	H	628	626
71-43-2	Benzene	P	17.87	**17.86**	**17.85**	122329	I	I	H	652	651
110-82-7	Cyclohexane	P	18.14	18.12	**18.13**	107149	I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.36	**18.38**	72439	I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.43	**18.43**	271438	I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.64	**18.65**	173091	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.07	**19.08**	82208	I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.39	**19.39**	447188	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.07	**20.10**	195672	I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.91	**20.93**	114920	I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.10**	**21.14**	2373512	I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.35	**21.38**	60505	I	I	H	769	768
589-81-1	3-Methylheptane	p	21.55	21.57	**21.55**	85255	I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.29	**22.26**	257218	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.77	**23.76**	655984	I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	23.97	**24.00**	1763955	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.42	**24.48**	284217	I	O	M	885	881
95-47-6	o-xylene	P	24.57	24.59	**24.60**	633394	I	O	M	889	886
111-84-2	n-Nonane	P	24.87	24.89	**24.88**	538099	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.38	**25.41**	0	I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	25.95	**26.02**	0	I	I	H	948	947
620-14-4	3-Ethyltoluene	P	26.17	26.19	**26.18**	0	I	I	H	955	957
622-96-8	4-Ethyltoluene	P	26.26	26.28	**26.27**	72548	I	I	H	958	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.47	**26.45**	26363	I	I	H	966	964
611-14-3	2-Ethyltoluene	P	26.61	26.63	**26.62**	196725	I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.10	**27.09**	53395	I	I	H	993	991
124-18-5	n-Decane	P	27.26	27.28	**27.26**	247273	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.57						26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.12	**28.06**	0	I	O	M	1029	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.25	**28.22**	57675	I	I	H	1034	1037
1120-21-4	Undecane	P	29.86	29.86	**30.06**		O	I	M	1100	1100
112-40-3	Dodecane	P	32.46	32.46	**32.66**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					41110400		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					41110400		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					41110400		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120424-GCK		
Hexane Std Area:	366002		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	85.07	42.53	48.98	85.07	42.53	48.98	48.98	48.98
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	127.31	63.66	78.53	127.31	63.66	78.53	78.53	78.53
Propene	42.1	3	1138.39	379.46	654.73	1,138.39	379.46	654.73	654.73	654.73
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	1.26	0.32	0.72	ND	ND	ND	0	
n-Butane	58.1	4	543.20	135.80	323.36	543.20	135.80	323.36	323.36	323.36
t-2-Butene	56.1	4	7.62	1.90	4.38	7.62	1.90	4.38	4.38	4.38
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	594.10	118.82	351.59	594.10	118.82	351.59	351.59	351.59
1-Pentene	70.1	5	121.65	24.33	69.90	121.65	24.33	69.90	69.90	69.90
n-Pentane	72.1	5	165.34	33.07	97.71	165.34	33.07	97.71	97.71	97.71
t-2-Pentene	70.1	5	662.52	132.50	380.68	662.52	132.50	380.68	380.68	380.68
c-2-Pentene	70.1	5	59.72	11.94	34.31	59.72	11.94	34.31	34.31	34.31
2,2-Dimethylbutane	86.2	6	110.16	18.36	64.86	110.16	18.36	64.86	64.86	64.86
Cyclopentane	70.1	5	14.56	2.91	8.37	14.56	2.91	8.37	8.37	8.37
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	58.12	9.69	34.22	58.12	9.69	34.22	34.22	34.22
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	13.82	2.30	7.95	13.82	2.30	7.95	7.95	7.95
2,4-Dimethylpentane	100.2	7	160.26	22.89	94.02	160.26	22.89	94.02	94.02	94.02
Benzene	78.1	6	173.01	28.83	92.29	173.01	28.83	92.29	92.29	92.29
Cyclohexane	84.2	6	151.54	25.26	87.15	151.54	25.26	87.15	87.15	87.15
2-Methylhexane	100.2	7	102.45	14.64	60.10	102.45	14.64	60.10	60.10	60.10
2,3-Dimethylpentane	100.2	7	383.89	54.84	225.21	383.89	54.84	225.21	225.21	225.21
3-Methylhexane	100.2	7	244.80	34.97	143.61	244.80	34.97	143.61	143.61	143.61
2,2,4-Trimethylpentane	114.2	8	116.26	14.53	68.02	116.26	14.53	68.02	68.02	68.02
n-Heptane	100.2	7	632.44	90.35	371.02	632.44	90.35	371.02	371.02	371.02
Methylcyclohexane	98.2	7	276.73	39.53	159.11	276.73	39.53	159.11	159.11	159.11
2,3,4-Trimethylpentane	114.2	8	162.53	20.32	95.09	162.53	20.32	95.09	95.09	95.09
Toluene	92.1	7	3356.79	479.54	1810.07	3,356.79	479.54	1,810.07	1,810.07	1,810.07
2-Methylheptane	114.2	8	85.57	10.70	50.06	85.57	10.70	50.06	50.06	50.06
3-Methylheptane	114.2	8	120.57	15.07	70.54	120.57	15.07	70.54	70.54	70.54
n-Octane	114.2	8	363.78	45.47	212.82	363.78	45.47	212.82	212.82	212.82
Ethylbenzene	106.2	8	927.74	115.97	504.74	927.74	115.97	504.74	504.74	504.74

m,p-xylene	106.2	8	2494.71	311.84	1357.27	2,494.71	311.84	1,357.27	1,357.27	1,357.27
Styrene	104.2	8	401.96	50.24	214.57	401.96	50.24	214.57	214.57	214.57
o-xylene	106.2	8	895.79	111.97	487.36	895.79	111.97	487.36	487.36	487.36
n-Nonane	128.3	9	761.02	84.56	444.62	761.02	84.56	444.62	444.62	444.62
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	102.60	11.40	56.16	102.60	11.40	56.16	56.16	56.16
1,3,5-Trimethylbenzene	120.2	9	37.28	4.14	20.41	37.28	4.14	20.41	20.41	20.41
2-Ethyltoluene	120.2	9	278.22	30.91	152.29	278.22	30.91	152.29	152.29	152.29
1,2,4-Trimethylbenzene	120.2	9	75.51	8.39	41.33	75.51	8.39	41.33	41.33	41.33
n-Decane	142.3	10	349.71	34.97	203.95	349.71	34.97	203.95	203.95	203.95
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	81.57	8.16	44.86	81.57	8.16	44.86	44.86	44.86
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	58141.23	9690.2	34233.4	58,141.23	9,690.20	34,233.43	34,233.43	34,233.43
Total Non-Methane Hydrocarbons	16	1.0	58141.23	58141.2	38125.4	58,141.23	58,141.23	38,125.39	38,125.39	38,125.39

SDG: **224435**
Laboratory Number: **37**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0		=		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0		=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0		=		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0		=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0		=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0		=		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0		=		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0		=		Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0		=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0		=	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0		=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0		=	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					85.1		85.07		
					0.0			0.00	
127.3						127.31			
					1138.4		1138.39		
0.0						0.00			
	0.0					0.00			
					1.3		1.26		
543.2						543.20			
					7.6		7.62		
					0.0		0.00		
	594.1					594.10			
					121.7		121.65		
165.3						165.34			
					662.5		662.52		
					59.7		59.72		
	110.2					110.16			
				14.6					14.56
	0.0					0.00			
	58.1					58.12			
	0.0					0.00			
0.0						0.00			
				13.8					13.82
	160.3					160.26			
		173.0							
				151.5		151.54			
	102.4					102.45			
	383.9					383.89			
	244.8					244.80			
	116.3					116.26			
632.4						632.44			
				276.7					276.73
	162.5					162.53			
		3356.8							
	85.6					85.57			
	120.6					120.57			
363.8						363.78			
		927.7							

		2494.7							
		402.0							
		895.8							
761.0						761.02			
		0.0							
		0.0							
		0.0							
		102.6							
		37.3							
		278.2							
		75.5							
349.7						349.71			
		0.0							
		0.0							
		81.6							
0.0						0.00			
0.0						0.00			
2942.8	2138.7	8825.2	456.7	2076.2	0.0	5233.1	2076.2	0.0	305.1

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

173.01

3356.79

927.74

				2494.71	
				401.96	
				895.79	
				0.00	
				0.00	
				0.00	
				102.60	
				37.28	
				278.22	
				75.51	
				0.00	
				0.00	
				81.57	
0.0	0.0	0.0	0.0	8825.2	0.0

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 37

File Name: 2443537A
Description: T-605
Canister: 892
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 9:41
Date Analyzed: 12/04/24 **Time:** 12:10
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	42.53	2.30	6.91	48.98	
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	63.66	2.47	7.40	78.53	
115-07-1	Propene	1.33	4.00	379.46	2.30	6.90	654.73	
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	135.80	2.38	7.14	323.36	
624-64-6	t-2-Butene	1.00	3.00	1.90	2.30	6.90	4.38	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	118.82	2.37	7.10	351.59	
109-67-1	1-Pentene	0.80	2.40	24.33	2.30	6.90	69.90	
109-66-0	n-Pentane	0.80	2.40	33.07	2.36	7.09	97.71	
646-04-8	t-2-Pentene	0.80	2.40	132.50	2.30	6.90	380.68	
627-20-3	c-2-Pentene	0.80	2.40	11.94	2.30	6.90	34.31	
75-83-2	2,2-Dimethylbutane	0.67	2.00	18.36	2.36	7.07	64.86	
287-92-3	Cyclopentane	0.80	2.40	2.91	2.30	6.90	8.37	
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	9.69	2.36	7.07	34.22	
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	2.30	2.30	6.90	7.95	
108-08-7	2,4-Dimethylpentane	0.57	1.71	22.89	2.35	7.04	94.02	
71-43-2	Benzene	0.67	2.00	28.83	2.13	6.40	92.29	
110-82-7	Cyclohexane	0.67	2.00	25.26	2.30	6.90	87.15	
591-76-4	2-Methylhexane	0.57	1.71	14.64	2.35	7.04	60.10	
565-59-3	2,3-Dimethylpentane	0.57	1.71	54.84	2.35	7.04	225.21	
589-34-4	3-Methylhexane	0.57	1.71	34.97	2.35	7.04	143.61	
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	14.53	2.34	7.02	68.02	
142-82-5	n-Heptane	0.57	1.71	90.35	2.35	7.04	371.02	
108-87-2	Methylcyclohexane	0.57	1.71	39.53	2.30	6.90	159.11	
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	20.32	2.34	7.02	95.09	
108-88-3	Toluene	0.57	1.71	479.54	2.16	6.47	1,810.07	
592-27-8	2-Methylheptane	0.50	1.50	10.70	2.34	7.02	50.06	
589-81-1	3-Methylheptane	0.50	1.50	15.07	2.34	7.02	70.54	
111-65-9	n-Octane	0.50	1.50	45.47	2.34	7.02	212.82	
100-41-4	Ethylbenzene	0.50	1.50	115.97	2.18	6.53	504.74	

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	311.84	2.18	6.53	1,357.27	
100-42-5	Styrene	0.50	1.50	50.24	2.14	6.41	214.57	
95-47-6	o-xylene	0.50	1.50	111.97	2.18	6.53	487.36	
111-84-2	n-Nonane	0.44	1.33	84.56	2.34	7.01	444.62	
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	11.40	2.19	6.57	56.16	
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	4.14	2.19	6.57	20.41	
611-14-3	2-Ethyltoluene	0.44	1.33	30.91	2.19	6.57	152.29	
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	8.39	2.19	6.57	41.33	
124-18-5	n-Decane	0.40	1.20	34.97	2.33	7.00	203.95	
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	8.16	2.20	6.60	44.86	
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	9,690.20	26.50	79.49	34,233.43	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	58,141.23	29.51	88.52	38,125.39	

Sample Data Packages

SDG Number 224435

Lab Id Number 38

Client ID T-606

Analytical Method TO-12

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 38

Client: C.E. Schmidt
Client ID: T-606
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 608
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/21/2024 Time: 9:58
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCK TO-12	EPA TO-12 C2 to C12 CRYO	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\12044K\2443538A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : T-606
Run Time Bar Code:
Acquired on : 04 Dec 24 01:02 PM
Report Created on: 05 Dec 24 10:57 AM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: KTO3DHC.MTH
Analysis Method : KTO3DHC.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12044K\2443538A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.064	1967	597	BV	0.052	0.4196
2	3.201	1446	850	VV	0.024	0.3085
3	3.249	4036	1152	VV	0.053	0.8608
4	3.446	6229	1363	VV	0.062	1.3285
5	3.492	1417	985	VV	0.024	0.3021
6	3.625	6187	1051	VV	0.074	1.3197
7	3.856	3866	841	VV	0.059	0.8245
8	4.044	5257	2023	VV	0.036	1.1212
9	4.140	4720	2022	VV	0.034	1.0066
10	4.230	3585	1062	VV	0.046	0.7646
11	4.426	904	318	VV	0.041	0.1928
12	4.586	804	284	PV	0.036	0.1715
13	4.937	1388	284	PV	0.064	0.2960
14	5.109	2242	939	VV	0.038	0.4781
15	5.182	32773	14108	VV	0.034	6.9899
16	6.999	16319	5596	BV	0.044	3.4806
17	7.239	2011	469	VV	0.063	0.4288
18	8.360	10626	3112	BV	0.049	2.2663
19	8.498	2203	417	VV	0.071	0.4699
20	8.744	6318	1367	VB	0.060	1.3476
21	9.638	2664	182	BV	0.181	0.5682
22	11.423	22957	3768	PV	0.082	4.8964
23	11.624	49491	5656	VV	0.112	10.5556
24	12.030	5367	713	VB	0.101	1.1446
25	12.338	1809	521	BV	0.052	0.3859
26	12.486	2247	642	PV	0.052	0.4792
27	14.799	3153	998	PV	0.049	0.6725
28	14.940	3948	967	VV	0.058	0.8420
29	15.331	2008	391	VV	0.074	0.4284
30	15.438	2458	429	VV	0.077	0.5243
31	15.603	16087	1653	VV	0.132	3.4312
32	16.452	5725	543	VB	0.134	1.2211
33	16.913	9318	3088	BV	0.045	1.9875
34	17.893	1112	292	BB	0.058	0.2373
35	18.144	1778	546	BB	0.050	0.3791
36	18.675	1284	360	BB	0.054	0.2740

37	19.024	1208	399	BV	0.044	0.2576
38	19.098	1142	324	VB	0.052	0.2435
39	19.407	2478	665	BV	0.057	0.5285
40	20.107	1668	411	BB	0.061	0.3557
41	20.950	1368	346	BV	0.058	0.2918
42	21.148	8473	1335	PV	0.087	1.8071
43	22.314	1685	301	BB	0.079	0.3594
44	22.744	1145	279	BV	0.060	0.2442
45	22.942	1235	306	PB	0.060	0.2634
46	23.352	32713	6406	VV	0.075	6.9772
47	23.817	6831	900	VV	0.101	1.4570
48	24.001	14189	1967	VV	0.107	3.0263
49	24.200	2305	382	VB	0.084	0.4917
50	24.652	7328	767	VV	0.131	1.5628
51	24.886	4796	927	VV	0.075	1.0230
52	25.245	1779	361	BV	0.081	0.3795
53	25.785	3050	488	VV	0.089	0.6504
54	25.922	31517	7698	VV	0.063	6.7221
55	26.316	11705	2174	PV	0.078	2.4966
56	26.502	3185	625	VV	0.072	0.6793
57	26.613	2449	402	VV	0.087	0.5223
58	26.983	7570	1490	PV	0.080	1.6145
59	27.257	3274	901	BV	0.056	0.6983
60	27.335	4251	1137	VV	0.057	0.9068
61	27.672	4480	1065	PV	0.065	0.9554
62	27.797	13149	2762	VV	0.073	2.8045
63	28.018	48180	10298	VV	0.070	10.2761

Total area = 468857

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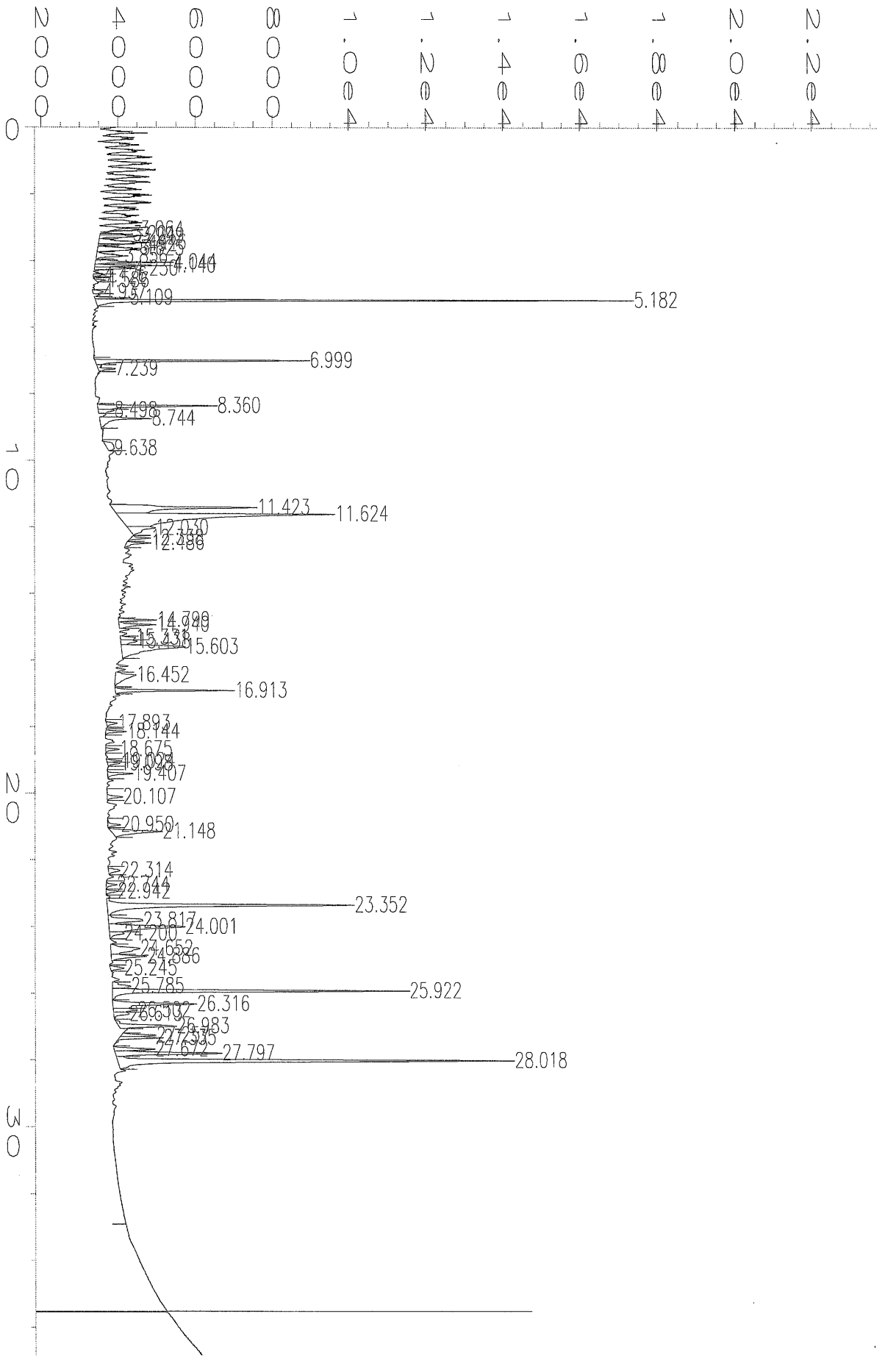

C:\HPCHEM\1\DATA\1204K\244353BA.D

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **224435**
EAS ID: **38**
File Name: **2443538A**
Sample ID: **T-606**
Sampled: **11/21/2024**
Received: **11/21/24**
Analyzed: **12/04/24**
QCBatch: **120424-GCK**
Can: **608**
Can Factor: **1.00**
Volume: **200.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **9:58** Matrix **AA**
Time: **13:00** Chem **TRG**
Time: **13:02** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **366002**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

									RT Win	C2-C4 C5-C12
									RT	**0.3** **0.1**
									RTI	**3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.03	**4.04**	5257	NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.07			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.14**	4720	I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**	2242	I	O	M	293	290
74-98-6	Propane	P	5.20	**5.20**	**5.18**	32773	I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.58**						137	351
106-98-9	1-Butene	P	7.29	7.27	**7.24**	2011	I	I	H	365	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.36**	10626	I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.77	**8.74**	6318	I	I	H	409	410
590-18-1	c-2-Butene	P	9.63	9.65	**9.64**	2664	I	I	H	431	431
78-78-4	i-Pentane	P	11.37	11.38	**11.42**	22957	I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.31	**12.34**	1809	I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.49**	**12.49**	2247	I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.80						162	510
627-20-3	c-2-Pentene	P	13.08	13.09	**13.04**		I	O	M	515	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.78	**13.73**		I	O	M	534	537
287-92-3	Cyclopentane	P	14.88	14.89	**14.80**	3153	I	O	M	563	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.07						162	570
107-83-5	2-Methylpentane	P	15.08	15.09	**15.05**		I	I	H	569	571
96-14-0	3-Methylpentane	P	15.55	15.56	**15.60**		I	I	H	584	583
110-54-3	n-Hexane	P	16.17	**16.18**	**16.18**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.87	**16.91**	9318	I	I	H	623	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.06	**17.08**		I	I	H	628	626
71-43-2	Benzene	P	17.87	**17.88**	**17.89**	1112	I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.16	**18.14**	1778	I	I	H	661	658
591-76-4	2-Methylhexane	P	18.38	18.40	**18.38**		I	I	H	668	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.47	**18.43**		I	I	H	670	671
589-34-4	3-Methylhexane	P	18.66	18.68	**18.68**	1284	I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.11	**19.10**	1142	I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.43	**19.41**	2478	I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.11	**20.11**	1668	I	I	H	724	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	20.95	**20.95**	1368	I	I	H	753	753
108-88-3	Toluene	P	21.12	**21.14**	**21.15**	8473	I	I	H	760	758
592-27-8	2-Methylheptane	P	21.33	21.36	**21.38**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.58	**21.55**		I	I	H	774	775
111-65-9	n-Octane	P	22.27	22.30	**22.31**	1685	I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.78	**23.82**	6831	I	O	M	859	855
108-38-3	m,p-xylene	P	23.95	23.98	**24.00**	14189	I	I	H	866	863
100-42-5	Styrene	P	24.40	24.43	**24.48**		I	I	H	884	881
95-47-6	o-xylene	P	24.57	24.60	**24.65**	7.28	I	O	M	891	886
111-84-2	n-Nonane	P	24.87	24.90	**24.89**	4796	I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.39	**25.41**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	25.96	**25.92**		I	O	M	944	947
620-14-4	3-Ethyltoluene	P	26.17	26.20	**26.18**		I	I	H	955	957
622-96-8	4-Ethyltoluene	P	26.26	26.29	**26.32**		I	I	H	960	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.48	**26.50**	3185	I	O	M	968	964
611-14-3	2-Ethyltoluene	P	26.61	26.64	**26.61**	2449	I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.11	**26.98**		I	I	H	988	991
124-18-5	n-Decane	P	27.26	27.29	**27.26**	3274	I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.58						-29	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.13						-29	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.26	**28.22**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	29.91	**29.91**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.51	**32.51**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					468857		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					468857		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					468857		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120424-GCK		
Hexane Std Area:	366002		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	7.43	3.72	4.28	7.43	3.72	4.28	4.28	4.28
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	6.68	3.34	4.12	6.68	3.34	4.12	4.12	4.12
Propene	42.1	3	3.17	1.06	1.82	ND	ND	ND	0	
Propane	44.1	3	46.35	15.45	27.92	46.35	15.45	27.92	27.92	27.92
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	2.84	0.71	1.63	ND	ND	ND	0	
n-Butane	58.1	4	15.03	3.76	8.95	15.03	3.76	8.95	8.95	8.95
t-2-Butene	56.1	4	8.94	2.23	5.14	8.94	2.23	5.14	5.14	5.14
c-2-Butene	56.1	4	3.77	0.94	2.17	ND	ND	ND	0	
i-Pentane	72.2	5	32.47	6.49	19.21	32.47	6.49	19.21	19.21	19.21
1-Pentene	70.1	5	2.56	0.51	1.47	ND	ND	ND	0	
n-Pentane	72.1	5	3.18	0.64	1.88	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	4.46	0.89	2.56	4.46	0.89	2.56	2.56	2.56
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	13.18	2.20	7.58	13.18	2.20	7.58	7.58	7.58
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	1.57	0.26	0.84	ND	ND	ND	0	
Cyclohexane	84.2	6	2.51	0.42	1.45	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	1.82	0.26	1.07	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	1.62	0.20	0.94	ND	ND	ND	0	
n-Heptane	100.2	7	3.50	0.50	2.06	ND	ND	ND	0	
Methylcyclohexane	98.2	7	2.36	0.34	1.36	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	1.93	0.24	1.13	ND	ND	ND	0	
Toluene	92.1	7	11.98	1.71	6.46	11.98	1.71	6.46	6.46	6.46
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	2.38	0.30	1.39	ND	ND	ND	0	

Ethylbenzene	106.2	8	9.66	1.21	5.26	9.66	1.21	5.26	5.26	5.26
m,p-xylene	106.2	8	20.07	2.51	10.92	20.07	2.51	10.92	10.92	10.92
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0	
o-xylene	106.2	8	0.01	0.00	0.01	ND	ND	ND	0	
n-Nonane	128.3	9	6.78	0.75	3.96	6.78	0.75	3.96	3.96	3.96
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3,5-Trimethylbenzene	120.2	9	4.50	0.50	2.47	4.50	0.50	2.47	2.47	2.47
2-Ethyltoluene	120.2	9	3.46	0.38	1.90	ND	ND	ND	0	
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
n-Decane	142.3	10	4.63	0.46	2.70	4.63	0.46	2.70	2.70	2.70
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0	
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0	
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0	
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3	
Total Non-Methane Hydrocarbons	86.2	6.0	663.09	110.5	390.4	663.09	110.52	390.43	390.43	390.43
Total Non-Methane Hydrocarbons	16	1.0	663.09	663.1	434.8	663.09	663.09	434.81	434.81	434.81

SDG: **224435**
Laboratory Number: **38**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	J	=		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	J	=		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0		=		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0		=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	J	=		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0		=		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	J	=		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0		=		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	J	=		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	J	=	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0		=	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	J	=	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0		=	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0		=	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					7.4		7.43		
					0.0			0.00	
6.7						6.68			
					3.2		3.17		
46.3						46.35			
		0.0				0.00			
					2.8		2.84		
15.0						15.03			
					8.9		8.94		
					3.8		3.77		
		32.5				32.47			
					2.6		2.56		
3.2						3.18			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				4.5					4.46
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				13.2					13.18
		0.0				0.00			
			1.6						
				2.5		2.51			
		0.0				0.00			
		0.0				0.00			
		1.8				1.82			
		1.6				1.62			
3.5						3.50			
				2.4					2.36
		1.9				1.93			
			12.0						
		0.0				0.00			
		0.0				0.00			
2.4						2.38			

		9.7							
		20.1							
		0.0							
		0.0							
6.8						6.78			
		0.0							
		0.0							
		0.0							
		0.0							
		4.5							
		3.5							
		0.0							
4.6						4.63			
		0.0							
		0.0							
		0.0							
0.0						0.00			
0.0						0.00			
88.5	37.8	51.3	22.5	28.7	0.0	128.9	28.7	0.0	20.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

1.57

11.98

				9.66	
				20.07	
				0.00	
				0.01	
				0.00	
				0.00	
				0.00	
				0.00	
				4.50	
				3.46	
				0.00	
				0.00	
				0.00	
				0.00	
0.0	0.0	0.0	0.0	51.3	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		224435	
Laboratory Number:		38	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|_i$

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.03E+04	5257	7.4	3.72	4.28
Acetylene	2	TRG	26.0	2.03E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.03E+04	4720	6.7	3.34	4.12
Propene	3	TRG	42.1	2.03E+04	2242	3.2	1.06	1.82
Propane	3	TRG	44.1	2.03E+04	32773	46.3	15.45	27.92
i-Butane	4	TRG	58.1	2.03E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.03E+04	2011	2.8	0.71	1.63
n-Butane	4	TRG	58.1	2.03E+04	10626	15.0	3.76	8.95
t-2-Butene	4	TRG	56.1	2.03E+04	6318	8.9	2.23	5.14
c-2-Butene	4	TRG	56.1	2.03E+04	2664	3.8	0.94	2.17
i-Pentane	5	TRG	72.2	2.03E+04	22957	32.5	6.49	19.21
1-Pentene	5	TRG	70.1	2.03E+04	1809	2.6	0.51	1.47
n-Pentane	5	TRG	72.1	2.03E+04	2247	3.2	0.64	1.88
t-2-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.03E+04	3153	4.5	0.89	2.56
2,3-Dimethylbutane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.03E+04	9318	13.2	2.20	7.58
2,4-Dimethylpentane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.03E+04	1112	1.6	0.26	0.84
Cyclohexane	6	TRG	84.2	2.03E+04	1778	2.5	0.42	1.45
2-Methylhexane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.03E+04	1284	1.8	0.26	1.07
2,2,4-Trimethylpentane	8	TRG	114.2	2.03E+04	1142	1.6	0.20	0.94
n-Heptane	7	TRG	100.2	2.03E+04	2478	3.5	0.50	2.06
Methylcyclohexane	7	TRG	98.2	2.03E+04	1668	2.4	0.34	1.36
2,3,4-Trimethylpentane	8	TRG	114.2	2.03E+04	1368	1.9	0.24	1.13
Toluene	7	TRG	92.1	2.03E+04	8473	12.0	1.71	6.46
2-Methylheptane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.03E+04	1685	2.4	0.30	1.39
Ethylbenzene	8	TRG	106.2	2.03E+04	6831	9.7	1.21	5.26

m,p-xylene	8	TRG	106.2	2.03E+04	14189	20.1	2.51	10.92
Styrene	8	TRG	104.2	2.03E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	2.03E+04	7	0.0	0.00	0.01
n-Nonane	9	TRG	128.3	2.03E+04	4796	6.8	0.75	3.96
i-Propylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.03E+04	3185	4.5	0.50	2.47
2-Ethyltoluene	9	TRG	120.2	2.03E+04	2449	3.5	0.38	1.90
1,2,4-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.03E+04	3274	4.6	0.46	2.70
1,2,3-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.03E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.03E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.03E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.03E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.03E+04	468857	663.1	110.52	390.43
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.03E+04	468857	663.1	663.09	434.81

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: 224435
Laboratory Number: 38

File Name: 2443538A
Description: T-606
Canister: 608
QC_Batch: 120424-GCK

Date Sampled: 11/21/24 **Time:** 9:58
Date Analyzed: 12/04/24 **Time:** 13:02
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	3.72	2.30	6.91	4.28	J
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	3.34	2.47	7.40	4.12	J
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	15.45	2.41	7.23	27.92	
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	3.76	2.38	7.14	8.95	
624-64-6	t-2-Butene	1.00	3.00	2.23	2.30	6.90	5.14	J
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	6.49	2.37	7.10	19.21	
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	0.89	2.30	6.90	2.56	J
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	2.20	2.30	6.90	7.58	
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	1.71	2.16	6.47	6.46	J
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	1.21	2.18	6.53	5.26	J

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	2.51	2.18	6.53	10.92	
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	0.75	2.34	7.01	3.96	J
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	0.50	2.19	6.57	2.47	J
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	0.46	2.33	7.00	2.70	J
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	110.52	26.50	79.49	390.43	
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	663.09	29.51	88.52	434.81	

Sample Data Packages

SDG Number 224435

Lab Id Number 39

Client ID T-607

Analytical Method TO-12

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Chromatogram

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12034

File Name: B12034B
Description: METHOD BLANK
Canister:
QC_Batch: 120324-GCK

Date Sampled: **Time:**
Date Analyzed: 12/03/24 **Time:** 11:16
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **LABQC**
EAS ID: **B12034**
File Name: **B12034B**
Sample ID: **METHOD BLANK**
Sampled: **NA**
Received: **NA**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **NA**
Can Factor: **1.00**
Volume: **200.0**
Type: **MB**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **NA** Matrix **AA**
Time: **NA** Chem **TRG**
Time: **11:16** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31						133	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200

Abbreviation	**Total Petroleum Hydrocarbons:**		TPH Subtractions
TNMHC - C6	Total Non-Methane Hydrocarbons	0	0.001
TNMHC - C1	Total Non-Methane Hydrocarbons	0	0.001

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	0.00	0.0	0.0	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	0.00	0.0	0.0	ND	ND	ND	0

SDG: **LABQC**
Laboratory Number: **B12034**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
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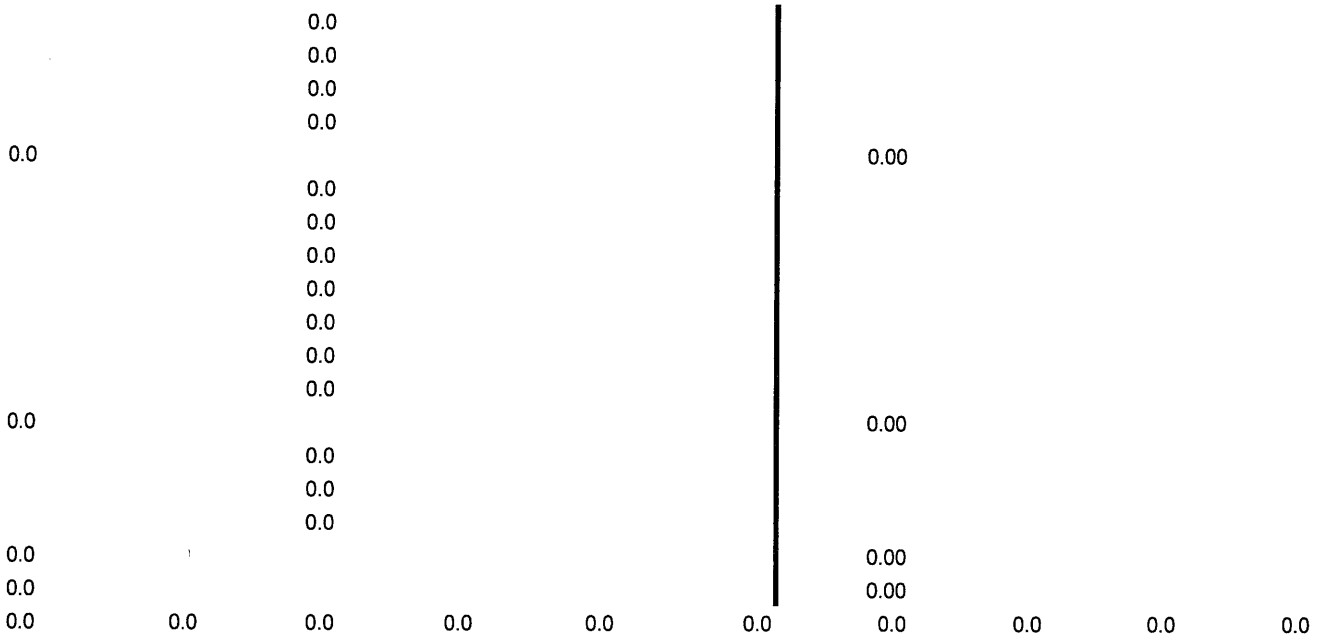

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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		LABQC	
Laboratory Number:		B12034	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.04E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	2.04E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.04E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	2.04E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	2.04E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.04E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	2.04E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.04E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.04E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	2.04E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	2.04E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	2.04E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.04E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.04E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.04E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.04E+04	0	0.0	0.00	0.00

```
================================================================================
                              Area Percent Report
================================================================================

Data File Name   : C:\GCCHEM\1\DATA\GCK\12034K\B12034B.D
Operator         : TR                              Page Number      : 1
Instrument       : ANALYZER1                       Vial Number      :
Sample Name      : METHOD BLANK                    Injection Number :
Run Time Bar Code:                                 Sequence Line    :
Acquired on      : 03 Dec 24  11:16 AM             Instrument Method: GC1SHORT.MTH
Report Created on: 03 Dec 24  01:15 PM             Analysis Method  : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\B12034B.D
    Pk#  Ret Time       Area          Height     Type   Width     Area %
   |---|----------|--------------|--------------|----|---------|----------|
No results to report

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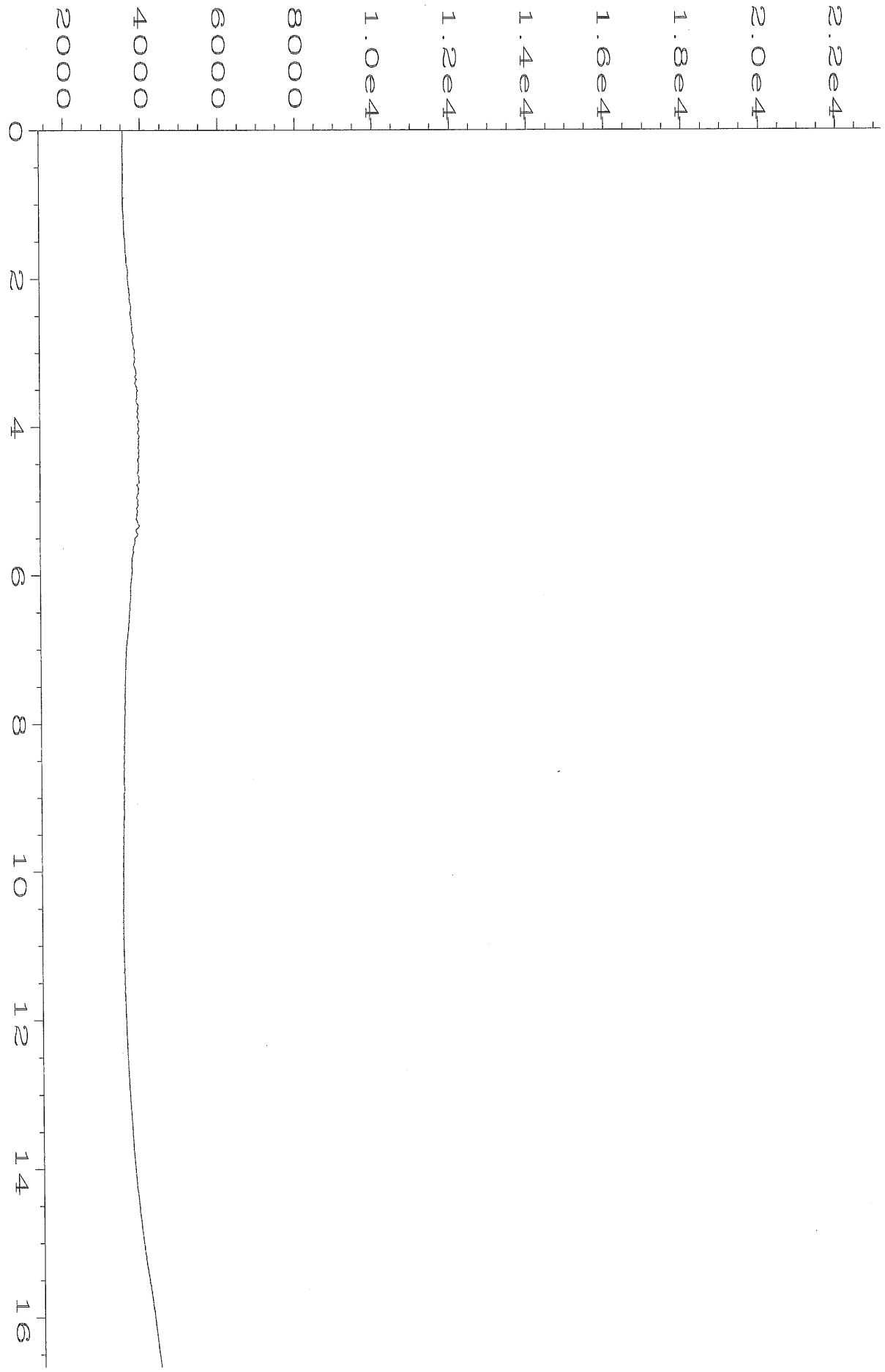
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0
2
4
6
8
10
12
14
16
C:\GCCHEM\1\DATA\GCK\1203 4K\B1203 4B.D

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12044

File Name: B12044B
Description: METHOD BLANK
Canister:
QC_Batch: 120424-GCK

Date Sampled:
Time:
Date Analyzed: 12/04/24
Time: 11:31
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **LABQC**
EAS ID: **B12044**
File Name: **B12044B**
Sample ID: **METHOD BLANK**
Sampled: **NA**
Received: **NA**
Analyzed: **12/04/24**
QCBatch: **120424-GCK**
Can: **NA**
Can Factor: **1.00**
Volume: **200.0**
Type: **MB**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **NA** Matrix **AA**
Time: **NA** Chem **TRG**
Time: **11:31** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **366002**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win	C2-C	C5-C12									
RT	**0.3**	**0.1**									
RTI	**3**	**3**									

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31						133	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200

Abbreviation	**Total Petroleum Hydrocarbons:**		TPH Subtractions
TNMHC - C6	Total Non-Methane Hydrocarbons	0	0.001
TNMHC - C1	Total Non-Methane Hydrocarbons	0	0.001

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120424-GCK		
Hexane Std Area:	366002		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	0.00	0.0	0.0	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	0.00	0.0	0.0	ND	ND	ND	0

SDG: **LABQC**
Laboratory Number: **B12044**

(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
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					0.0			0.00	
0.0						0.00			
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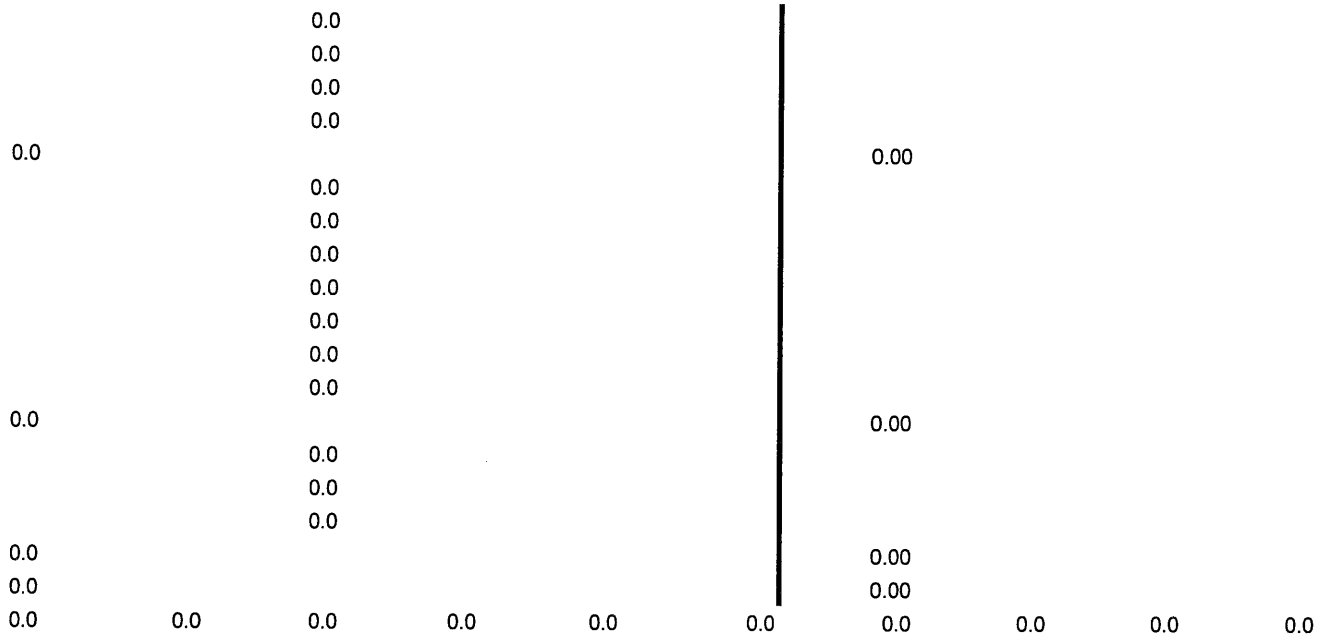
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		LABQC	
Laboratory Number:		B12044	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.03E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	2.03E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.03E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	2.03E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	2.03E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.03E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.03E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	2.03E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	2.03E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	2.03E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.03E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	2.03E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.03E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.03E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	2.03E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.03E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	2.03E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	2.03E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	2.03E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	2.03E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	2.03E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	2.03E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.03E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.03E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.03E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.03E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.03E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.03E+04	0	0.0	0.00	0.00

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Area Percent Report

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Operator : TR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : METHOD BLANK
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 04 Dec 24 11:31 AM
Instrument Method: GC1SHORT.MTH
Report Created on: 04 Dec 24 11:47 AM
Analysis Method : GC1SHORT.MTH
Sample Info :

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Pk#	Ret Time	Area	Height	Type	Width	Area %

Total area = 0

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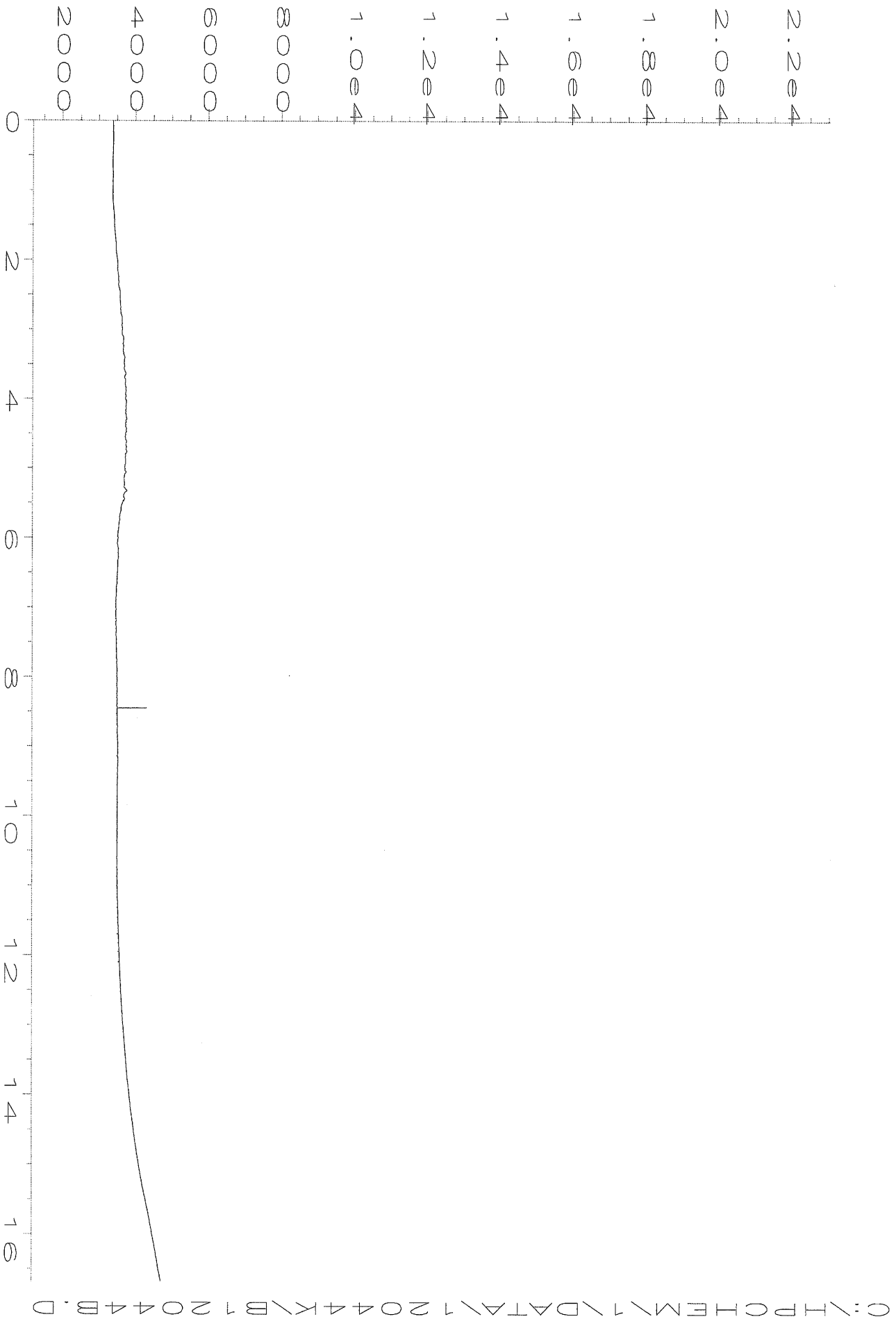
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LCS/LCD Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
There will be one LCS/LCD report for each QC Batch (DAB) in this SDG.

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112224-GCK
Date: 11/22/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	92		116		70	130	24	25	
110-54-3	n-Hexane	94		116		70	130	21	25	
71-43-2	Benzene	103		119		70	130	16	25	
142-82-5	n-Heptane	102		118		70	130	16	25	
108-88-3	Toluene	101		125		70	130	24	25	
111-65-9	n-Octane	99		124		70	130	25	25	
108-38-3	m,p-xylene	102		121		70	130	19	25	
95-47-6	o-xylene	116		103		70	130	14	25	
108-67-8	1,3,5-Trimethylbenzene	106		89		70	130	17	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD	
File Name:	**QC11224B**	**QC11224C**	**C11224A**	DAB:
SDG:	**LABQC**	**LABQC**		
LCS EAS ID:	**QC11224B**	**QC11224C**		
Time:	**8:01**	**8:33**		
Date Analyzed:	**11/22/24**			
QCBatch:	**112224-GCK**	Method:	**TO-12**	TO-14
Hexane Con Cal:	**310466**			TO-03
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18
Chem:	**TRG**	SF:	**2**	TO-12
Matrix:	**AA**	Instrument:	**GCK**	
Can Factor:	**1.00**	Unit Factor	**20**	
Volume:	**1.00** ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	B LCS Area	C LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**9458**	**11892**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**13053**	**16003**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**14019**	**16183**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**14898**	**17259**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**12411**	**15399**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**14619**	**18269**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**9687**	**11482**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**12001**	**10592**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**5933**	**4970**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	54	10.9	33.2
n-Hexane	86.2	6	75	12.5	45.6
Benzene	78.1	6	81	13.5	44.4
n-Heptane	100.2	7	86	12.3	51.9
Toluene	92.1	7	71	10.2	39.7
n-Octane	114.2	8	84	10.5	50.7
m,p-xylene	106.2	8	56	7.0	31.3
o-xylene	106.2	8	69	8.6	38.7
1,3,5-Trimethylbenzene	120.2	9	34	3.8	19.3

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	68	13.7
n-Hexane	86.2	6	92	15.4
Benzene	78.1	6	93	15.5
n-Heptane	100.2	7	99	14.2
Toluene	92.1	7	89	12.7
n-Octane	114.2	8	105	13.1
m,p-xylene	106.2	8	66	8.3
o-xylene	106.2	8	61	7.6
1,3,5-Trimethylbenzene	120.2	9	29	3.2

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC11224B **LCD** QC11224C

Date Analyzed: 11/22/24

QC_Batch: 112224-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	11.8	10.9	10.9	92.3	70	130		23.7	25	
110-54-3	n-Hexane	86.2	13.3	12.5	12.5	94.3	70	130		21.3	25	
71-43-2	Benzene	78.1	13.0	13.5	13.5	103.4	70	130		16.0	25	
142-82-5	n-Heptane	100.2	12.0	12.3	12.3	102.3	70	130		16.2	25	
108-88-3	Toluene	92.1	10.2	10.2	10.2	100.5	70	130		24.2	25	
111-65-9	n-Octane	114.2	10.6	10.5	10.5	99.0	70	130		24.7	25	
108-38-3	m,p-xylene	106.2	6.8	7.0	7.0	102.5	70	130		19.0	25	
95-47-6	o-xylene	106.2	7.4	8.6	8.6	116.4	70	130		13.7	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	3.6	3.8	3.8	105.7	70	130		17.2	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	11.8	13.7	13.7	116.0	70	130	
110-54-3	n-Hexane	86.2	13.3	15.4	15.4	115.7	70	130	
71-43-2	Benzene	78.1	13.0	15.5	15.5	119.4	70	130	
142-82-5	n-Heptane	100.2	12.0	14.2	14.2	118.5	70	130	
108-88-3	Toluene	92.1	10.2	12.7	12.7	124.7	70	130	
111-65-9	n-Octane	114.2	10.6	13.1	13.1	123.7	70	130	
108-38-3	m,p-xylene	106.2	6.8	8.3	8.3	121.5	70	130	
95-47-6	o-xylene	106.2	7.4	7.6	7.6	102.8	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	3.6	3.2	3.2	88.5	70	130	

Area Percent Report

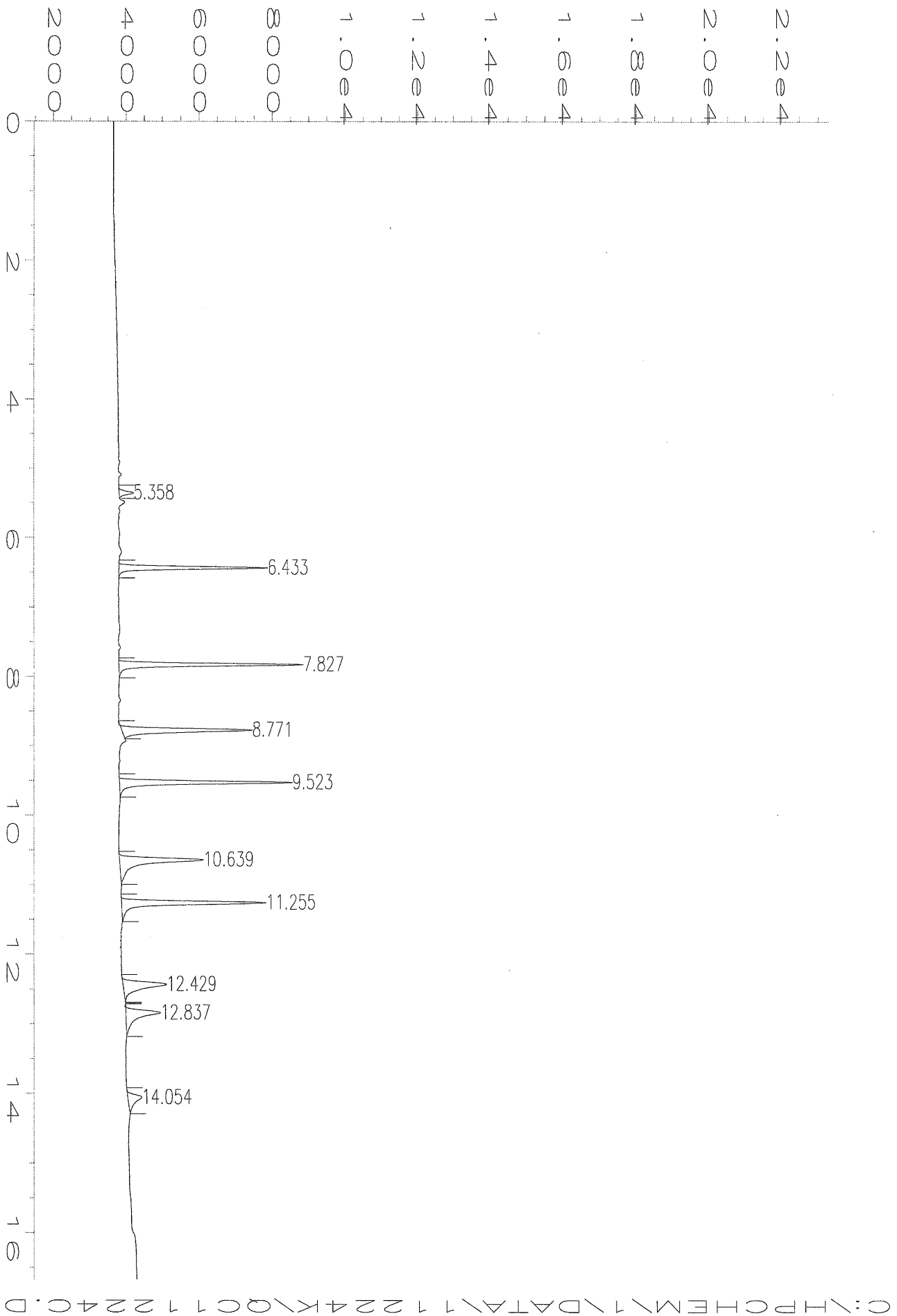
Data File Name : C:\HPCHEM\1\DATA\11224K\QC11224C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 22 Nov 24 11:33 AM
Report Created on: 22 Nov 24 11:50 AM
Sample Info : 1 ML SPIKE

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\QC11224C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.358	1365	393	BV	0.053	1.3210
2	6.433	11526	4064	BB	0.044	11.1571
3	7.827	15469	5048	BB	0.047	14.9733
4	8.771	13502	3562	BV	0.058	13.0697
5	9.523	15869	4733	BB	0.052	15.3610
6	10.639	12800	2299	BB	0.081	12.3898
7	11.255	15152	3960	BB	0.058	14.6666
8	12.429	7840	1193	BB	0.095	7.5890
9	12.837	6839	957	BB	0.101	6.6205
10	14.054	2946	384	BB	0.112	2.8520

Total area = 103308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Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCK\11224K\QC11224B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 22 Nov 24 10:59 AM
Report Created on: 22 Nov 24 01:46 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11224K\QC11224B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.402	9458	3210	MM	0.049	8.9156
2	7.801	13053	4060	MM	0.054	12.3047
3	8.747	14019	2637	MM	0.089	13.2154
4	9.506	14898	3345	MM	0.074	14.0444
5	10.630	12411	1373	MF	0.151	11.7002
6	11.246	14619	2549	FM	0.096	13.7811
7	12.430	9687	1035	MF	0.156	9.1316
8	12.832	12001	955	FM	0.210	11.3138
9	14.034	5933	608	MM	0.163	5.5932

Total area = 106078

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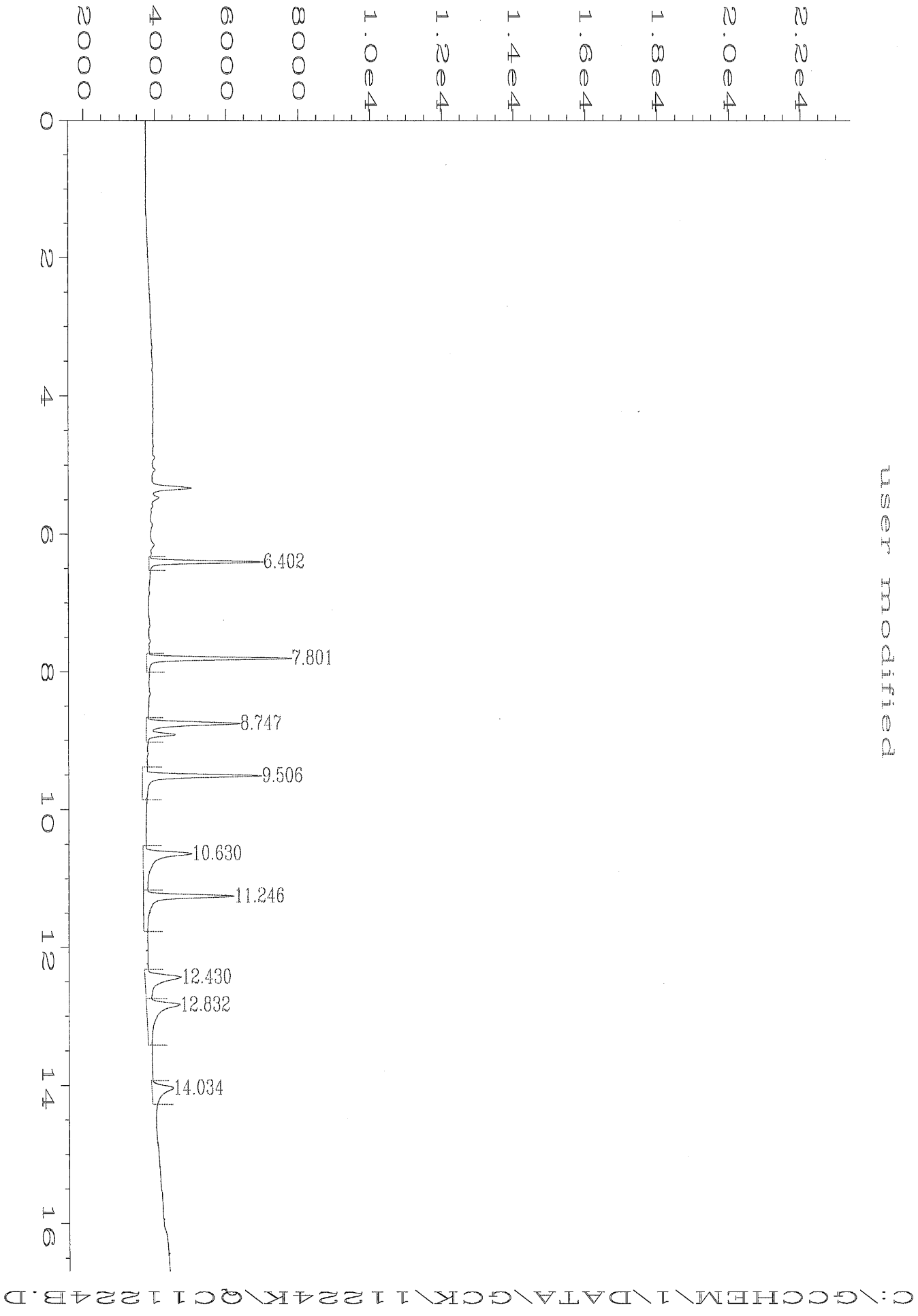
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Area Percent Report

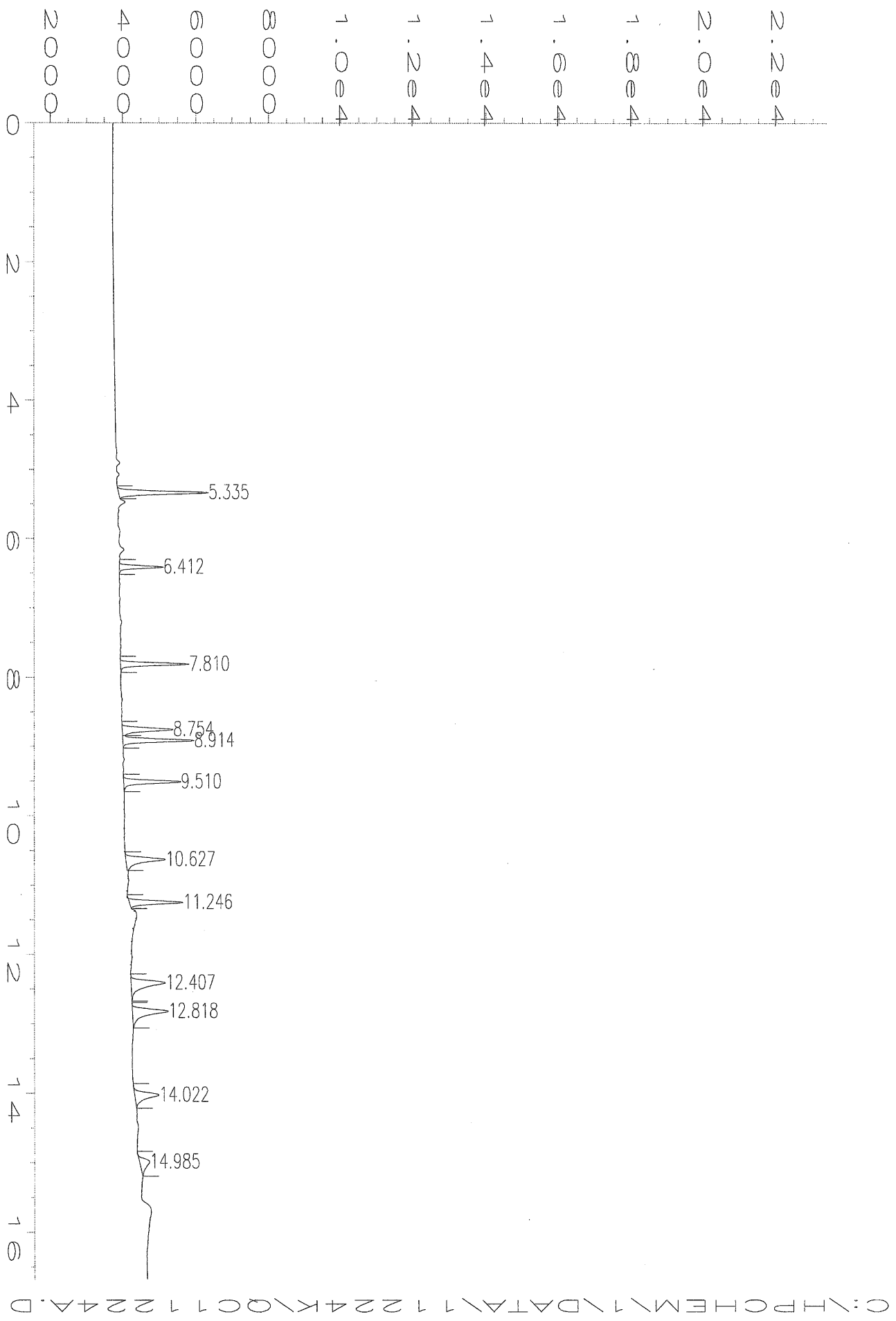
Data File Name : C:\HPCHEM\1\DATA\11224K\QC11224A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 22 Nov 24 10:29 AM
Report Created on: 22 Nov 24 10:46 AM
Sample Info : 1 ML SPIKE

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11224K\QC11224A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.335	8376	2465	BV	0.053	13.5787
2	6.412	3298	1206	BB	0.043	5.3464
3	7.810	5481	1873	BB	0.045	8.8854
4	8.754	5190	1389	BV	0.057	8.4134
5	8.914	6485	1942	VB	0.052	10.5131
6	9.510	5098	1554	BB	0.050	8.2648
7	10.627	5215	1073	BB	0.073	8.4552
8	11.246	4847	1458	BV	0.052	7.8575
9	12.407	5786	927	BB	0.089	9.3798
10	12.818	5732	970	BB	0.081	9.2928
11	14.022	3925	658	BB	0.087	6.3632
12	14.985	2251	277	BB	0.118	3.6498

Total area = 61682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QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112524-GCK
Date: 11/25/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	106		94		70	130	13	25	
110-54-3	n-Hexane	106		94		70	130	11	25	
71-43-2	Benzene	105		95		70	130	10	25	
142-82-5	n-Heptane	106		94		70	130	12	25	
108-88-3	Toluene	109		91		70	130	17	25	
111-65-9	n-Octane	108		92		70	130	16	25	
108-38-3	m,p-xylene	103		97		70	130	5	25	
95-47-6	o-xylene	101		99		70	130	1	25	
108-67-8	1,3,5-Trimethylbenzene	95		105		70	130	10	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC11254C**	**QC11254B**	**C11254A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC11254C**	**QC11254B**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**11/25/24**				
QCBatch:	**112524-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**318104**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00**	ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	C LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**11875**	**10455**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**15716**	**14065**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**14827**	**13349**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**16024**	**14219**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**13179**	**11106**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**15608**	**13307**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**10281**	**9744**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**10182**	**10080**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**7886**	**8724**

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12034

File Name: B12034B
Description: METHOD BLANK
Canister:
QC_Batch: 120324-GCK

Date Sampled:
Time:
Date Analyzed: 12/03/24
Time: 11:16
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **LABQC**
EAS ID: **B12034**
File Name: **B12034B**
Sample ID: **METHOD BLANK**
Sampled: **NA**
Received: **NA**
Analyzed: **12/03/24**
QCBatch: **120324-GCK**
Can: **NA**
Can Factor: **1.00**
Volume: **200.0**
Type: **MB**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **NA** Matrix **AA**
Time: **NA** Chem **TRG**
Time: **11:16** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **367502**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31						133	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**							TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					0		0.001			
TNMHC - C1	Total Non-Methane Hydrocarbons					0		0.001			

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120324-GCK		
Hexane Std Area:	367502		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	0.00	0.0	0.0	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	0.00	0.0	0.0	ND	ND	ND	0

SDG: **LABQC**
Laboratory Number: **B12034**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
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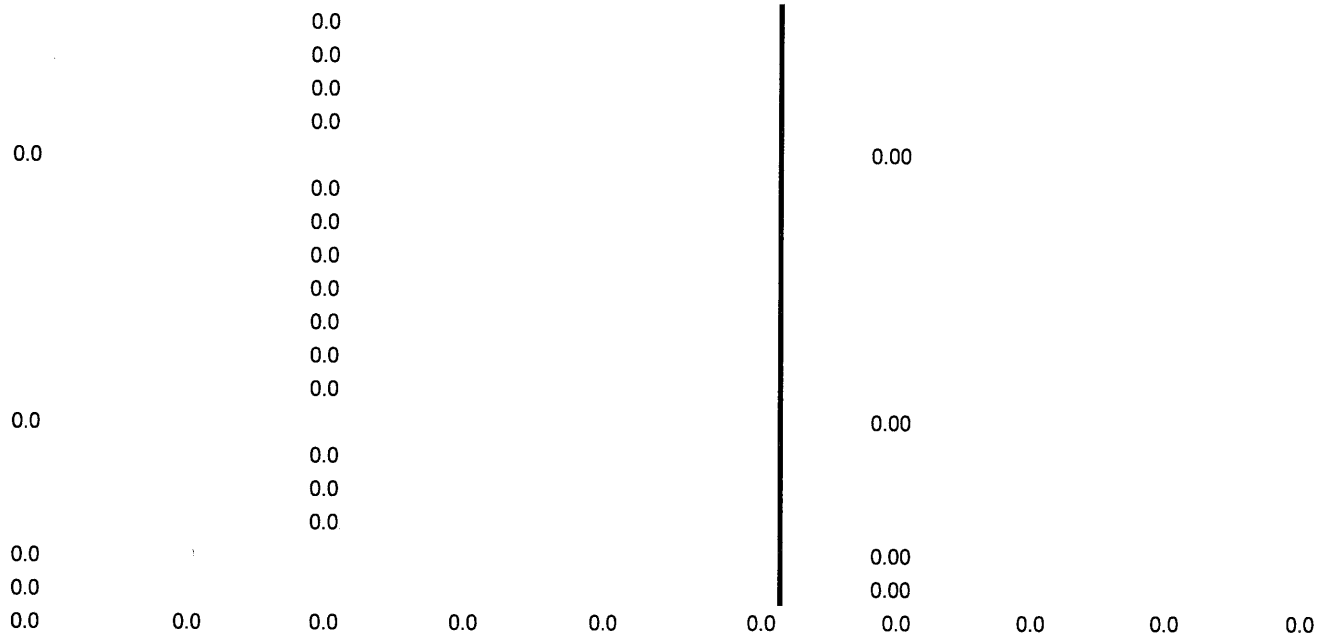
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Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

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SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		LABQC	
Laboratory Number:		B12034	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum | (Astdni) / (Cstdni) |i

2) ppbC = 6 Carbons (Avg RFn) × Ansamp SV × CDF × 1000 = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.04E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	2.04E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.04E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	2.04E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	2.04E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	2.04E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	2.04E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.04E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	2.04E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.04E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.04E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	2.04E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.04E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.04E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	2.04E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.04E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	2.04E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	2.04E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	2.04E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.04E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	2.04E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.04E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.04E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.04E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.04E+04	0	0.0	0.00	0.00
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.04E+04	0	0.0	0.00	0.00

```
================================================================================
                              Area Percent Report
================================================================================

Data File Name   : C:\GCCHEM\1\DATA\GCK\12034K\B12034B.D
Operator         : TR                              Page Number      : 1
Instrument       : ANALYZER1                       Vial Number      :
Sample Name      : METHOD BLANK                    Injection Number :
Run Time Bar Code:                                 Sequence Line    :
Acquired on      : 03 Dec 24  11:16 AM             Instrument Method: GC1SHORT.MTH
Report Created on: 03 Dec 24  01:15 PM             Analysis Method  : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\B12034B.D
    Pk#  Ret Time       Area          Height      Type   Width     Area %
   |---|----------|--------------|--------------|----|---------|----------|
No results to report

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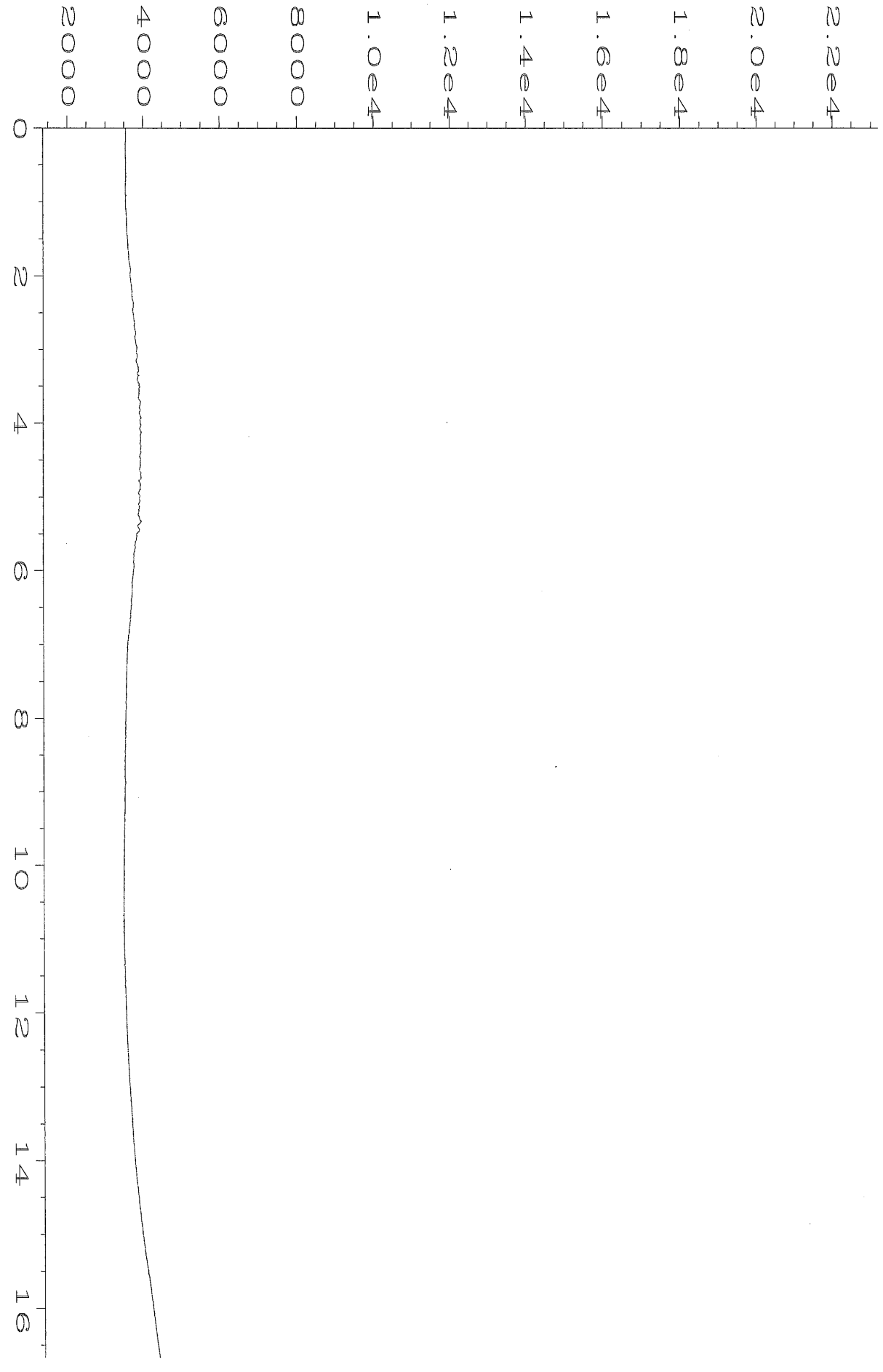
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1.4e4
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2.2e4
0
2
4
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8
10
12
14
16
C:\GC\CHEM\1\DATA\GCK\1203 4K\B1203 4B.D

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: B12044

File Name: B12044B
Description: METHOD BLANK
Canister:
QC_Batch: 120424-GCK

Date Sampled: **Time:**
Date Analyzed: 12/04/24 **Time:** 11:31
Can Factor: 1.00
Air Volume: 200 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	2.00	6.00	ND	2.30	6.91	ND	ND
74-86-2	Acetylene	2.00	6.00	ND	2.13	6.39	ND	ND
74-84-0	Ethane	2.00	6.00	ND	2.47	7.40	ND	ND
115-07-1	Propene	1.33	4.00	ND	2.30	6.90	ND	ND
74-98-6	Propane	1.33	4.00	ND	2.41	7.23	ND	ND
75-28-5	i-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
106-98-9	1-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
106-97-8	n-Butane	1.00	3.00	ND	2.38	7.14	ND	ND
624-64-6	t-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
590-18-1	c-2-Butene	1.00	3.00	ND	2.30	6.90	ND	ND
78-78-4	i-Pentane	0.80	2.40	ND	2.37	7.10	ND	ND
109-67-1	1-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
109-66-0	n-Pentane	0.80	2.40	ND	2.36	7.09	ND	ND
646-04-8	t-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
627-20-3	c-2-Pentene	0.80	2.40	ND	2.30	6.90	ND	ND
75-83-2	2,2-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
287-92-3	Cyclopentane	0.80	2.40	ND	2.30	6.90	ND	ND
79-29-8	2,3-Dimethylbutane	0.67	2.00	ND	2.36	7.07	ND	ND
107-83-5	2-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
96-14-0	3-Methylpentane	0.67	2.00	ND	2.36	7.07	ND	ND
110-54-3	n-Hexane	0.67	2.00	ND	2.36	7.07	ND	ND
96-37-7	Methylcyclopentane	0.67	2.00	ND	2.30	6.90	ND	ND
108-08-7	2,4-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
71-43-2	Benzene	0.67	2.00	ND	2.13	6.40	ND	ND
110-82-7	Cyclohexane	0.67	2.00	ND	2.30	6.90	ND	ND
591-76-4	2-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
565-59-3	2,3-Dimethylpentane	0.57	1.71	ND	2.35	7.04	ND	ND
589-34-4	3-Methylhexane	0.57	1.71	ND	2.35	7.04	ND	ND
540-84-1	2,2,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
142-82-5	n-Heptane	0.57	1.71	ND	2.35	7.04	ND	ND
108-87-2	Methylcyclohexane	0.57	1.71	ND	2.30	6.90	ND	ND
565-75-3	2,3,4-Trimethylpentane	0.50	1.50	ND	2.34	7.02	ND	ND
108-88-3	Toluene	0.57	1.71	ND	2.16	6.47	ND	ND
592-27-8	2-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
589-81-1	3-Methylheptane	0.50	1.50	ND	2.34	7.02	ND	ND
111-65-9	n-Octane	0.50	1.50	ND	2.34	7.02	ND	ND
100-41-4	Ethylbenzene	0.50	1.50	ND	2.18	6.53	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-38-3	m,p-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
100-42-5	Styrene	0.50	1.50	ND	2.14	6.41	ND	ND
95-47-6	o-xylene	0.50	1.50	ND	2.18	6.53	ND	ND
111-84-2	n-Nonane	0.44	1.33	ND	2.34	7.01	ND	ND
98-82-8	i-Propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
103-65-1	n-propylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
620-14-4	3-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
622-96-8	4-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
108-67-8	1,3,5-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
611-14-3	2-Ethyltoluene	0.44	1.33	ND	2.19	6.57	ND	ND
95-63-6	1,2,4-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
124-18-5	n-Decane	0.40	1.20	ND	2.33	7.00	ND	ND
526-73-8	1,2,3-Trimethylbenzene	0.44	1.33	ND	2.19	6.57	ND	ND
141-93-5	1,3-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
105-05-5	1,4-Diethylbenzene	0.40	1.20	ND	2.20	6.60	ND	ND
1120-21-4	Undecane	0.36	1.09	ND	2.33	6.99	ND	ND
112-40-3	Dodecane	0.33	1.00	ND	2.33	6.98	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	7.50	22.50	ND	26.50	79.49	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	45.00	135.00	ND	29.51	88.52	ND	ND

QUANTITATION REPORT

EPA Method TO-14 FID

SDG: **LABQC**
EAS ID: **B12044**
File Name: **B12044B**
Sample ID: **METHOD BLANK**
Sampled: **NA**
Received: **NA**
Analyzed: **12/04/24**
QCBatch: **120424-GCK**
Can: **NA**
Can Factor: **1.00**
Volume: **200.0**
Type: **MB**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Time: **NA** Matrix **AA**
Time: **NA** Chem **TRG**
Time: **11:31** MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **366002**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

RT Win C2-C4 C5-C12
RT **0.3** **0.1**
RTI **3** **3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.07	**4.05**		NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.11			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.18**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11	**5.11**		I	I	H	289	290
74-98-6	Propane	P	5.20	**5.20**	**5.22**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.62**						133	351
106-98-9	1-Butene	P	7.29	7.31						133	367
106-97-8	n-Butane	P	8.34	**8.34**	**8.35**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.76						201	410
590-18-1	c-2-Butene	P	9.63	9.64						201	431
78-78-4	i-Pentane	P	11.37	11.44	**11.46**		I	I	H	474	473
109-67-1	1-Pentene	P	12.30	12.37	**12.39**		I	I	H	496	495
109-66-0	n-Pentane	P	12.48	**12.55**	**12.55**		I	I	H	500	500
646-04-8	t-2-Pentene	P	12.79	12.86	**12.85**		I	I	H	508	510
627-20-3	c-2-Pentene	P	13.08	13.15	**13.18**		I	I	H	517	518
75-83-2	2,2-Dimethylbutane	P	13.77	13.84	**13.89**		I	I	H	536	537
287-92-3	Cyclopentane	P	14.88	14.95	**15.01**		I	I	H	566	567
79-29-8	2,3-Dimethylbutane	P	15.06	15.13						164	570
107-83-5	2-Methylpentane	P	15.08	15.15	**15.18**		I	I	H	571	571
96-14-0	3-Methylpentane	P	15.55	15.62	**15.61**		I	I	H	582	583
110-54-3	n-Hexane	P	16.17	**16.24**	**16.28**		I	I	H	600	600
96-37-7	Methylcyclopentane	P	16.86	16.97						98	622
108-08-7	2,4-Dimethylpentane	P	17.05	17.16	**17.20**		I	I	H	629	626
71-43-2	Benzene	P	17.87	**17.98**	**17.98**		I	I	H	653	651
110-82-7	Cyclohexane	P	18.14	18.25	**18.27**		I	O	M	661	658
591-76-4	2-Methylhexane	P	18.38	18.49	**18.51**		I	I	H	669	670
565-59-3	2,3-Dimethylpentane	P	18.45	18.56	**18.57**		I	I	H	671	671
589-34-4	3-Methylhexane	P	18.66	18.77	**18.78**		I	I	H	677	678
540-84-1	2,2,4-Trimethylpentane	P	19.09	19.20	**19.21**		I	I	H	690	690
142-82-5	n-Heptane	P	19.41	19.52	**19.52**		I	I	H	700	700
108-87-2	Methylcyclohexane	P	20.09	20.20	**20.23**		I	I	H	725	722
565-75-3	2,3,4-Trimethylpentane	P	20.93	21.04	**21.07**		I	I	H	754	753
108-88-3	Toluene	P	21.12	**21.23**	**21.26**		I	I	H	761	758
592-27-8	2-Methylheptane	P	21.33	21.47	**21.46**		I	I	H	768	768
589-81-1	3-Methylheptane	p	21.55	21.69	**21.68**		I	I	H	775	775
111-65-9	n-Octane	P	22.27	22.41	**22.39**		I	I	H	800	800

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
100-41-4	Ethylbenzene	P	23.75	23.89	**23.88**		I	I	H	857	855
108-38-3	m,p-xylene	P	23.95	24.09	**24.11**		I	I	H	866	863
100-42-5	Styrene	P	24.40	24.54						-55	881
95-47-6	o-xylene	P	24.57	24.71	**24.72**		I	O	M	889	886
111-84-2	n-Nonane	P	24.87	25.01	**25.00**		I	I	H	900	900
98-82-8	i-Propylbenzene	P	25.36	25.50	**25.53**		I	O	M	922	919
103-65-1	n-propylbenzene	P	25.93	26.07	**26.13**		I	I	H	947	947
620-14-4	3-Ethyltoluene	P	26.17	26.31	**26.30**		I	I	H	954	957
622-96-8	4-Ethyltoluene	P	26.26	26.40	**26.48**		I	I	H	962	959
108-67-8	1,3,5-Trimethylbenzene	P	26.45	26.59	**26.65**		I	O	M	969	964
611-14-3	2-Ethyltoluene	P	26.61	26.75	**26.74**		I	I	H	973	975
95-63-6	1,2,4-Trimethylbenzene	P	27.08	27.22						-148	991
124-18-5	n-Decane	P	27.26	27.40	**27.39**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene	P	27.55	27.69						-26	1014
141-93-5	1,3-Diethylbenzene	P	28.10	28.24						-26	1032
105-05-5	1,4-Diethylbenzene	P	28.23	28.37	**28.36**		I	I	H	1036	1037
1120-21-4	Undecane	P	29.86	30.06	**30.06**		I	I	H	1100	1100
112-40-3	Dodecane	P	32.46	32.66	**32.66**		I	I	H	1200	1200

Abbreviation	**Total Petroleum Hydrocarbons:**		TPH Subtractions
TNMHC - C6	Total Non-Methane Hydrocarbons	0	0.001
TNMHC - C1	Total Non-Methane Hydrocarbons	0	0.001

CALCULATIONS

EPA Method TO-14 FID

QCBatch:	120424-GCK		
Hexane Std Area:	366002		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	200.00		
Combined Factor:	1.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTC ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	0.00	**0.00**	0.00	ND	ND	ND	0	
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0	
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0	
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0	

Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3
Total Non-Methane Hydrocarbons	86.2	6.0	0.00	0.0	0.0	ND	ND	ND	0
Total Non-Methane Hydrocarbons	16	1.0	0.00	0.0	0.0	ND	ND	ND	0

SDG: **LABQC**
Laboratory Number: **B12044**

(1)	(2)	Calc	Calc	Calc	Calc	Calc	Calc				
MDL	MDL	MDL	MDL	MDL	RL	RL	RL		Detect	EPA	Rept
ppbC	ppbV	ppbV	ug/m3	ppbC	ppbV	ug/m3	ppbC	Flag	Flan	Flag	Res
4.000	2.00	2.00	2.30	4.00	6.00	6.91	12.0	U	ND		Y
4.000	2.00	2.00	2.13	4.00	6.00	6.39	12.0	U	ND		Y
4.000	2.00	2.00	2.47	4.00	6.00	7.40	12.0	U	ND		Y
4.000	1.33	1.33	2.30	4.00	4.00	6.90	12.0	U	ND		Y
4.000	1.33	1.33	2.41	4.00	4.00	7.23	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.38	4.00	3.00	7.14	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	1.00	1.00	2.30	4.00	3.00	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.37	4.00	2.40	7.10	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.36	4.00	2.40	7.09	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.80	0.80	2.30	4.00	2.40	6.90	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.36	4.00	2.00	7.07	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.67	0.67	2.13	4.00	2.00	6.40	12.0	U	ND		Y
4.000	0.67	0.67	2.30	4.00	2.00	6.90	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.35	4.00	1.71	7.04	12.0	U	ND		Y
4.000	0.57	0.57	2.30	4.00	1.71	6.90	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.57	0.57	2.16	4.00	1.71	6.47	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y
4.000	0.50	0.50	2.34	4.00	1.50	7.02	12.0	U	ND		Y

4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.50	0.50	2.14	4.00	1.50	6.41	12.0	U	ND	Y
4.000	0.50	0.50	2.18	4.00	1.50	6.53	12.0	U	ND	Y
4.000	0.44	0.44	2.34	4.00	1.33	7.01	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.33	4.00	1.20	7.00	12.0	U	ND	Y
4.000	0.44	0.44	2.19	4.00	1.33	6.57	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.40	0.40	2.20	4.00	1.20	6.60	12.0	U	ND	Y
4.000	0.36	0.36	2.33	4.00	1.09	6.99	12.0	U	ND	Y
4.000	0.33	0.33	2.33	4.00	1.00	6.98	12.0	U	ND	Y
										Y
45.00	7.5	7.50	26.50	45.00	22.5	79.5	135.0	U	ND	Y
45.00	45.0	45.00	29.51	45.00	135.0	88.5	135.0	U	ND	Y

Parafins	Iso Parafins	Aromatics	Napthlenic	Olefins	Oxygenates	Alkanes	Alkenes	Alkynes	Cycloalkanes
					0.0		0.00		
					0.0			0.00	
0.0						0.00			
					0.0		0.00		
0.0						0.00			
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
					0.0		0.00		
0.0						0.00			
					0.0		0.00		
					0.0		0.00		
		0.0				0.00			
				0.0					0.00
		0.0				0.00			
		0.0				0.00			
		0.0				0.00			
0.0						0.00			
				0.0					0.00
		0.0				0.00			
			0.0						
				0.0		0.00			
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		0.0				0.00			
0.0						0.00			
				0.0					0.00
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			0.0						
		0.0				0.00			
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0.0						0.00			
0.0						0.00			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cycloalkenes	Alcohols	Ketones	Ethers	Aromatics	Terpenes

0.00

0.00

0.00
0.00
0.00
0.00

0.00
0.00
0.00
0.00
0.00
0.00
0.00

0.00
0.00
0.00

0.0	0.0	0.0	0.0	0.0	0.0

SAMPLE CALCULATION

EPA Method TO-14 FID

SDG:		LABQC	
Laboratory Number:		B12044	
Standard Volume	STV	1.0	
Sample Volume	SV	200	
Can Dilution Factor	CDF	1.00	
Gas Constant		24.4	25C
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) / (Cstdni) i

2) ppbC = 6 Carbons × Ansamp × CDF × 1000 / (Avg RFn) / SV = **Cn**

3) Amount ppbv = Cn / C#

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.4

Compound	C #	Chem type	MW	AvgRFn	Area Ansamp	**Cn** ppbC Raw Amt	Amount ppbv	Amount ug/m3
Ethene	2	TRG	28.1	2.03E+04	0	0.0	0.00	0.00
Acetylene	2	TRG	26.0	2.03E+04	0	0.0	0.00	0.00
Ethane	2	TRG	30.1	2.03E+04	0	0.0	0.00	0.00
Propene	3	TRG	42.1	2.03E+04	0	0.0	0.00	0.00
Propane	3	TRG	44.1	2.03E+04	0	0.0	0.00	0.00
i-Butane	4	TRG	58.1	2.03E+04	0	0.0	0.00	0.00
1-Butene	4	TRG	56.1	2.03E+04	0	0.0	0.00	0.00
n-Butane	4	TRG	58.1	2.03E+04	0	0.0	0.00	0.00
t-2-Butene	4	TRG	56.1	2.03E+04	0	0.0	0.00	0.00
c-2-Butene	4	TRG	56.1	2.03E+04	0	0.0	0.00	0.00
i-Pentane	5	TRG	72.2	2.03E+04	0	0.0	0.00	0.00
1-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
n-Pentane	5	TRG	72.1	2.03E+04	0	0.0	0.00	0.00
t-2-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
c-2-Pentene	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
2,2-Dimethylbutane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Cyclopentane	5	TRG	70.1	2.03E+04	0	0.0	0.00	0.00
2,3-Dimethylbutane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
2-Methylpentane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
3-Methylpentane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
n-Hexane	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Methylcyclopentane	6	TRG	84.2	2.03E+04	0	0.0	0.00	0.00
2,4-Dimethylpentane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
Benzene	6	TRG	78.1	2.03E+04	0	0.0	0.00	0.00
Cyclohexane	6	TRG	84.2	2.03E+04	0	0.0	0.00	0.00
2-Methylhexane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
2,3-Dimethylpentane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
3-Methylhexane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
2,2,4-Trimethylpentane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
n-Heptane	7	TRG	100.2	2.03E+04	0	0.0	0.00	0.00
Methylcyclohexane	7	TRG	98.2	2.03E+04	0	0.0	0.00	0.00
2,3,4-Trimethylpentane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
Toluene	7	TRG	92.1	2.03E+04	0	0.0	0.00	0.00
2-Methylheptane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
3-Methylheptane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
n-Octane	8	TRG	114.2	2.03E+04	0	0.0	0.00	0.00
Ethylbenzene	8	TRG	106.2	2.03E+04	0	0.0	0.00	0.00

m,p-xylene	8	TRG	106.2	2.03E+04	0	0.0	0.00	0.00
Styrene	8	TRG	104.2	2.03E+04	0	0.0	0.00	0.00
o-xylene	8	TRG	106.2	2.03E+04	0	0.0	0.00	0.00
n-Nonane	9	TRG	128.3	2.03E+04	0	0.0	0.00	0.00
i-Propylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
n-propylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
3-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
4-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,3,5-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
2-Ethyltoluene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,2,4-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
n-Decane	10	TRG	142.3	2.03E+04	0	0.0	0.00	0.00
1,2,3-Trimethylbenzene	9	TRG	120.2	2.03E+04	0	0.0	0.00	0.00
1,3-Diethylbenzene	10	TRG	134.2	2.03E+04	0	0.0	0.00	0.00
1,4-Diethylbenzene	10	TRG	134.2	2.03E+04	0	0.0	0.00	0.00
Undecane	11	TRG	156.3	2.03E+04	0	0.0	0.00	0.00
Dodecane	12	TRG	170.3	2.03E+04	0	0.0	0.00	0.00
Total Petroleum Hydrocarbons:								
Total Non-Methane Hydrocarbons	6	TRG	86.2	2.03E+04	0	0.0	0.00	0.00
Total Non-Methane Hydrocarbons	1	TRG	16.0	2.03E+04	0	0.0	0.00	0.00

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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\12044K\B12044B.D
Operator : TR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : METHOD BLANK
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 04 Dec 24 11:31 AM
Instrument Method: GC1SHORT.MTH
Report Created on: 04 Dec 24 11:47 AM
Analysis Method : GC1SHORT.MTH
Sample Info :

Sig. 1 in C:\HPCHEM\1\DATA\12044K\B12044B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %

Total area = 0

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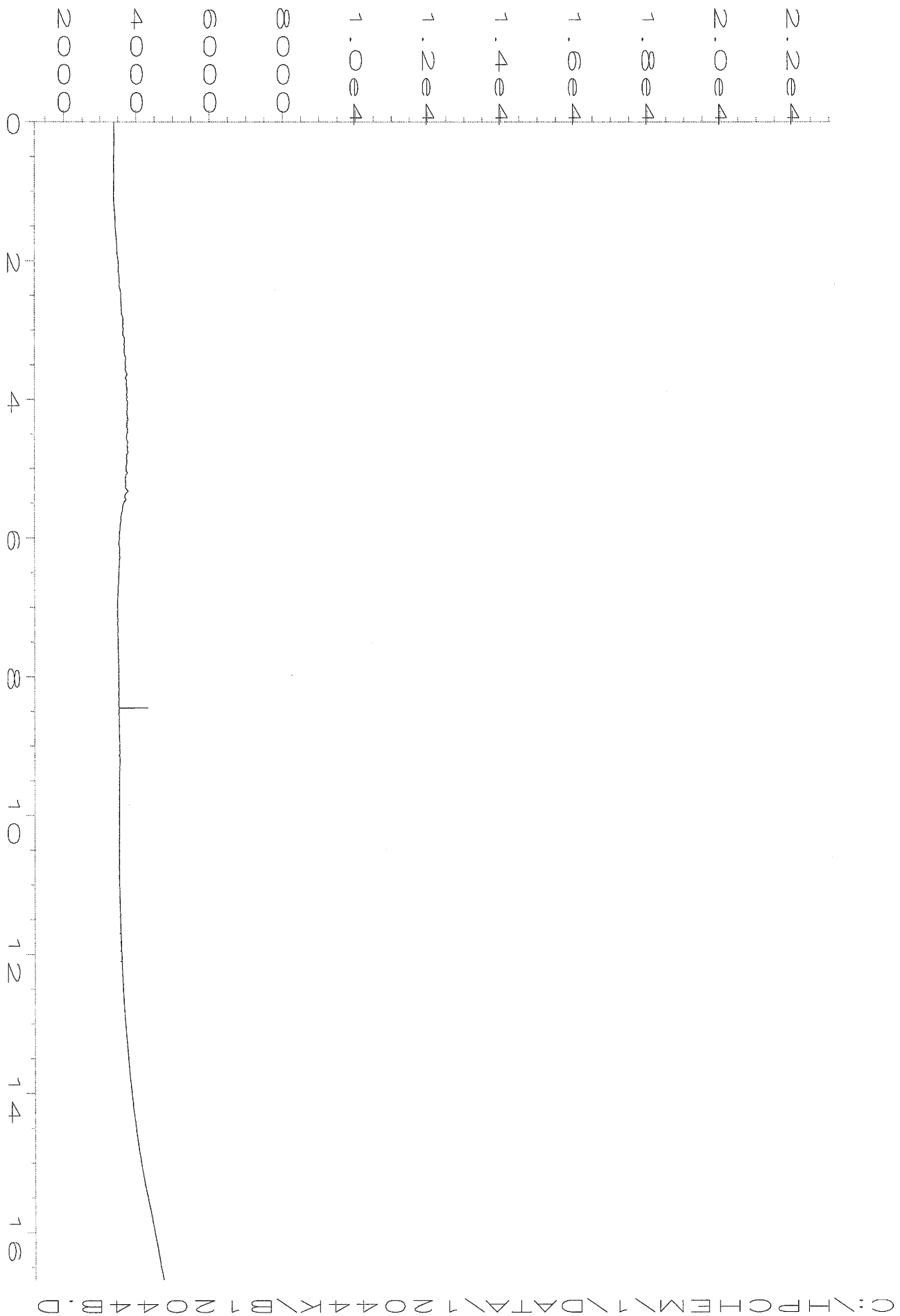
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1.6e4
1.8e4
2.0e4
2.2e4
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4
6
8
10
12
14
16
C:\HPCHEM\1\DATA\1204AKB1204AB.D

LCS/LCD Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one LCS/LCD report for each QC Batch (DAB) in this SDG.

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112224-GCK
Date: 11/22/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	92		116		70	130	24	25	
110-54-3	n-Hexane	94		116		70	130	21	25	
71-43-2	Benzene	103		119		70	130	16	25	
142-82-5	n-Heptane	102		118		70	130	16	25	
108-88-3	Toluene	101		125		70	130	24	25	
111-65-9	n-Octane	99		124		70	130	25	25	
108-38-3	m,p-xylene	102		121		70	130	19	25	
95-47-6	o-xylene	116		103		70	130	14	25	
108-67-8	1,3,5-Trimethylbenzene	106		89		70	130	17	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC11224B**	**QC11224C**	**C11224A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC11224B**	**QC11224C**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**11/22/24**				
QCBatch:	**112224-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**310466**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00**	ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	B LCS Area	C LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**9458**	**11892**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**13053**	**16003**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**14019**	**16183**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**14898**	**17259**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**12411**	**15399**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**14619**	**18269**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**9687**	**11482**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**12001**	**10592**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**5933**	**4970**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	54	10.9	33.2
n-Hexane	86.2	6	75	12.5	45.6
Benzene	78.1	6	81	13.5	44.4
n-Heptane	100.2	7	86	12.3	51.9
Toluene	92.1	7	71	10.2	39.7
n-Octane	114.2	8	84	10.5	50.7
m,p-xylene	106.2	8	56	7.0	31.3
o-xylene	106.2	8	69	8.6	38.7
1,3,5-Trimethylbenzene	120.2	9	34	3.8	19.3

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	68	13.7
n-Hexane	86.2	6	92	15.4
Benzene	78.1	6	93	15.5
n-Heptane	100.2	7	99	14.2
Toluene	92.1	7	89	12.7
n-Octane	114.2	8	105	13.1
m,p-xylene	106.2	8	66	8.3
o-xylene	106.2	8	61	7.6
1,3,5-Trimethylbenzene	120.2	9	29	3.2

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC11224B **LCD** QC11224C

Date Analyzed: 11/22/24

QC_Batch: 112224-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	11.8	10.9	10.9	92.3	70	130		23.7	25	
110-54-3	n-Hexane	86.2	13.3	12.5	12.5	94.3	70	130		21.3	25	
71-43-2	Benzene	78.1	13.0	13.5	13.5	103.4	70	130		16.0	25	
142-82-5	n-Heptane	100.2	12.0	12.3	12.3	102.3	70	130		16.2	25	
108-88-3	Toluene	92.1	10.2	10.2	10.2	100.5	70	130		24.2	25	
111-65-9	n-Octane	114.2	10.6	10.5	10.5	99.0	70	130		24.7	25	
108-38-3	m,p-xylene	106.2	6.8	7.0	7.0	102.5	70	130		19.0	25	
95-47-6	o-xylene	106.2	7.4	8.6	8.6	116.4	70	130		13.7	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	3.6	3.8	3.8	105.7	70	130		17.2	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	11.8	13.7	13.7	116.0	70	130	
110-54-3	n-Hexane	86.2	13.3	15.4	15.4	115.7	70	130	
71-43-2	Benzene	78.1	13.0	15.5	15.5	119.4	70	130	
142-82-5	n-Heptane	100.2	12.0	14.2	14.2	118.5	70	130	
108-88-3	Toluene	92.1	10.2	12.7	12.7	124.7	70	130	
111-65-9	n-Octane	114.2	10.6	13.1	13.1	123.7	70	130	
108-38-3	m,p-xylene	106.2	6.8	8.3	8.3	121.5	70	130	
95-47-6	o-xylene	106.2	7.4	7.6	7.6	102.8	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	3.6	3.2	3.2	88.5	70	130	

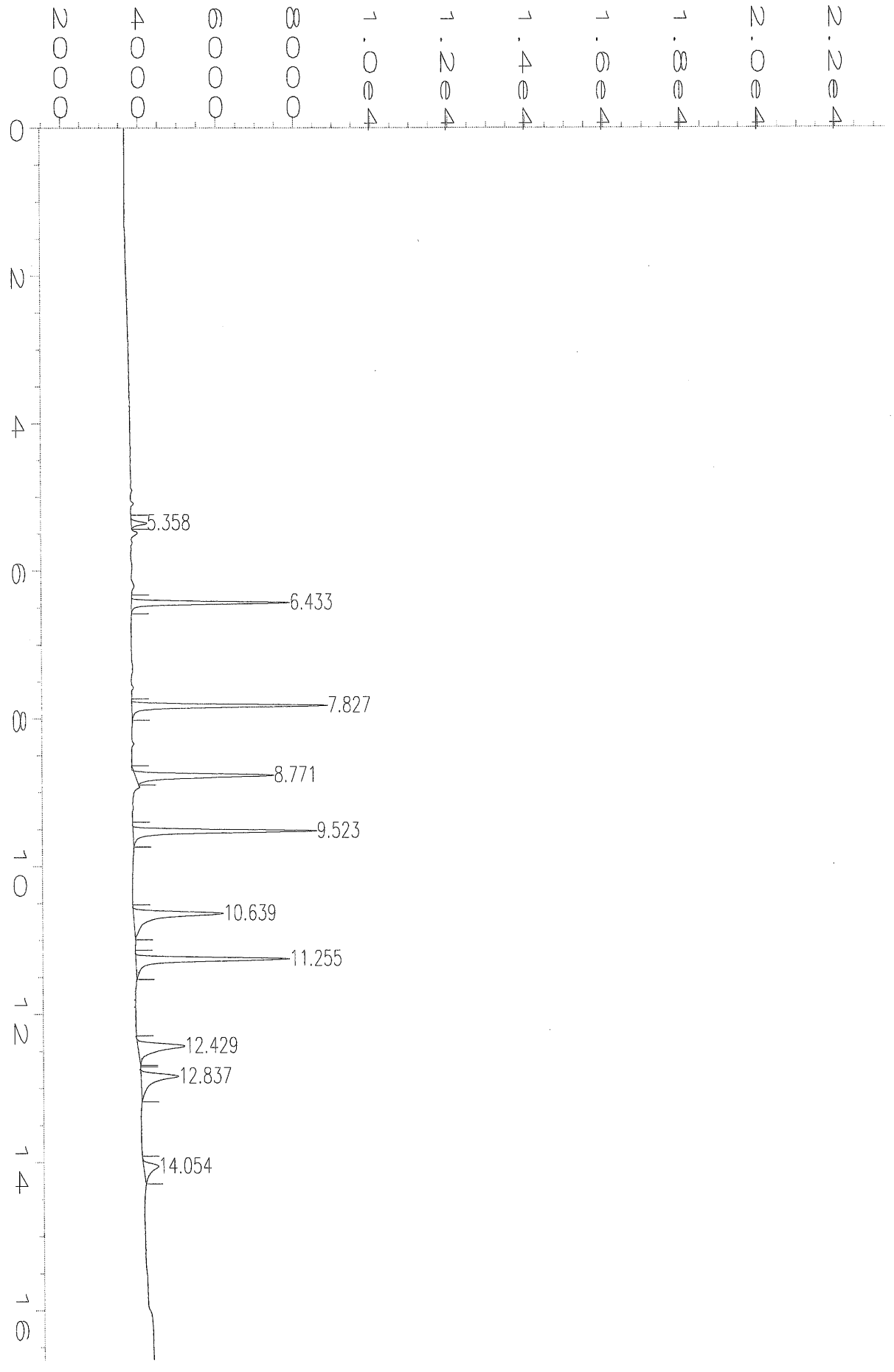
Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11224K\QC11224C.D
Operator : TR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ST62529
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 22 Nov 24 11:33 AM
Instrument Method: GC1SHORT.MTH
Report Created on: 22 Nov 24 11:50 AM
Analysis Method : GC1SHORT.MTH
Sample Info : 1 ML SPIKE

Sig. 1 in C:\HPCHEM\1\DATA\11224K\QC11224C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.358	1365	393	BV	0.053	1.3210
2	6.433	11526	4064	BB	0.044	11.1571
3	7.827	15469	5048	BB	0.047	14.9733
4	8.771	13502	3562	BV	0.058	13.0697
5	9.523	15869	4733	BB	0.052	15.3610
6	10.639	12800	2299	BB	0.081	12.3898
7	11.255	15152	3960	BB	0.058	14.6666
8	12.429	7840	1193	BB	0.095	7.5890
9	12.837	6839	957	BB	0.101	6.6205
10	14.054	2946	384	BB	0.112	2.8520

Total area = 103308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Area Percent Report

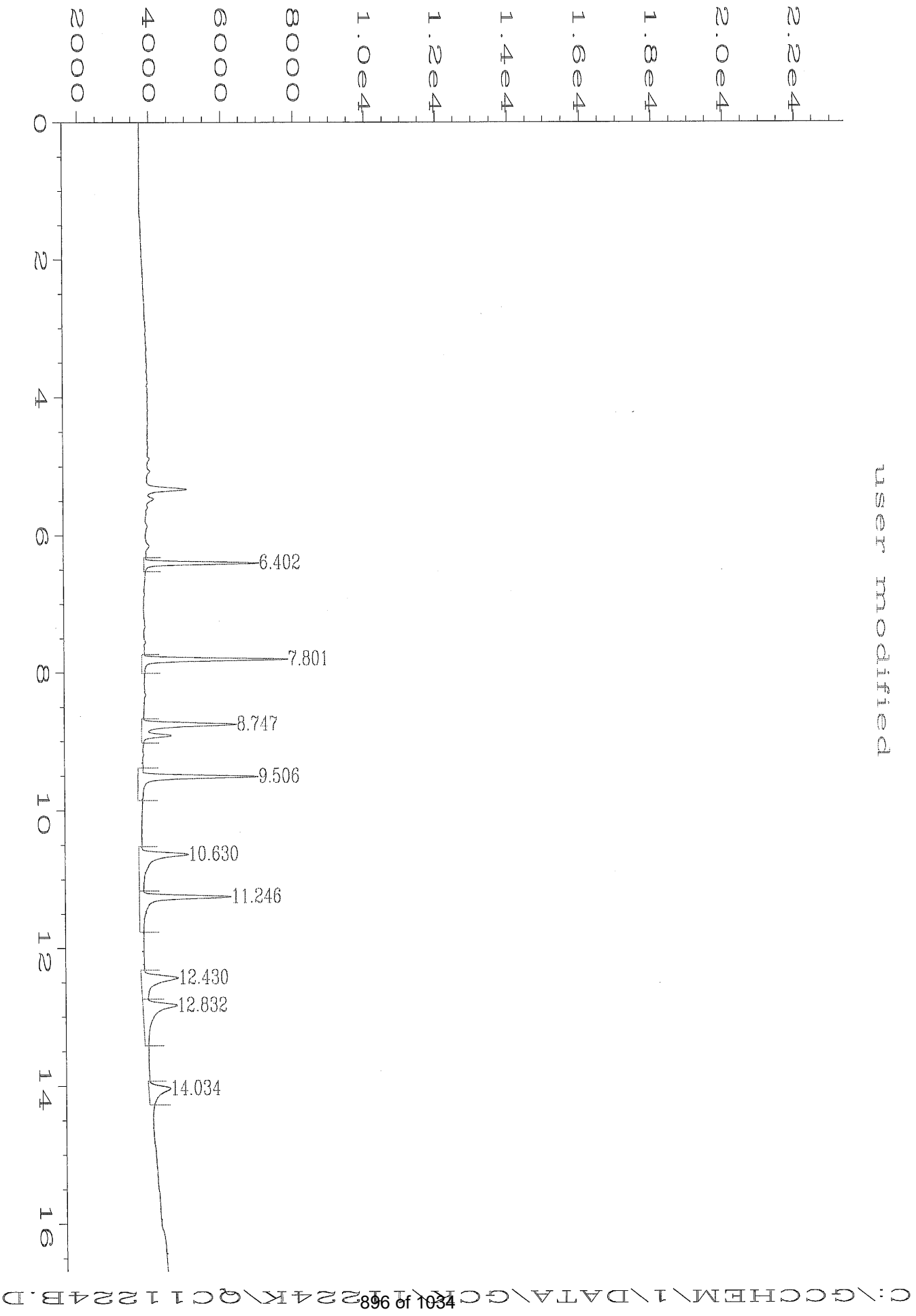
Data File Name : C:\GCCHEM\1\DATA\GCK\11224K\QC11224B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 22 Nov 24 10:59 AM
Report Created on: 22 Nov 24 01:46 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11224K\QC11224B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.402	9458	3210	MM	0.049	8.9156
2	7.801	13053	4060	MM	0.054	12.3047
3	8.747	14019	2637	MM	0.089	13.2154
4	9.506	14898	3345	MM	0.074	14.0444
5	10.630	12411	1373	MF	0.151	11.7002
6	11.246	14619	2549	FM	0.096	13.7811
7	12.430	9687	1035	MF	0.156	9.1316
8	12.832	12001	955	FM	0.210	11.3138
9	14.034	5933	608	MM	0.163	5.5932

Total area = 106078

User Modified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user modified
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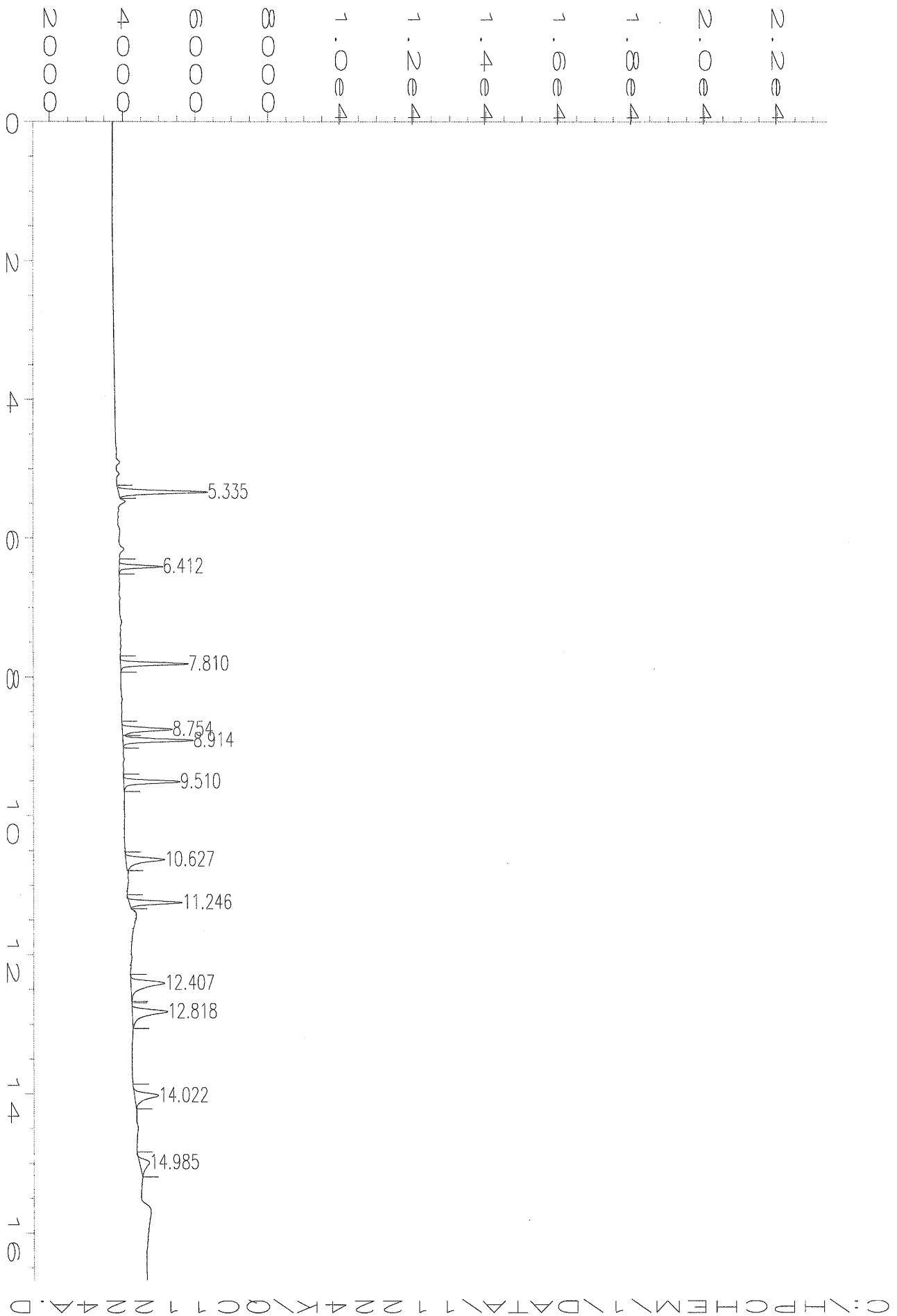
Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11224K\QC11224A.D
Operator : TR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ST62529
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 22 Nov 24 10:29 AM
Instrument Method: GC1SHORT.MTH
Report Created on: 22 Nov 24 10:46 AM
Analysis Method : GC1SHORT.MTH
Sample Info : 1 ML SPIKE

Sig. 1 in C:\HPCHEM\1\DATA\11224K\QC11224A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.335	8376	2465	BV	0.053	13.5787
2	6.412	3298	1206	BB	0.043	5.3464
3	7.810	5481	1873	BB	0.045	8.8854
4	8.754	5190	1389	BV	0.057	8.4134
5	8.914	6485	1942	VB	0.052	10.5131
6	9.510	5098	1554	BB	0.050	8.2648
7	10.627	5215	1073	BB	0.073	8.4552
8	11.246	4847	1458	BV	0.052	7.8575
9	12.407	5786	927	BB	0.089	9.3798
10	12.818	5732	970	BB	0.081	9.2928
11	14.022	3925	658	BB	0.087	6.3632
12	14.985	2251	277	BB	0.118	3.6498

Total area = 61682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QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112524-GCK
Date: 11/25/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	106		94		70	130	13	25	
110-54-3	n-Hexane	106		94		70	130	11	25	
71-43-2	Benzene	105		95		70	130	10	25	
142-82-5	n-Heptane	106		94		70	130	12	25	
108-88-3	Toluene	109		91		70	130	17	25	
111-65-9	n-Octane	108		92		70	130	16	25	
108-38-3	m,p-xylene	103		97		70	130	5	25	
95-47-6	o-xylene	101		99		70	130	1	25	
108-67-8	1,3,5-Trimethylbenzene	95		105		70	130	10	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC11254C**	**QC11254B**	**C11254A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC11254C**	**QC11254B**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**11/25/24**				
QCBatch:	**112524-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**318104**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00**	ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	C LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**11875**	**10455**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**15716**	**14065**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**14827**	**13349**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**16024**	**14219**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**13179**	**11106**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**15608**	**13307**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**10281**	**9744**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**10182**	**10080**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**7886**	**8724**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	68	13.7	41.6
n-Hexane	86.2	6	90	15.1	54.9
Benzene	78.1	6	85	14.2	46.9
n-Heptane	100.2	7	92	13.2	55.8
Toluene	92.1	7	76	10.8	42.2
n-Octane	114.2	8	90	11.2	54.2
m,p-xylene	106.2	8	59	7.4	33.2
o-xylene	106.2	8	59	7.3	32.9
1,3,5-Trimethylbenzene	120.2	9	45	5.0	25.6

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	60	12.0
n-Hexane	86.2	6	81	13.5
Benzene	78.1	6	77	12.8
n-Heptane	100.2	7	82	11.7
Toluene	92.1	7	64	9.1
n-Octane	114.2	8	77	9.6
m,p-xylene	106.2	8	56	7.0
o-xylene	106.2	8	58	7.3
1,3,5-Trimethylbenzene	120.2	9	50	5.6

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC11254C **LCD** QC11254B

Date Analyzed: 11/25/24

QC_Batch: 112524-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	12.9	13.7	13.7	106.4	70	130		12.7	25	
110-54-3	n-Hexane	86.2	14.3	15.1	15.1	105.5	70	130		11.1	25	
71-43-2	Benzene	78.1	13.5	14.2	14.2	105.2	70	130		10.5	25	
142-82-5	n-Heptane	100.2	12.4	13.2	13.2	106.0	70	130		11.9	25	
108-88-3	Toluene	92.1	10.0	10.8	10.8	108.5	70	130		17.1	25	
111-65-9	n-Octane	114.2	10.4	11.2	11.2	108.0	70	130		15.9	25	
108-38-3	m,p-xylene	106.2	7.2	7.4	7.4	102.7	70	130		5.4	25	
95-47-6	o-xylene	106.2	7.3	7.3	7.3	100.5	70	130		1.0	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	5.3	5.0	5.0	95.0	70	130		10.1	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	12.9	12.0	12.0	93.6	70	130	
110-54-3	n-Hexane	86.2	14.3	13.5	13.5	94.5	70	130	
71-43-2	Benzene	78.1	13.5	12.8	12.8	94.8	70	130	
142-82-5	n-Heptane	100.2	12.4	11.7	11.7	94.0	70	130	
108-88-3	Toluene	92.1	10.0	9.1	9.1	91.5	70	130	
111-65-9	n-Octane	114.2	10.4	9.6	9.6	92.0	70	130	
108-38-3	m,p-xylene	106.2	7.2	7.0	7.0	97.3	70	130	
95-47-6	o-xylene	106.2	7.3	7.3	7.3	99.5	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	5.3	5.6	5.6	105.0	70	130	

Area Percent Report

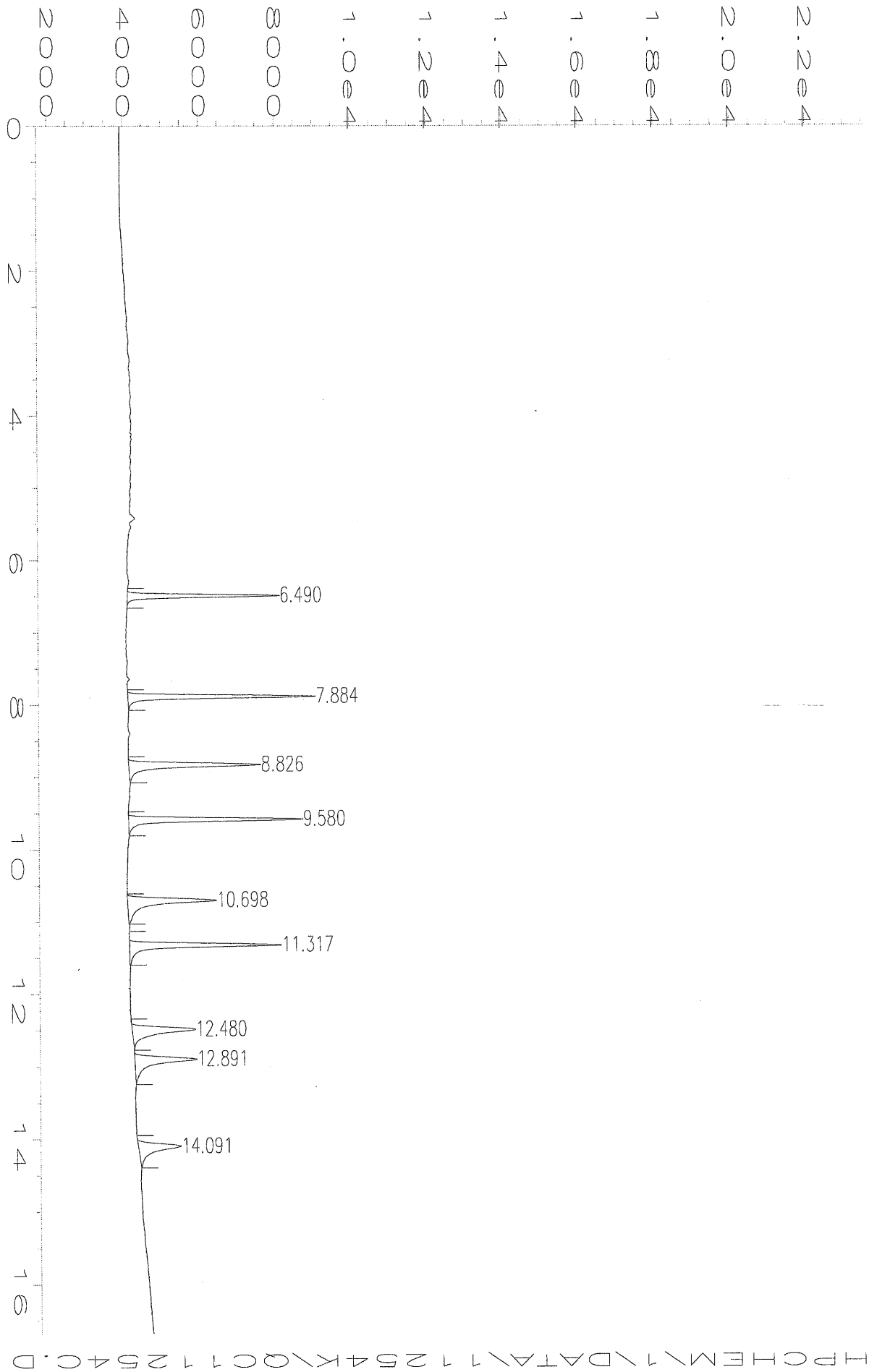
Data File Name : C:\HPCHEM\1\DATA\11254K\QC11254C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 25 Nov 24 10:18 AM
Report Created on: 25 Nov 24 10:35 AM
Sample Info : 1 ML, SPIKE

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\QC11254C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.490	11875	4021	BB	0.046	10.2748
2	7.884	15716	4970	BB	0.049	13.5973
3	8.826	14827	3505	BB	0.064	12.8282
4	9.580	16024	4606	BB	0.054	13.8645
5	10.698	13179	2363	BB	0.082	11.4029
6	11.317	15608	4019	BB	0.059	13.5046
7	12.480	10281	1672	BB	0.091	8.8951
8	12.891	10182	1641	BB	0.090	8.8094
9	14.091	7886	1136	BB	0.101	6.8231

Total area = 115579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Area Percent Report

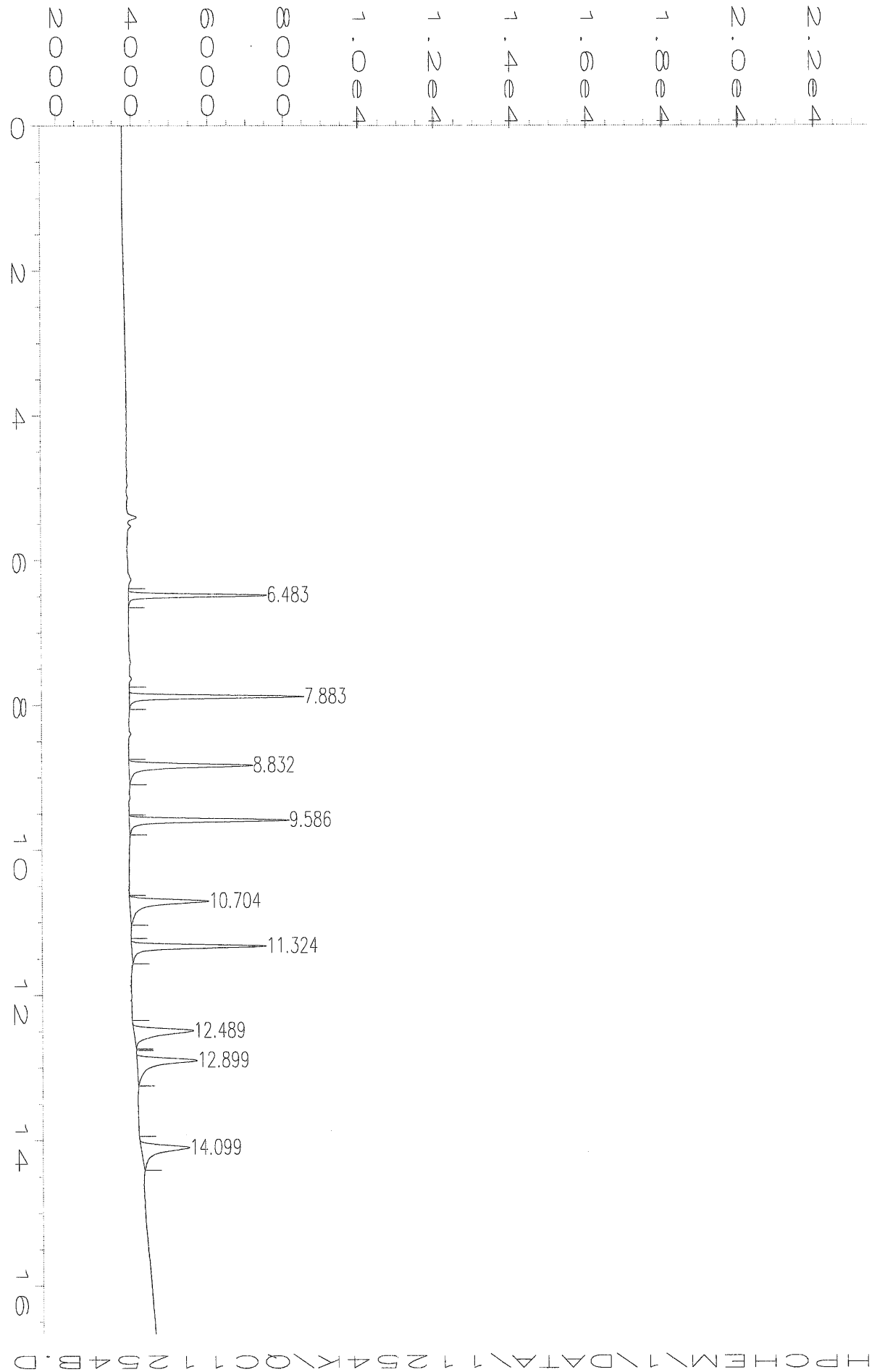
Data File Name : C:\HPCHEM\1\DATA\11254K\QC11254B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 25 Nov 24 09:47 AM
Report Created on: 25 Nov 24 10:03 AM
Sample Info : 1 ML, SPIKE

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\QC11254B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.483	10455	3626	BB	0.045	9.9522
2	7.883	14065	4590	BB	0.048	13.3889
3	8.832	13349	3254	BB	0.062	12.7077
4	9.586	14219	4215	BB	0.052	13.5356
5	10.704	11106	2068	BB	0.078	10.5722
6	11.324	13307	3533	BB	0.057	12.6675
7	12.489	9744	1562	BB	0.090	9.2762
8	12.899	10080	1579	BB	0.090	9.5954
9	14.099	8724	1265	BB	0.098	8.3043

Total area = 105048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Area Percent Report

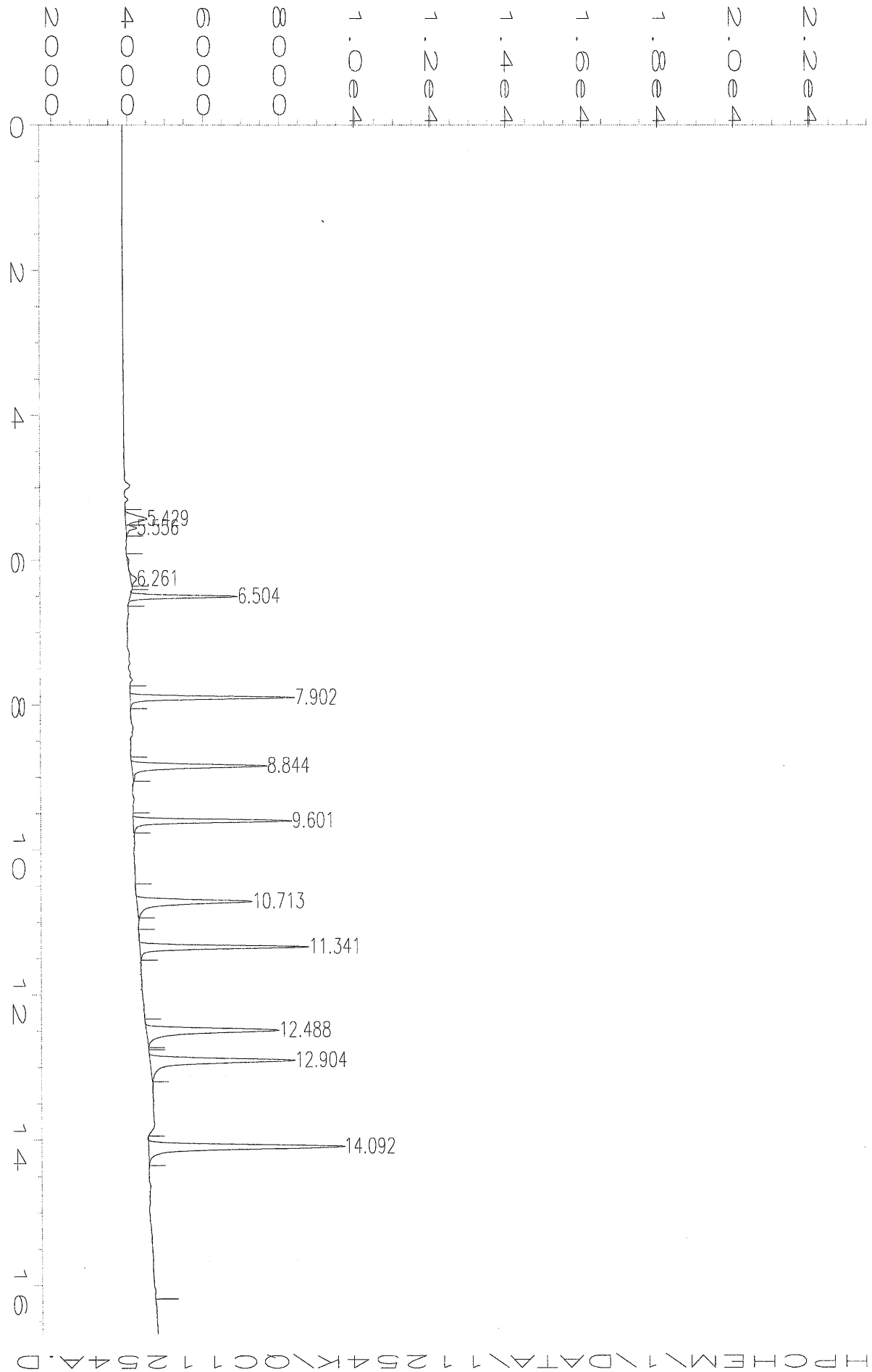
Data File Name : C:\HPCHEM\1\DATA\11254K\QC11254A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 25 Nov 24 09:07 AM
Report Created on: 25 Nov 24 09:24 AM
Sample Info : 1 ML, SPIKE

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\QC11254A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.429	3231	570	BV	0.084	2.2812
2	5.556	1054	288	VB	0.054	0.7445
3	6.261	978	153	BB	0.088	0.6903
4	6.504	7982	2831	BB	0.044	5.6360
5	7.902	13175	4333	BB	0.047	9.3035
6	8.844	13811	3560	BB	0.059	9.7523
7	9.601	13826	4177	BB	0.052	9.7630
8	10.713	13581	3039	BB	0.067	9.5899
9	11.341	15438	4443	BB	0.054	10.9010
10	12.488	16706	3488	BB	0.073	11.7964
11	12.904	18324	3814	BB	0.073	12.9392
12	14.092	23512	5118	BB	0.071	16.6027

Total area = 141617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QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112624-GCK
Date: 11/26/24

		LCS Recovery		LCD Recovery		Spike Limit LCL	Spike Limit UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
109-66-0	n-Pentane	99		102		70	130	3	25	
110-54-3	n-Hexane	105		98		70	130	7	25	
71-43-2	Benzene	109		102		70	130	8	25	
142-82-5	n-Heptane	102		102		70	130	1	25	
108-88-3	Toluene	103		108		70	130	5	25	
111-65-9	n-Octane	106		103		70	130	3	25	
108-38-3	m,p-xylene	110		107		70	130	3	25	
95-47-6	o-xylene	105		110		70	130	6	25	
108-67-8	1,3,5-Trimethylbenzene	107		113		70	130	7	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC11264A**	**QC11264B**	**C11264A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC11264A**	**QC11264B**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**11/26/24**				
QCBatch:	**112624-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**343092**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00**	ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	A LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**12131**	**12516**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**18270**	**17065**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**17245**	**16054**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**18566**	**18435**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**17800**	**18627**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**21460**	**20813**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**19807**	**19228**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**19969**	**21111**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**15530**	**16481**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	70	14.0	42.5
n-Hexane	86.2	6	105	17.5	63.8
Benzene	78.1	6	99	16.5	54.6
n-Heptane	100.2	7	107	15.3	64.6
Toluene	92.1	7	102	14.6	56.9
n-Octane	114.2	8	124	15.4	74.5
m,p-xylene	106.2	8	114	14.3	63.9
o-xylene	106.2	8	115	14.4	64.5
1,3,5-Trimethylbenzene	120.2	9	89	9.9	50.4

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	72	14.4
n-Hexane	86.2	6	98	16.4
Benzene	78.1	6	92	15.4
n-Heptane	100.2	7	106	15.2
Toluene	92.1	7	107	15.3
n-Octane	114.2	8	120	15.0
m,p-xylene	106.2	8	111	13.8
o-xylene	106.2	8	122	15.2
1,3,5-Trimethylbenzene	120.2	9	95	10.5

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC11264A **LCD** QC11264B

Date Analyzed: 11/26/24

QC_Batch: 112624-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	14.2	14.0	14.0	98.7	70	130		3.1	25	
110-54-3	n-Hexane	86.2	16.7	17.5	17.5	105.0	70	130		6.9	25	
71-43-2	Benzene	78.1	15.2	16.5	16.5	109.1	70	130		7.5	25	
142-82-5	n-Heptane	100.2	14.9	15.3	15.3	102.3	70	130		0.7	25	
108-88-3	Toluene	92.1	14.2	14.6	14.6	103.4	70	130		4.8	25	
111-65-9	n-Octane	114.2	14.6	15.4	15.4	106.0	70	130		3.2	25	
108-38-3	m,p-xylene	106.2	12.9	14.3	14.3	110.2	70	130		3.2	25	
95-47-6	o-xylene	106.2	13.8	14.4	14.4	104.5	70	130		6.0	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	9.3	9.9	9.9	106.9	70	130		6.5	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	14.2	14.4	14.4	101.8	70	130	
110-54-3	n-Hexane	86.2	16.7	16.4	16.4	98.1	70	130	
71-43-2	Benzene	78.1	15.2	15.4	15.4	101.5	70	130	
142-82-5	n-Heptane	100.2	14.9	15.2	15.2	101.5	70	130	
108-88-3	Toluene	92.1	14.2	15.3	15.3	108.2	70	130	
111-65-9	n-Octane	114.2	14.6	15.0	15.0	102.8	70	130	
108-38-3	m,p-xylene	106.2	12.9	13.8	13.8	107.0	70	130	
95-47-6	o-xylene	106.2	13.8	15.2	15.2	110.5	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	9.3	10.5	10.5	113.4	70	130	

Area Percent Report

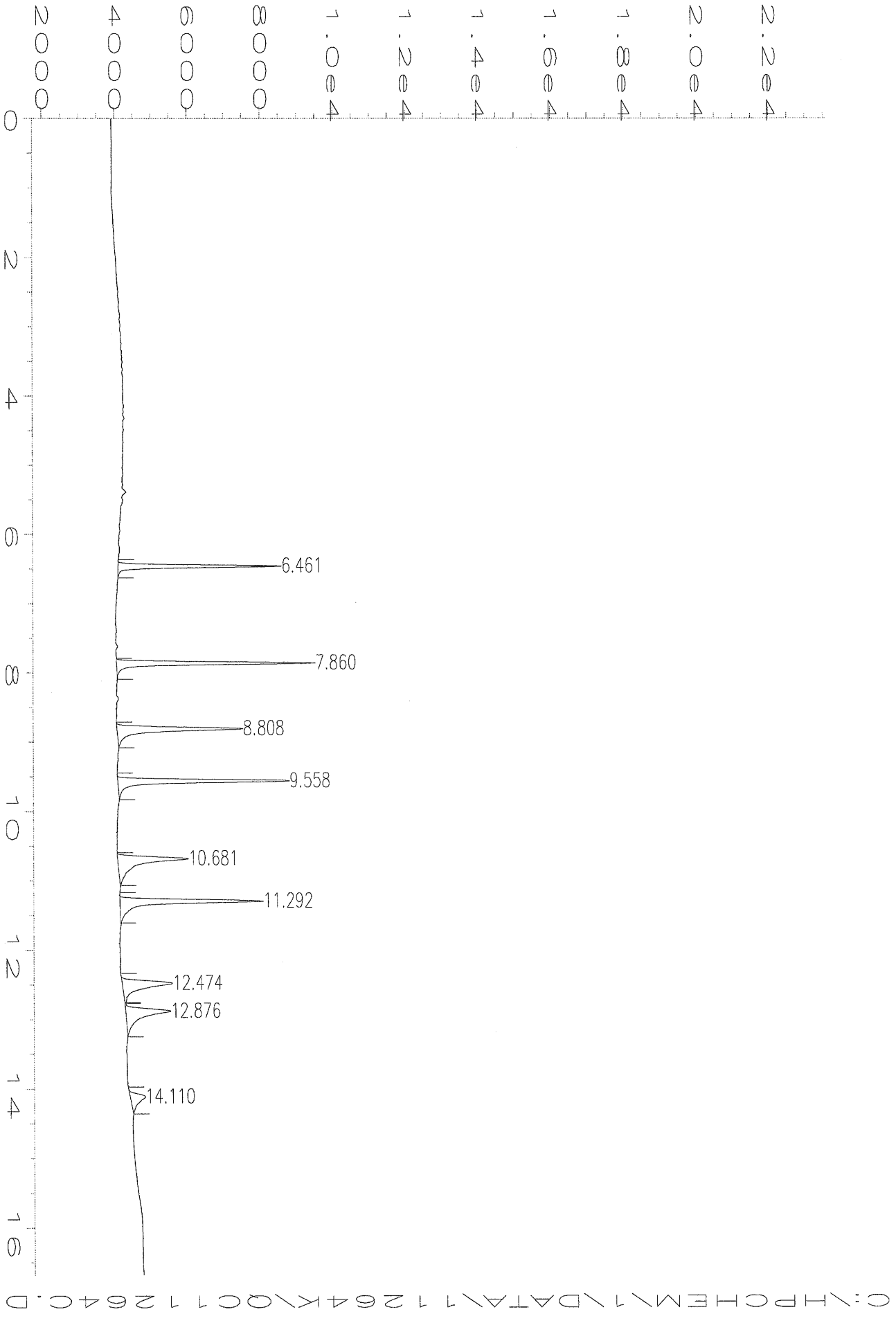
Data File Name : C:\HPCHEM\1\DATA\11264K\QC11264C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 26 Nov 24 10:34 AM
Report Created on: 26 Nov 24 10:51 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11264K\QC11264C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.461	12990	4505	BB	0.045	11.2104
2	7.860	17138	5465	BB	0.048	14.7897
3	8.808	15391	3484	BB	0.066	13.2825
4	9.558	16912	4720	BB	0.055	14.5951
5	10.681	13169	1954	BB	0.095	11.3644
6	11.292	17099	3942	BB	0.065	14.7558
7	12.474	9839	1389	BB	0.100	8.4910
8	12.876	9794	1241	BB	0.107	8.4522
9	14.110	3544	419	BB	0.121	3.0588

Total area = 115877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Area Percent Report

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Operator : TR
Instrument : ANALYZER1
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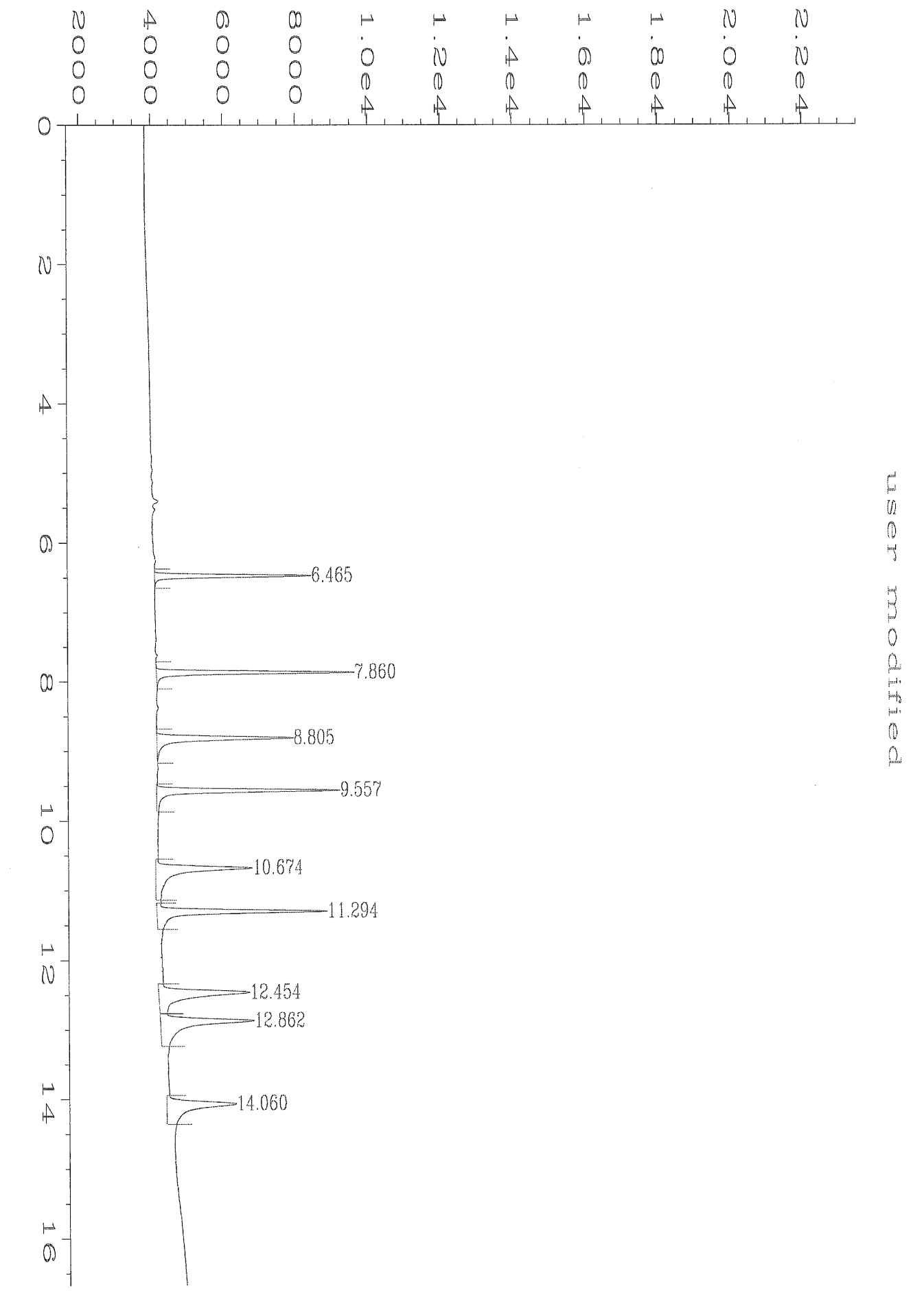
Acquired on : 26 Nov 24 10:04 AM
Report Created on: 27 Nov 24 02:03 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11264K\QC11264B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.465	12516	4346	BB	0.045	7.8065
2	7.860	17065	5476	BB	0.048	10.6439
3	8.805	16054	3781	BB	0.064	10.0130
4	9.557	18435	5072	MM	0.061	11.4983
5	10.674	18627	2689	MM	0.115	11.6178
6	11.294	20813	4712	MM	0.074	12.9812
7	12.454	19228	2528	MM	0.127	11.9930
8	12.862	21111	2602	MF	0.135	13.1672
9	14.060	16481	1922	MF	0.143	10.2791

Total area = 160330

User Modified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Area Percent Report

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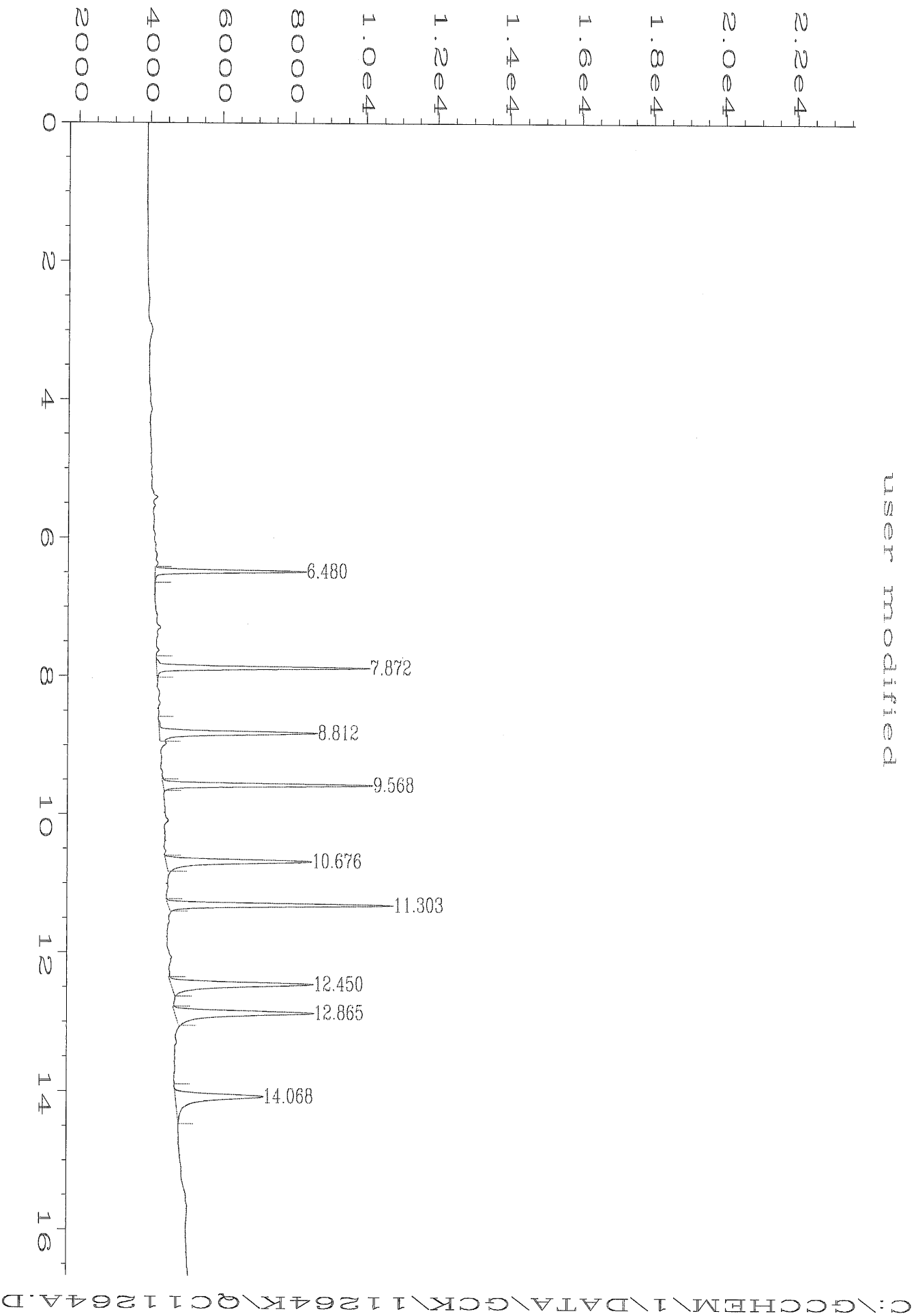
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 26 Nov 24 09:20 AM
Report Created on: 27 Nov 24 01:57 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11264K\QC11264A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.480	12131	4203	FB	0.045	7.5453
2	7.872	18270	5945	BV	0.047	11.3635
3	8.812	17245	4403	BF	0.060	10.7261
4	9.568	18566	5839	MM	0.053	11.5475
5	10.676	17800	4046	MM	0.073	11.0709
6	11.303	21460	6264	MM	0.057	13.3475
7	12.450	19807	3950	MM	0.084	12.3198
8	12.865	19969	3870	MM	0.086	12.4202
9	14.068	15530	2417	BB	0.095	9.6592

Total area = 160778

User Modified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QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 112724-GCK
Date: 11/26/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	107		106		70	130	1	25	
110-54-3	n-Hexane	101		101		70	130	0	25	
71-43-2	Benzene	107		104		70	130	3	25	
142-82-5	n-Heptane	99		99		70	130	0	25	
108-88-3	Toluene	98		98		70	130	0	25	
111-65-9	n-Octane	100		99		70	130	1	25	
108-38-3	m,p-xylene	107		109		70	130	2	25	
95-47-6	o-xylene	120		111		70	130	9	25	
108-67-8	1,3,5-Trimethylbenzene	125		128		70	130	3	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC11274C**	**QC11274B**	**C11274A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC11274C**	**QC11274B**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**11/26/24**				
QCBatch:	**112724-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**335843**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00** ml				

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	C LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**13158**	**13050**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**17546**	**17615**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**16906**	**16509**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**17968**	**18003**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**16926**	**16914**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**20241**	**20130**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**19264**	**19586**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**22922**	**21189**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**18235**	**18657**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	76	15.2	46.1
n-Hexane	86.2	6	101	16.8	61.3
Benzene	78.1	6	97	16.2	53.5
n-Heptane	100.2	7	103	14.8	62.5
Toluene	92.1	7	97	13.9	54.1
n-Octane	114.2	8	117	14.6	70.3
m,p-xylene	106.2	8	111	13.9	62.2
o-xylene	106.2	8	132	16.5	74.0
1,3,5-Trimethylbenzene	120.2	9	105	11.7	59.2

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	75	15.0
n-Hexane	86.2	6	101	16.9
Benzene	78.1	6	95	15.8
n-Heptane	100.2	7	104	14.8
Toluene	92.1	7	97	13.9
n-Octane	114.2	8	116	14.5
m,p-xylene	106.2	8	113	14.1
o-xylene	106.2	8	122	15.3
1,3,5-Trimethylbenzene	120.2	9	107	11.9

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC11274C **LCD** QC11274B

Date Analyzed: 11/26/24

QC_Batch: 112724-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	14.2	15.2	15.2	107.0	70	130		0.9	25	
110-54-3	n-Hexane	86.2	16.7	16.8	16.8	100.8	70	130		0.4	25	
71-43-2	Benzene	78.1	15.2	16.2	16.2	106.9	70	130		2.5	25	
142-82-5	n-Heptane	100.2	14.9	14.8	14.8	99.0	70	130		0.2	25	
108-88-3	Toluene	92.1	14.2	13.9	13.9	98.4	70	130		0.1	25	
111-65-9	n-Octane	114.2	14.6	14.6	14.6	100.0	70	130		0.5	25	
108-38-3	m,p-xylene	106.2	12.9	13.9	13.9	107.2	70	130		1.8	25	
95-47-6	o-xylene	106.2	13.8	16.5	16.5	120.0	70	130		9.1	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	9.3	11.7	11.7	125.5	70	130		2.9	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	14.2	15.0	15.0	106.1	70	130	
110-54-3	n-Hexane	86.2	16.7	16.9	16.9	101.2	70	130	
71-43-2	Benzene	78.1	15.2	15.8	15.8	104.4	70	130	
142-82-5	n-Heptane	100.2	14.9	14.8	14.8	99.2	70	130	
108-88-3	Toluene	92.1	14.2	13.9	13.9	98.3	70	130	
111-65-9	n-Octane	114.2	14.6	14.5	14.5	99.4	70	130	
108-38-3	m,p-xylene	106.2	12.9	14.1	14.1	109.0	70	130	
95-47-6	o-xylene	106.2	13.8	15.3	15.3	110.9	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	9.3	11.9	11.9	128.4	70	130	

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\GCK\11274K\QC11274C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 27 Nov 24 10:06 AM
Report Created on: 27 Nov 24 02:22 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\11274K\QC11274C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.418	13158	4563	BB	0.045	8.0645
2	7.812	17546	5591	BB	0.048	10.7536
3	8.755	16906	3713	BB	0.067	10.3610
4	9.505	17968	4945	BB	0.054	11.0121
5	10.624	16926	2392	BV	0.099	10.3738
6	11.238	20241	4639	VB	0.065	12.4049
7	12.400	19264	2475	MM	0.130	11.8062
8	12.804	22922	2507	MM	0.152	14.0482
9	14.009	18235	1808	MM	0.168	11.1758

Total area = 163165

User Modified

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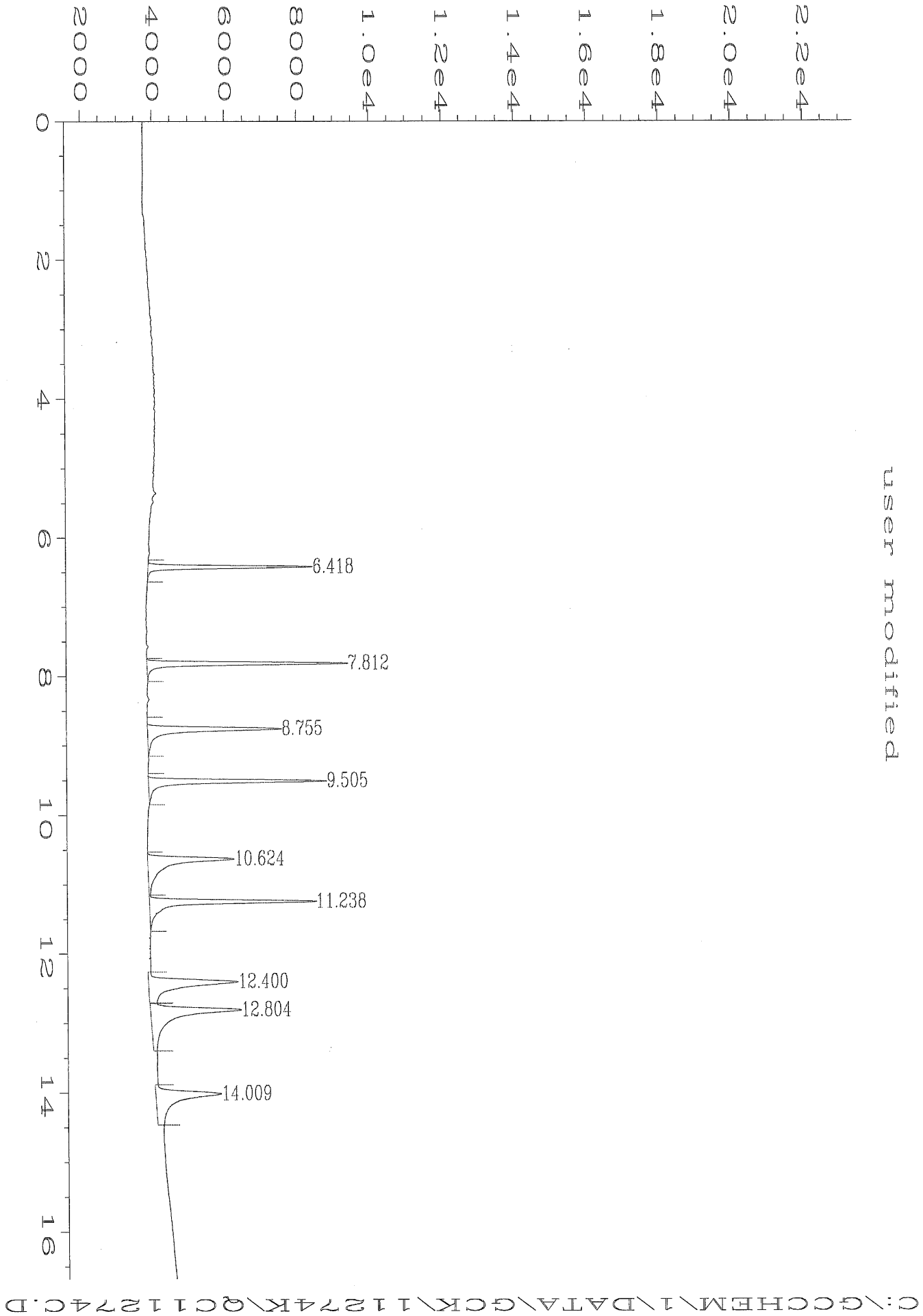
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Area Percent Report

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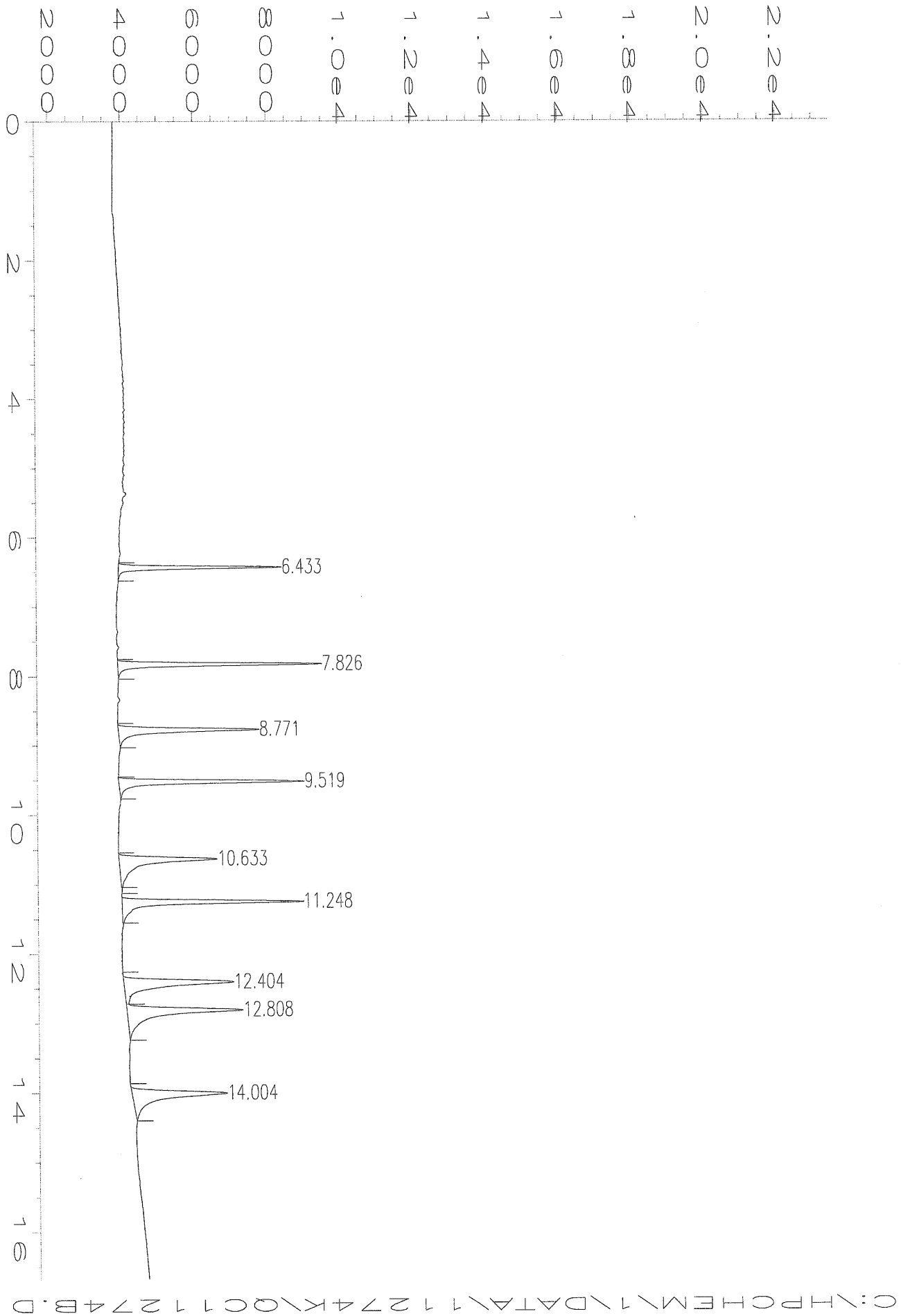
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 27 Nov 24 09:35 AM
Report Created on: 27 Nov 24 09:52 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\QC11274B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.433	13050	4457	BB	0.046	8.0730
2	7.826	17615	5602	BB	0.048	10.8967
3	8.771	16509	3849	BB	0.064	10.2128
4	9.519	18003	5092	BB	0.054	11.1369
5	10.633	16914	2693	BB	0.089	10.4633
6	11.248	20130	4988	BB	0.060	12.4528
7	12.404	19586	3012	BV	0.093	12.1159
8	12.808	21189	3177	VB	0.093	13.1076
9	14.004	18657	2601	BB	0.098	11.5411

Total area = 161653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2.0e4
2.2e4
0
2
4
6
8
10
12
14
16
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11.248
12.404
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Area Percent Report

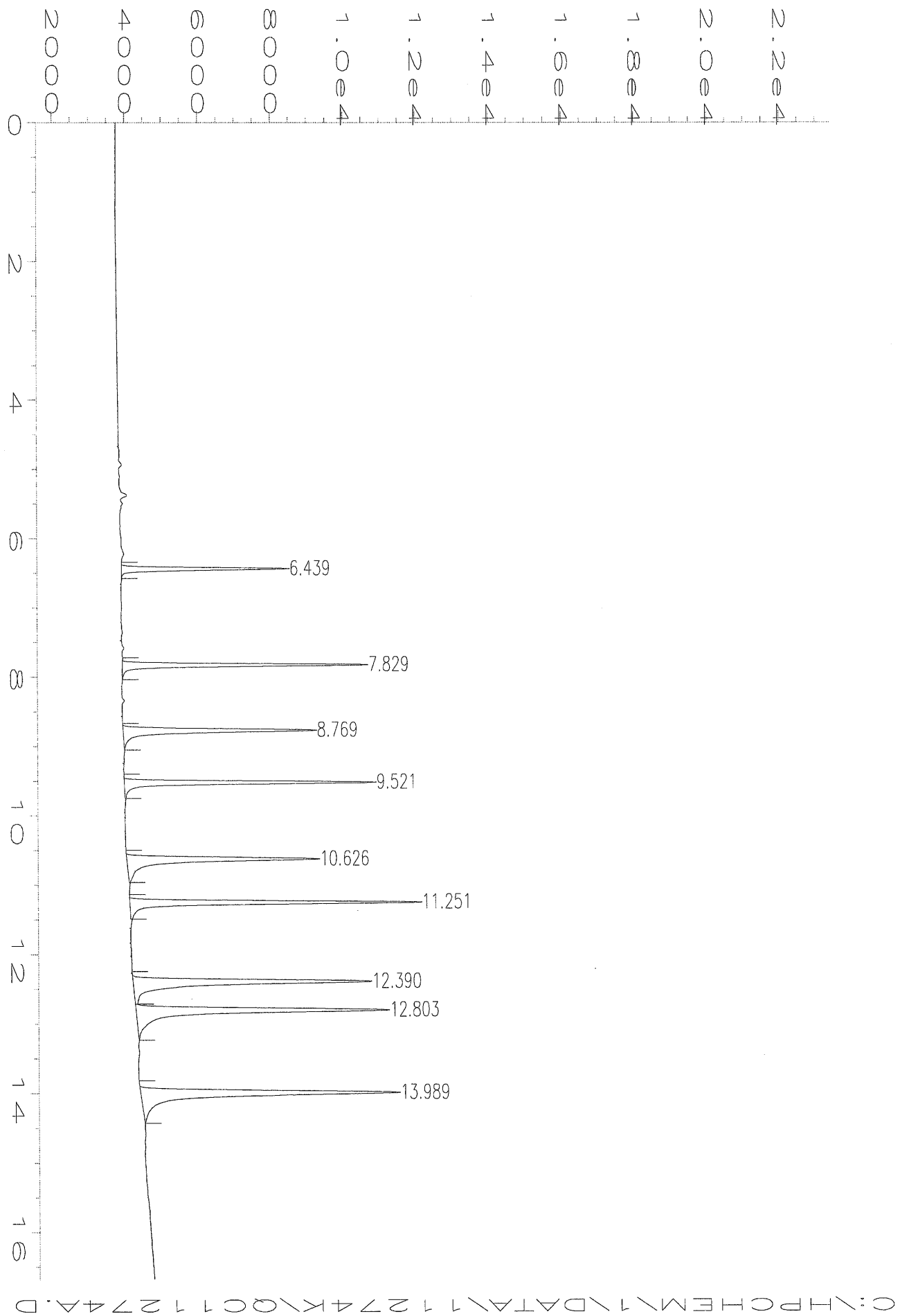
Data File Name : C:\HPCHEM\1\DATA\11274K\QC11274A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 27 Nov 24 09:05 AM
Report Created on: 27 Nov 24 09:21 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\QC11274A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.439	13102	4628	BB	0.044	5.3865
2	7.829	20605	6777	BB	0.047	8.4712
3	8.769	21314	5326	BB	0.060	8.7623
4	9.521	22963	6935	BB	0.050	9.4406
5	10.626	25106	5300	BB	0.069	10.3216
6	11.251	28883	8045	BB	0.055	11.8744
7	12.390	33990	6560	BV	0.075	13.9739
8	12.803	36665	6968	VB	0.077	15.0735
9	13.989	40611	7140	BB	0.083	16.6960

Total area = 243241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C:\HPCHEM\1\DATA\1 1 274K\QC1 1 274A.D

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 120224-GCK
Date: 12/02/24

		LCS Recovery		LCD Recovery		Spike Limit LCL	UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
109-66-0	n-Pentane	107		107		70	130	0	25	
110-54-3	n-Hexane	104		103		70	130	1	25	
71-43-2	Benzene	107		104		70	130	3	25	
142-82-5	n-Heptane	102		100		70	130	2	25	
108-88-3	Toluene	102		95		70	130	6	25	
111-65-9	n-Octane	99		96		70	130	3	25	
108-38-3	m,p-xylene	93		88		70	130	5	25	
95-47-6	o-xylene	99		87		70	130	12	25	
108-67-8	1,3,5-Trimethylbenzene	94		94		70	130	0	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC12024A**	**QC12024B**	**C12024A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC12024A**	**QC12024B**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**12/02/24**				
QCBatch:	**120224-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**364162**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00**	ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	A LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**13954**	**13976**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**18932**	**18745**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**17727**	**17246**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**18636**	**18343**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**16502**	**15476**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**19133**	**18569**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**14796**	**14052**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**16820**	**14845**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**11974**	**11933**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	80	16.1	48.9
n-Hexane	86.2	6	109	18.2	66.1
Benzene	78.1	6	102	17.0	56.1
n-Heptane	100.2	7	107	15.3	64.9
Toluene	92.1	7	95	13.6	52.8
n-Octane	114.2	8	110	13.8	66.4
m,p-xylene	106.2	8	85	10.6	47.8
o-xylene	106.2	8	97	12.1	54.3
1,3,5-Trimethylbenzene	120.2	9	69	7.7	38.9

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	80	16.1
n-Hexane	86.2	6	108	18.0
Benzene	78.1	6	99	16.6
n-Heptane	100.2	7	106	15.1
Toluene	92.1	7	89	12.7
n-Octane	114.2	8	107	13.4
m,p-xylene	106.2	8	81	10.1
o-xylene	106.2	8	85	10.7
1,3,5-Trimethylbenzene	120.2	9	69	7.6

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC12024A **LCD** QC12024B

Date Analyzed: 12/02/24

QC_Batch: 120224-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	15.1	16.1	16.1	106.7	70	130		0.2	25	
110-54-3	n-Hexane	86.2	17.5	18.2	18.2	104.0	70	130		1.0	25	
71-43-2	Benzene	78.1	15.9	17.0	17.0	106.9	70	130		2.9	25	
142-82-5	n-Heptane	100.2	15.0	15.3	15.3	102.1	70	130		1.6	25	
108-88-3	Toluene	92.1	13.4	13.6	13.6	101.6	70	130		6.3	25	
111-65-9	n-Octane	114.2	14.0	13.8	13.8	98.6	70	130		2.9	25	
108-38-3	m,p-xylene	106.2	11.4	10.6	10.6	93.2	70	130		4.7	25	
95-47-6	o-xylene	106.2	12.2	12.1	12.1	99.1	70	130		11.6	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	8.2	7.7	7.7	93.9	70	130		0.3	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	15.1	16.1	16.1	106.9	70	130	
110-54-3	n-Hexane	86.2	17.5	18.0	18.0	103.0	70	130	
71-43-2	Benzene	78.1	15.9	16.6	16.6	104.0	70	130	
142-82-5	n-Heptane	100.2	15.0	15.1	15.1	100.5	70	130	
108-88-3	Toluene	92.1	13.4	12.7	12.7	95.3	70	130	
111-65-9	n-Octane	114.2	14.0	13.4	13.4	95.7	70	130	
108-38-3	m,p-xylene	106.2	11.4	10.1	10.1	88.5	70	130	
95-47-6	o-xylene	106.2	12.2	10.7	10.7	87.5	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	8.2	7.6	7.6	93.5	70	130	

Area Percent Report

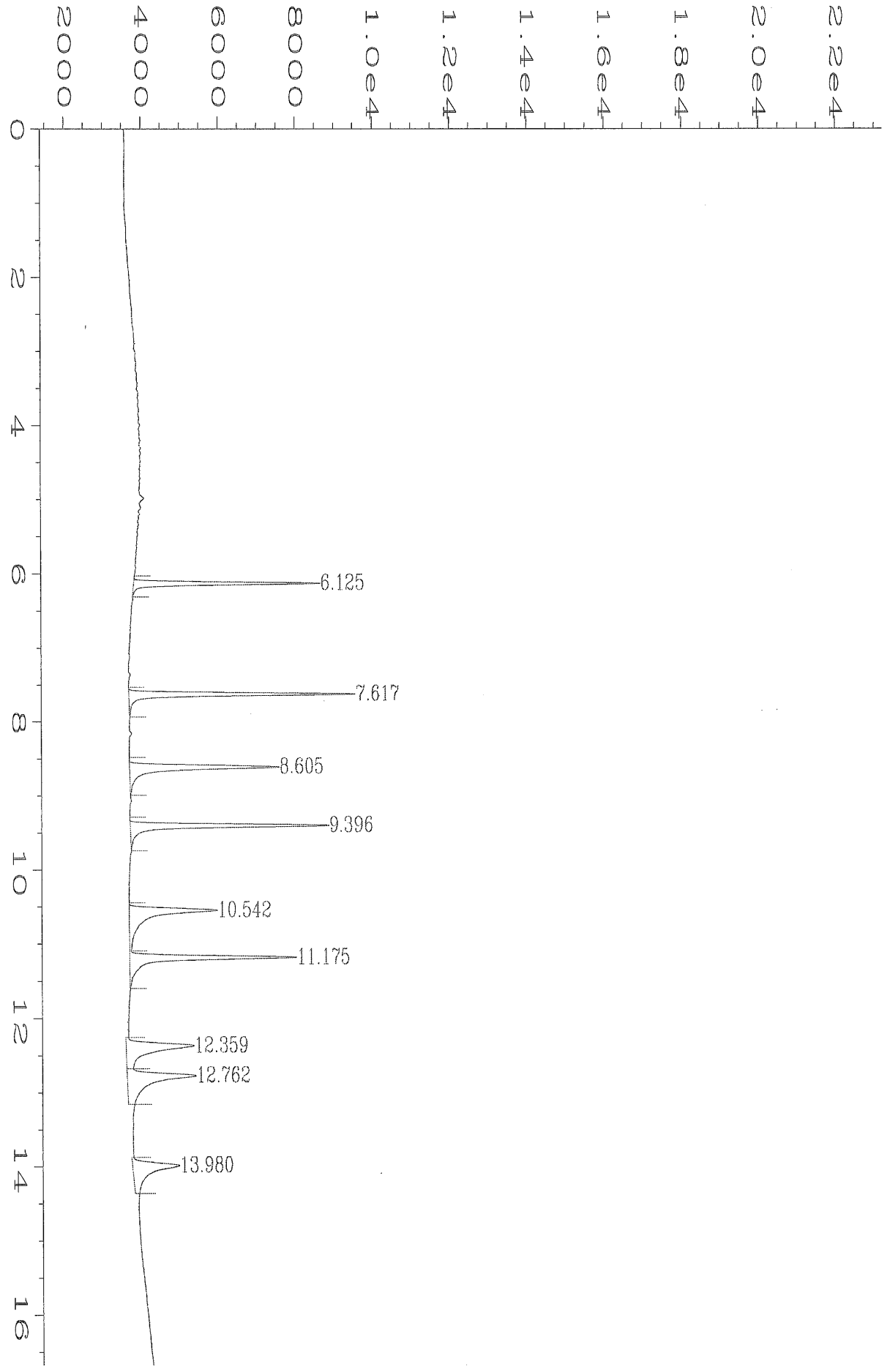
Data File Name : C:\GCCHEM\1\DATA\GCK\12024K\QC12024C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 02 Dec 24 10:31 AM
Report Created on: 03 Dec 24 12:55 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12024K\QC12024C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.125	13954	4849	BV	0.045	9.3983
2	7.617	18932	5894	BB	0.049	12.7509
3	8.605	17727	3903	BB	0.066	11.9393
4	9.396	18636	5162	BB	0.055	12.5516
5	10.542	16502	2288	BV	0.100	11.1147
6	11.175	19133	4337	VF	0.064	12.8865
7	12.359	14796	1769	MF	0.139	9.9657
8	12.762	16820	1792	FF	0.156	11.3286
9	13.980	11974	1225	MM	0.163	8.0645

Total area = 148474

User Modified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User Modified

Area Percent Report

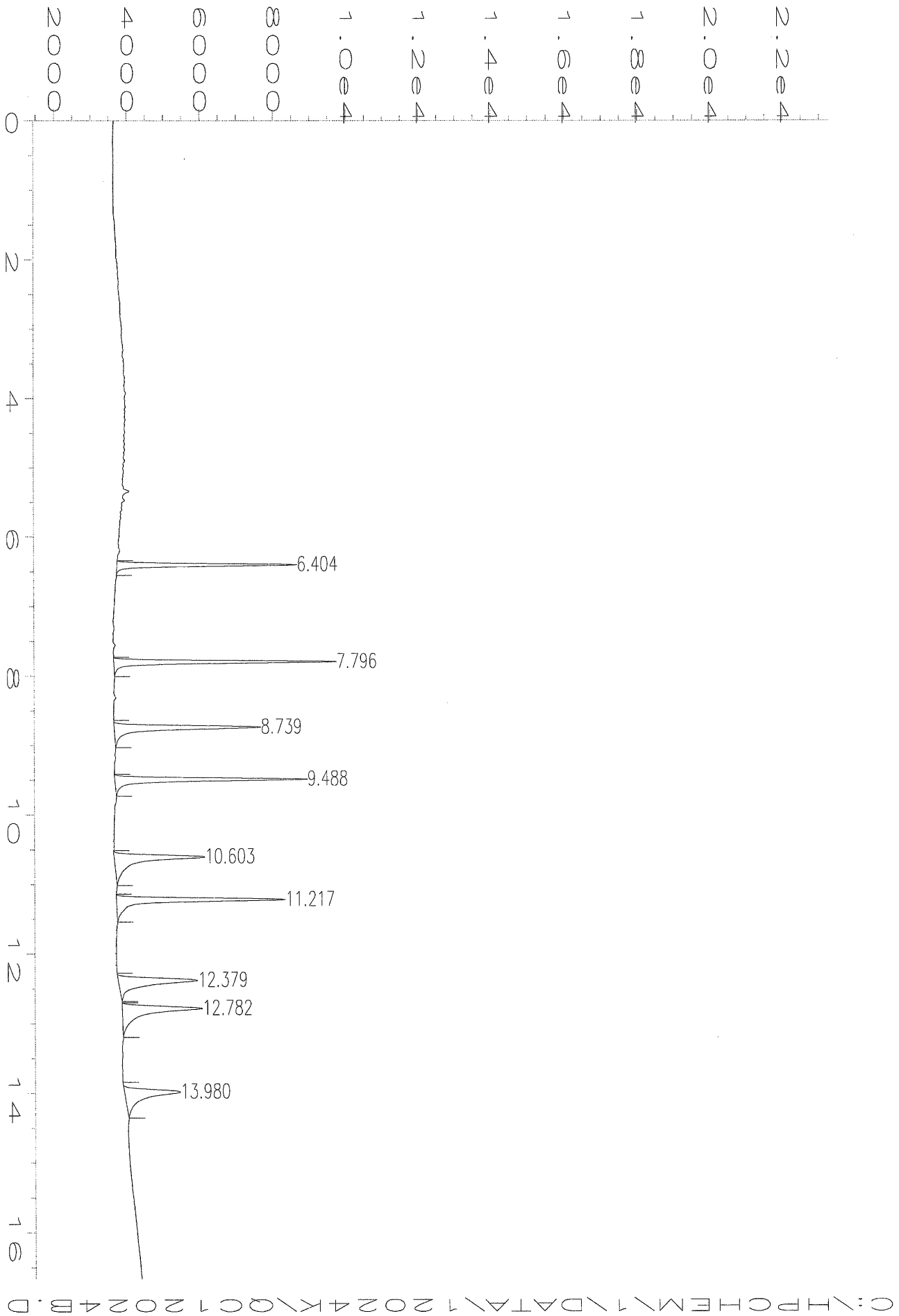
Data File Name : C:\HPCHEM\1\DATA\12024K\QC12024B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 02 Dec 24 10:02 AM
Report Created on: 02 Dec 24 10:18 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12024K\QC12024B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.404	13976	4930	BB	0.044	9.7605
2	7.796	18745	6096	BB	0.047	13.0914
3	8.739	17246	4022	BB	0.063	12.0443
4	9.488	18343	5286	BB	0.053	12.8110
5	10.603	15476	2491	BB	0.088	10.8087
6	11.217	18569	4613	BB	0.060	12.9683
7	12.379	14052	2177	BB	0.093	9.8136
8	12.782	14845	2189	BB	0.097	10.3680
9	13.980	11933	1529	BB	0.110	8.3342

Total area = 143184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13.980
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Area Percent Report

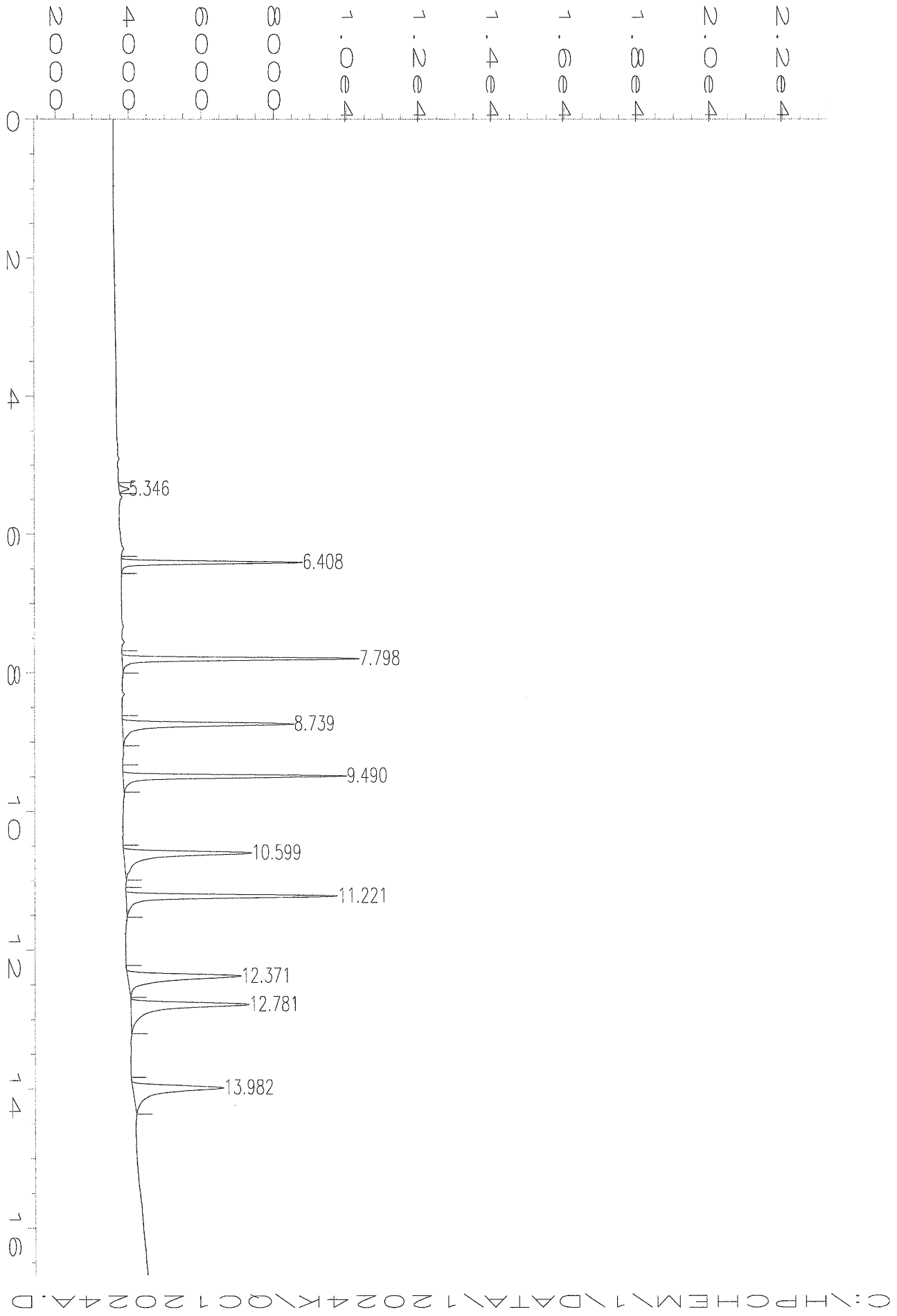
Data File Name : C:\HPCHEM\1\DATA\12024K\QC12024A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 02 Dec 24 09:32 AM
Report Created on: 02 Dec 24 09:49 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12024K\QC12024A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.346	954	268	BV	0.053	0.5546
2	6.408	14115	5007	BB	0.044	8.2060
3	7.798	19904	6548	BB	0.047	11.5718
4	8.739	19696	4731	BB	0.063	11.4507
5	9.490	20786	6149	BB	0.052	12.0845
6	10.599	19049	3522	BB	0.077	11.0746
7	11.221	21836	5827	BB	0.056	12.6949
8	12.371	18770	3134	BB	0.085	10.9127
9	12.781	19957	3253	BB	0.088	11.6025
10	13.982	16938	2511	BB	0.096	9.8478

Total area = 172002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QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 120324-GCK
Date: 12/03/24

		LCS Recovery		LCD Recovery		Spike Limit LCL	Spike Limit UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
109-66-0	n-Pentane	101		99		70	130	2	25	
110-54-3	n-Hexane	103		97		70	130	7	25	
71-43-2	Benzene	103		97		70	130	6	25	
142-82-5	n-Heptane	104		96		70	130	8	25	
108-88-3	Toluene	105		95		70	130	11	25	
111-65-9	n-Octane	104		96		70	130	8	25	
108-38-3	m,p-xylene	104		96		70	130	7	25	
95-47-6	o-xylene	103		97		70	130	5	25	
108-67-8	1,3,5-Trimethylbenzene	94		106		70	130	12	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD		
File Name:	**QC12034A**	**QC12034B**	**C12034A**		DAB:
SDG:	**LABQC**	**LABQC**			
LCS EAS ID:	**QC12034A**	**QC12034B**			
Time:	**8:01**	**8:33**			
Date Analyzed:	**12/03/24**				
QCBatch:	**120324-GCK**	Method:	**TO-12**	TO-14	
Hexane Con Cal:	**367502**			TO-03	
Standard:	**ST62344**	Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**	SF:	**2**	TO-12	
Matrix:	**AA**	Instrument:	**GCK**		
Can Factor:	**1.00**	Unit Factor	**20**		
Volume:	**1.00**	ml			

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	A LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**15395**	**15074**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**21982**	**20588**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**22431**	**21148**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**23571**	**21680**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**22989**	**20626**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**27854**	**25689**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**25353**	**23578**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**28021**	**26560**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**29425**	**33305**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	89	17.7	54.0
n-Hexane	86.2	6	127	21.1	76.8
Benzene	78.1	6	129	21.5	71.0
n-Heptane	100.2	7	136	19.4	82.0
Toluene	92.1	7	132	18.9	73.5
n-Octane	114.2	8	160	20.0	96.7
m,p-xylene	106.2	8	146	18.2	81.8
o-xylene	106.2	8	161	20.2	90.4
1,3,5-Trimethylbenzene	120.2	9	169	18.8	95.6

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	87	17.4
n-Hexane	86.2	6	119	19.8
Benzene	78.1	6	122	20.3
n-Heptane	100.2	7	125	17.8
Toluene	92.1	7	119	17.0
n-Octane	114.2	8	148	18.5
m,p-xylene	106.2	8	136	17.0
o-xylene	106.2	8	153	19.1
1,3,5-Trimethylbenzene	120.2	9	192	21.3

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC12034A **LCD** QC12034B

Date Analyzed: 12/03/24

QC_Batch: 120324-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	17.5	17.7	17.7	101.1	70	130		2.1	25	
110-54-3	n-Hexane	86.2	20.4	21.1	21.1	103.3	70	130		6.5	25	
71-43-2	Benzene	78.1	20.9	21.5	21.5	102.9	70	130		5.9	25	
142-82-5	n-Heptane	100.2	18.6	19.4	19.4	104.2	70	130		8.4	25	
108-88-3	Toluene	92.1	17.9	18.9	18.9	105.4	70	130		10.8	25	
111-65-9	n-Octane	114.2	19.3	20.0	20.0	104.0	70	130		8.1	25	
108-38-3	m,p-xylene	106.2	17.6	18.2	18.2	103.6	70	130		7.3	25	
95-47-6	o-xylene	106.2	19.6	20.2	20.2	102.7	70	130		5.4	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	20.1	18.8	18.8	93.8	70	130		12.4	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	17.5	17.4	17.4	98.9	70	130	
110-54-3	n-Hexane	86.2	20.4	19.8	19.8	96.7	70	130	
71-43-2	Benzene	78.1	20.9	20.3	20.3	97.1	70	130	
142-82-5	n-Heptane	100.2	18.6	17.8	17.8	95.8	70	130	
108-88-3	Toluene	92.1	17.9	17.0	17.0	94.6	70	130	
111-65-9	n-Octane	114.2	19.3	18.5	18.5	96.0	70	130	
108-38-3	m,p-xylene	106.2	17.6	17.0	17.0	96.4	70	130	
95-47-6	o-xylene	106.2	19.6	19.1	19.1	97.3	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	20.1	21.3	21.3	106.2	70	130	

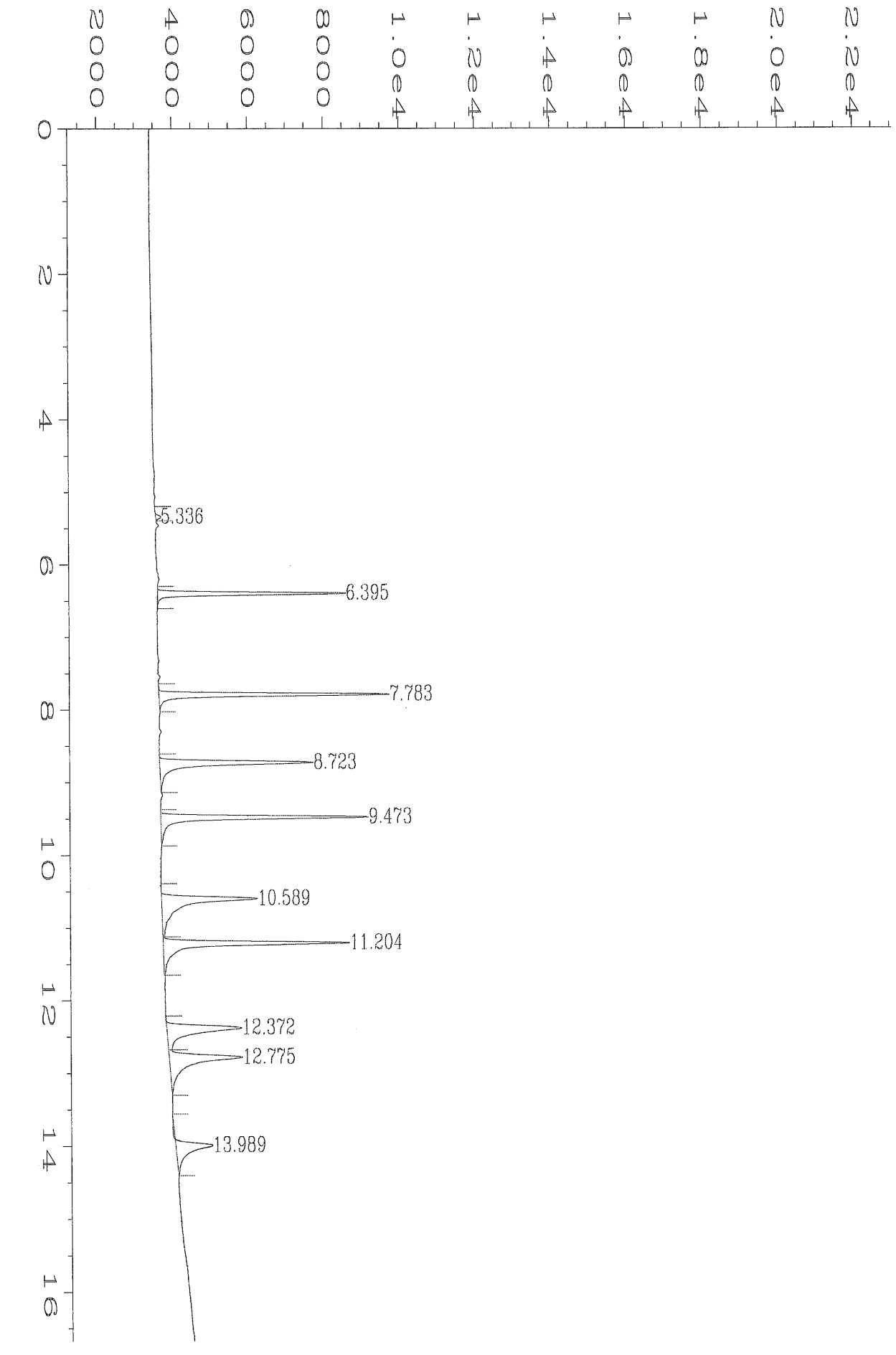
Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCK\12034K\QC12034C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 03 Dec 24 10:10 AM
Report Created on: 03 Dec 24 01:02 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\QC12034C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.336	433	137	BV	0.050	0.2895
2	6.395	14298	4995	BB	0.044	9.5653
3	7.783	19050	6095	BB	0.048	12.7441
4	8.723	18244	4066	BV	0.066	12.2052
5	9.473	20110	5499	BB	0.055	13.4532
6	10.589	17622	2538	BV	0.097	11.7891
7	11.204	21618	4925	VB	0.065	14.4624
8	12.372	14398	1996	BV	0.102	9.6319
9	12.775	15720	1946	VB	0.111	10.5164
10	13.989	7986	986	BB	0.112	5.3428

Total area = 149479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12.775
13.989
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Area Percent Report

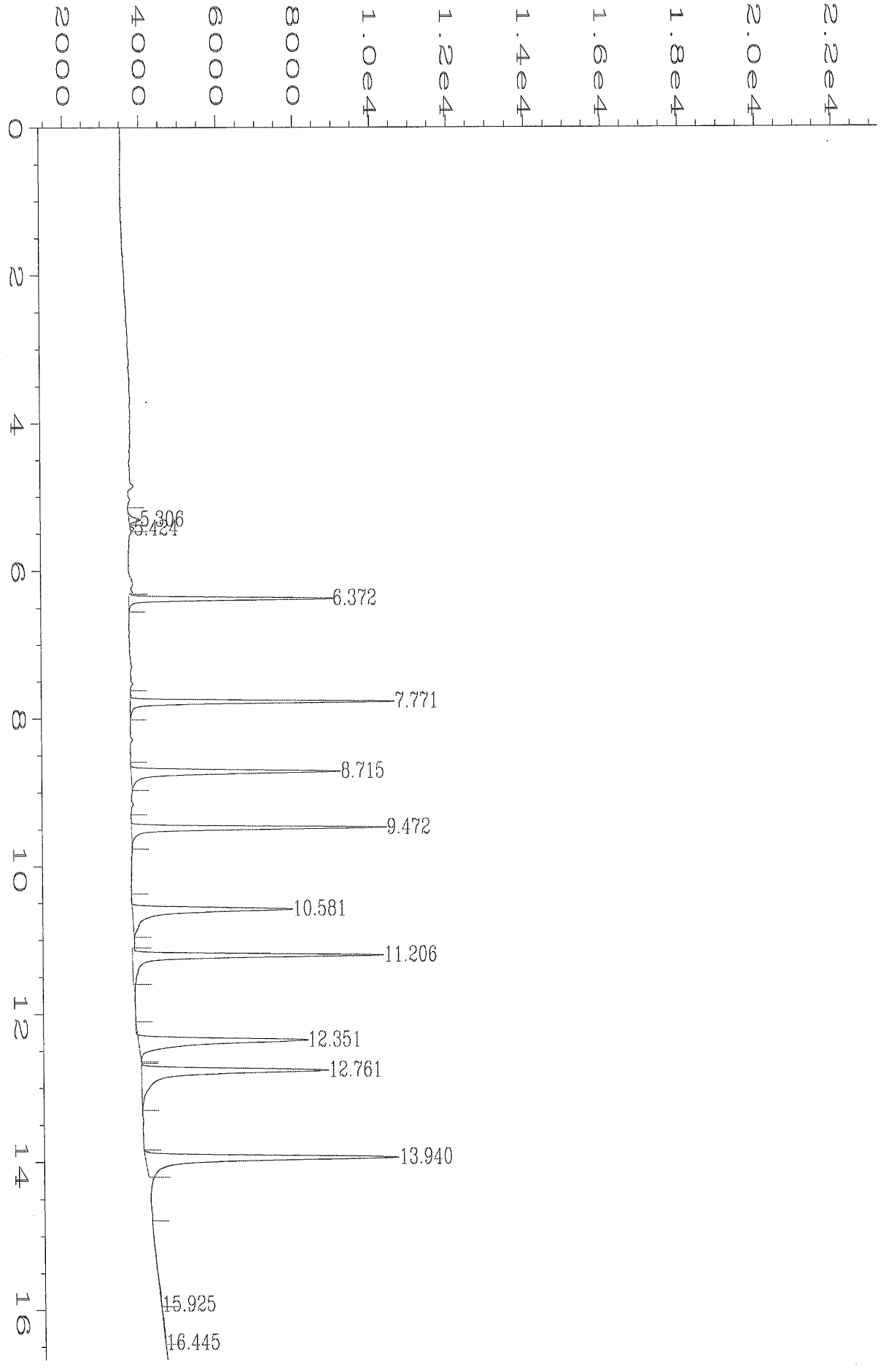
Data File Name : C:\GCCHEM\1\DATA\GCK\12034K\QC12034B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 03 Dec 24 09:15 AM
Report Created on: 03 Dec 24 01:13 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\QC12034B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.306	1162	291	BV	0.057	0.5529
2	5.424	252	105	PV	0.038	0.1201
3	6.372	15074	5330	VB	0.044	7.1725
4	7.771	20588	6881	BB	0.046	9.7958
5	8.715	21148	5454	BV	0.059	10.0623
6	9.472	21680	6652	BB	0.050	10.3154
7	10.581	20626	4166	BB	0.073	9.8140
8	11.206	25689	6531	MM	0.066	12.2229
9	12.351	23578	4415	BB	0.080	11.2188
10	12.761	26560	4862	BB	0.081	12.6377
11	13.940	33305	6591	MM	0.084	15.8468
12	15.925	56	19	BV	0.049	0.0265
13	16.445	450	13	PV	0.430	0.2142

Total area = 210168

User Modified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Area Percent Report

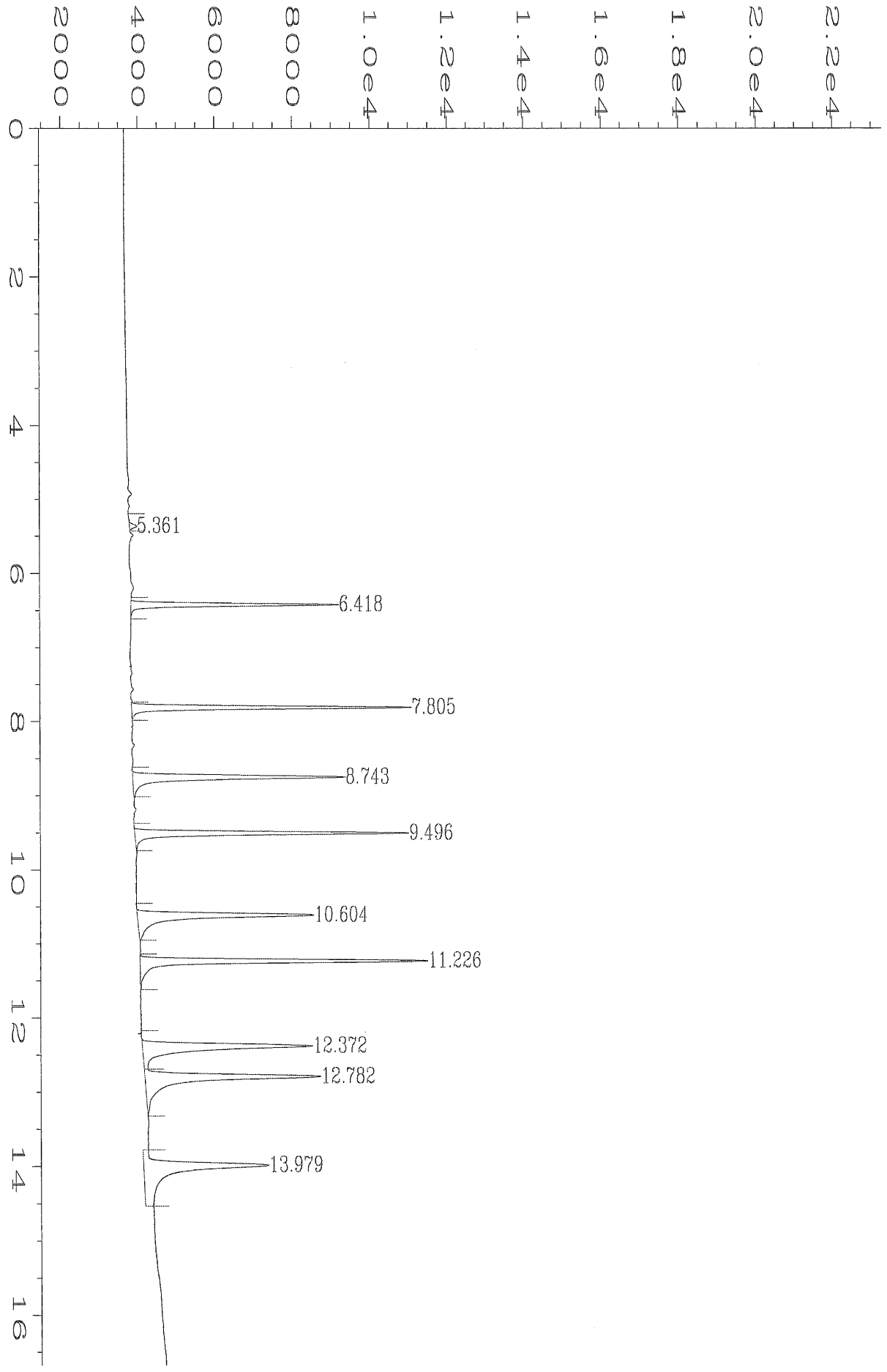
Data File Name : C:\GCCHEM\1\DATA\GCK\12034K\QC12034A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 03 Dec 24 08:36 AM
Report Created on: 03 Dec 24 01:12 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\QC12034A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.361	713	203	BV	0.054	0.3275
2	6.418	15395	5395	BB	0.044	7.0705
3	7.805	21982	7268	VV	0.046	10.0960
4	8.743	22431	5501	BV	0.061	10.3021
5	9.496	23571	7094	BB	0.050	10.8257
6	10.604	22989	4570	BV	0.075	10.5582
7	11.226	27854	7443	BB	0.056	12.7926
8	12.372	25353	4403	BV	0.082	11.6438
9	12.782	28021	4547	VB	0.086	12.8693
10	13.979	29425	3234	MM	0.152	13.5142

Total area = 217734

User Modified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11.226
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User Modified
C:\GCCHEM\1\DATA\GCK\1203 4K\QC1203 4A.D

QUALITY CONTROL SPIKE

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

EPA Method TO-12 Total Non-Methane Hydrocarbons

QC_Batch: 120424-GCK
Date: 12/04/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate Duplicate %	Duplicate Limit %	Flag
109-66-0	n-Pentane	102		98		70	130	4	25	
110-54-3	n-Hexane	107		93		70	130	14	25	
71-43-2	Benzene	107		93		70	130	13	25	
142-82-5	n-Heptane	106		94		70	130	11	25	
108-88-3	Toluene	111		89		70	130	22	25	
111-65-9	n-Octane	110		90		70	130	19	25	
108-38-3	m,p-xylene	111		89		70	130	22	25	
95-47-6	o-xylene	108		92		70	130	17	25	
108-67-8	1,3,5-Trimethylbenzene	101		99		70	130	2	25	

LCS- Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicates out of Limit

QUANTITATION REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

	LCS	LCD	STD			
File Name:	**QC12044A**	**QC12044B**	**C12044A**			DAB:
SDG:	**LABQC**	**LABQC**				
LCS EAS ID:	**QC12044A**	**QC12044B**				
Time:	**8:01**	**8:33**				
Date Analyzed:	**12/04/24**					
QCBatch:	**120424-GCK**		Method:	**TO-12**	TO-14	
Hexane Con Cal:	**366002**				TO-03	
Standard:	**ST62344**		Not Detected Flag:	**ND**	EPA 18	
Chem:	**TRG**		SF:	**2**	TO-12	
Matrix:	**AA**		Instrument:	**GCK**		
Can Factor:	**1.00**		Unit Factor	**20**		
Volume:	**1.00**	ml				

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	A LCS Area	B LCD Area
109-66-0	n-Pentane	10	P	**6.44**	**6.44**	**6.44**	**15813**	**15246**
110-54-3	n-Hexane	19	P	**7.83**	**7.83**	**7.83**	**22824**	**19756**
71-43-2	Benzene	27	P	**8.77**	**8.77**	**8.77**	**22089**	**19350**
142-82-5	n-Heptane	36	P	9.53	9.53	9.53	**24289**	**21697**
108-88-3	Toluene	43	P	**10.43**	**10.43**	**10.43**	**23364**	**18639**
111-65-9	n-Octane	53	P	11.26	11.26	11.26	**29373**	**24198**
108-38-3	m,p-xylene	57	P	12.40	12.40	12.40	**24232**	**19518**
95-47-6	o-xylene	63	P	12.81	12.81	12.81	**25081**	**21170**
108-67-8	1,3,5-Trimethylbenzene	72	P	14.00	14.00	14.00	**11651**	**11449**

CALCULATIONS

EPA Method TO-12 Total Non-Methane Hydrocarbons

Calibration	03/20/24		
Can Dilution Factor:	1.00		
Air Volume:	1		
Combined Factor:	0.001	1000.00	Basis
Gas Constant:	23.68		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV	Result mg/m3
n-Pentane	72.1	5	91	18.2	55.4
n-Hexane	86.2	6	131	21.9	79.7
Benzene	78.1	6	127	21.2	69.9
n-Heptane	100.2	7	140	20.0	84.5
Toluene	92.1	7	135	19.2	74.7
n-Octane	114.2	8	169	21.1	102.0
m,p-xylene	106.2	8	140	17.4	78.2
o-xylene	106.2	8	144	18.1	81.0
1,3,5-Trimethylbenzene	120.2	9	67	7.5	37.8

Compound	M.W.	Carbon #	Result ppmC	RESULTV ppmV
n-Pentane	72.1	5	88	17.6
n-Hexane	86.2	6	114	19.0
Benzene	78.1	6	111	18.6
n-Heptane	100.2	7	125	17.8
Toluene	92.1	7	107	15.3
n-Octane	114.2	8	139	17.4
m,p-xylene	106.2	8	112	14.0
o-xylene	106.2	8	122	15.2
1,3,5-Trimethylbenzene	120.2	9	66	7.3

QUALITY CONTROL REPORT

EPA Method TO-12 Total Non-Methane Hydrocarbons

LCS QC12044A **LCD** QC12044B

Date Analyzed: 12/04/24

QC_Batch: 120424-GCK

CAS#	Compound	MW	Spike PPBV	LCS ppbv	LCS ppbv	LCS %	LCL %	UCL %	Flag	LCD %	CL %	Flag
109-66-0	n-Pentane	72.1	17.9	18.2	18.2	101.8	70	130		3.7	25	
110-54-3	n-Hexane	86.2	20.4	21.9	21.9	107.2	70	130		14.4	25	
71-43-2	Benzene	78.1	19.9	21.2	21.2	106.6	70	130		13.2	25	
142-82-5	n-Heptane	100.2	18.9	20.0	20.0	105.6	70	130		11.3	25	
108-88-3	Toluene	92.1	17.3	19.2	19.2	111.2	70	130		22.5	25	
111-65-9	n-Octane	114.2	19.3	21.1	21.1	109.7	70	130		19.3	25	
108-38-3	m,p-xylene	106.2	15.7	17.4	17.4	110.8	70	130		21.5	25	
95-47-6	o-xylene	106.2	16.6	18.1	18.1	108.5	70	130		16.9	25	
108-67-8	1,3,5-Trimethylbenzene	120.2	7.4	7.5	7.5	100.9	70	130		1.7	25	

CAS#	Compound	MW	Spike Con PPBV	LCD ppbv	LCD ppbv	LCD %	LCL %	UCL %	Flag
109-66-0	n-Pentane	72.1	17.9	17.6	17.6	98.2	70	130	
110-54-3	n-Hexane	86.2	20.4	19.0	19.0	92.8	70	130	
71-43-2	Benzene	78.1	19.9	18.6	18.6	93.4	70	130	
142-82-5	n-Heptane	100.2	18.9	17.8	17.8	94.4	70	130	
108-88-3	Toluene	92.1	17.3	15.3	15.3	88.8	70	130	
111-65-9	n-Octane	114.2	19.3	17.4	17.4	90.3	70	130	
108-38-3	m,p-xylene	106.2	15.7	14.0	14.0	89.2	70	130	
95-47-6	o-xylene	106.2	16.6	15.2	15.2	91.5	70	130	
108-67-8	1,3,5-Trimethylbenzene	120.2	7.4	7.3	7.3	99.1	70	130	

Area Percent Report

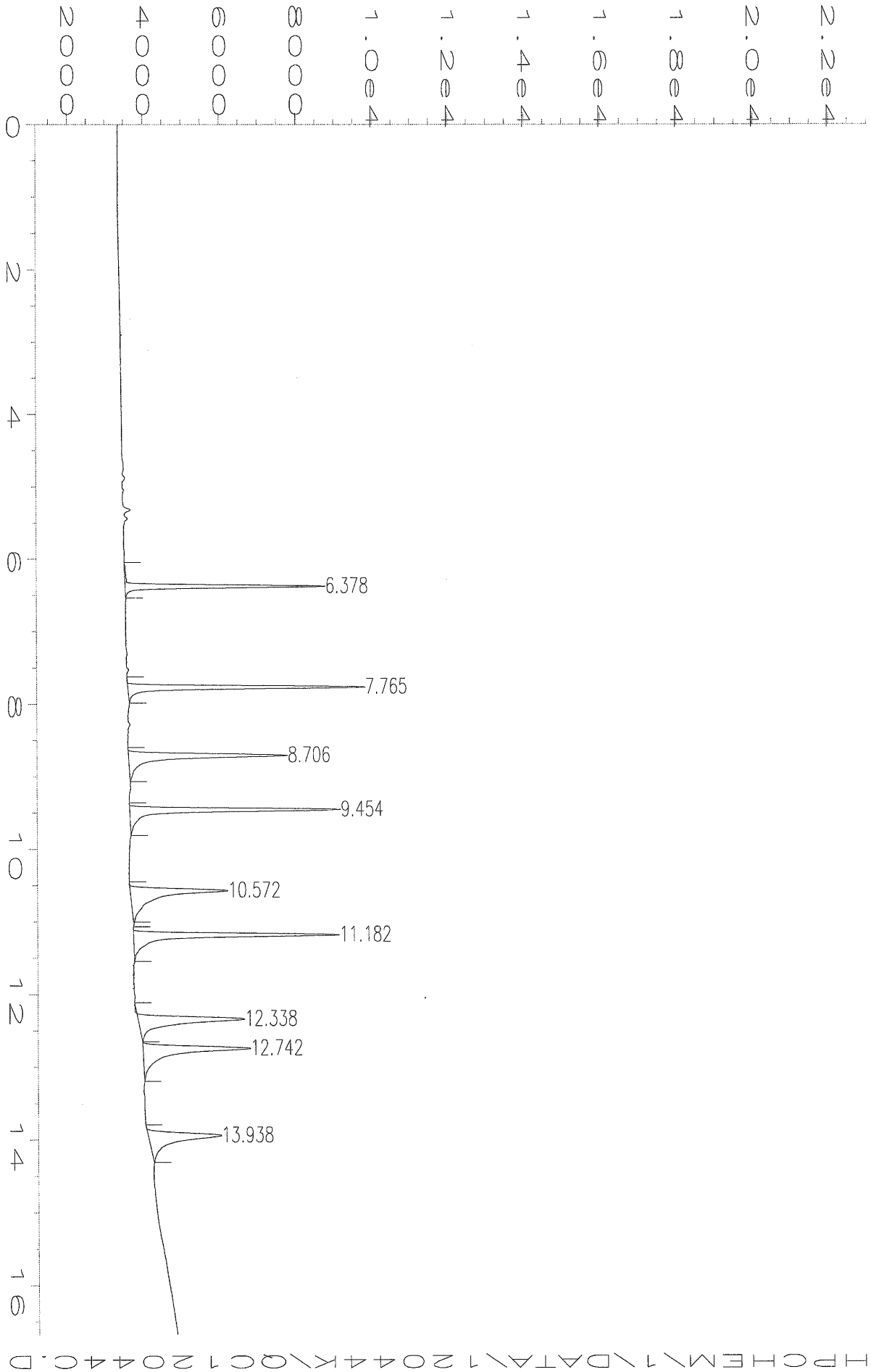
Data File Name : C:\HPCHEM\1\DATA\12044K\QC12044C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 04 Dec 24 10:18 AM
Report Created on: 04 Dec 24 10:35 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12044K\QC12044C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.378	15413	5238	BB	0.045	9.2907
2	7.765	19424	6216	BB	0.047	11.7088
3	8.706	19267	4160	BB	0.068	11.6140
4	9.454	20591	5524	BB	0.055	12.4120
5	10.572	17924	2553	BB	0.098	10.8049
6	11.182	22204	5390	BB	0.061	13.3848
7	12.338	17175	2789	BB	0.089	10.3529
8	12.742	18850	2809	BB	0.095	11.3627
9	13.938	15045	1920	BB	0.109	9.0693

Total area = 165892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Area Percent Report

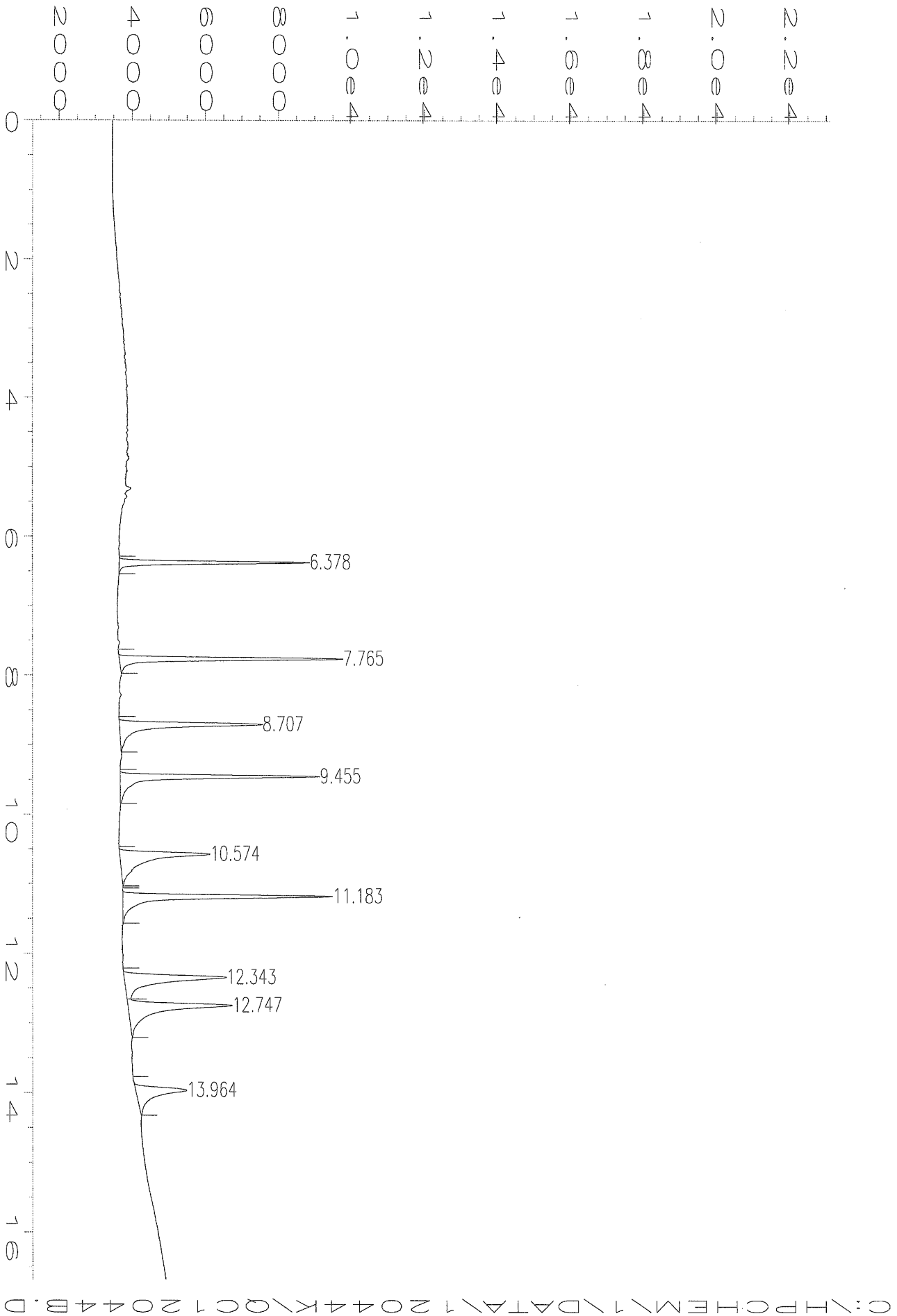
Data File Name : C:\HPCHEM\1\DATA\12044K\QC12044B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 04 Dec 24 09:30 AM
Report Created on: 04 Dec 24 09:46 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12044K\QC12044B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.378	15246	5226	BB	0.045	8.9148
2	7.765	19756	6132	BB	0.049	11.5518
3	8.707	19350	3917	BB	0.071	11.3143
4	9.455	21697	5477	BB	0.059	12.6866
5	10.574	18639	2467	BB	0.102	10.8984
6	11.183	24198	5739	BB	0.062	14.1491
7	12.343	19518	2788	BV	0.101	11.4123
8	12.747	21170	2854	VB	0.102	12.3783
9	13.964	11449	1396	BB	0.111	6.6943

Total area = 171024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Area Percent Report

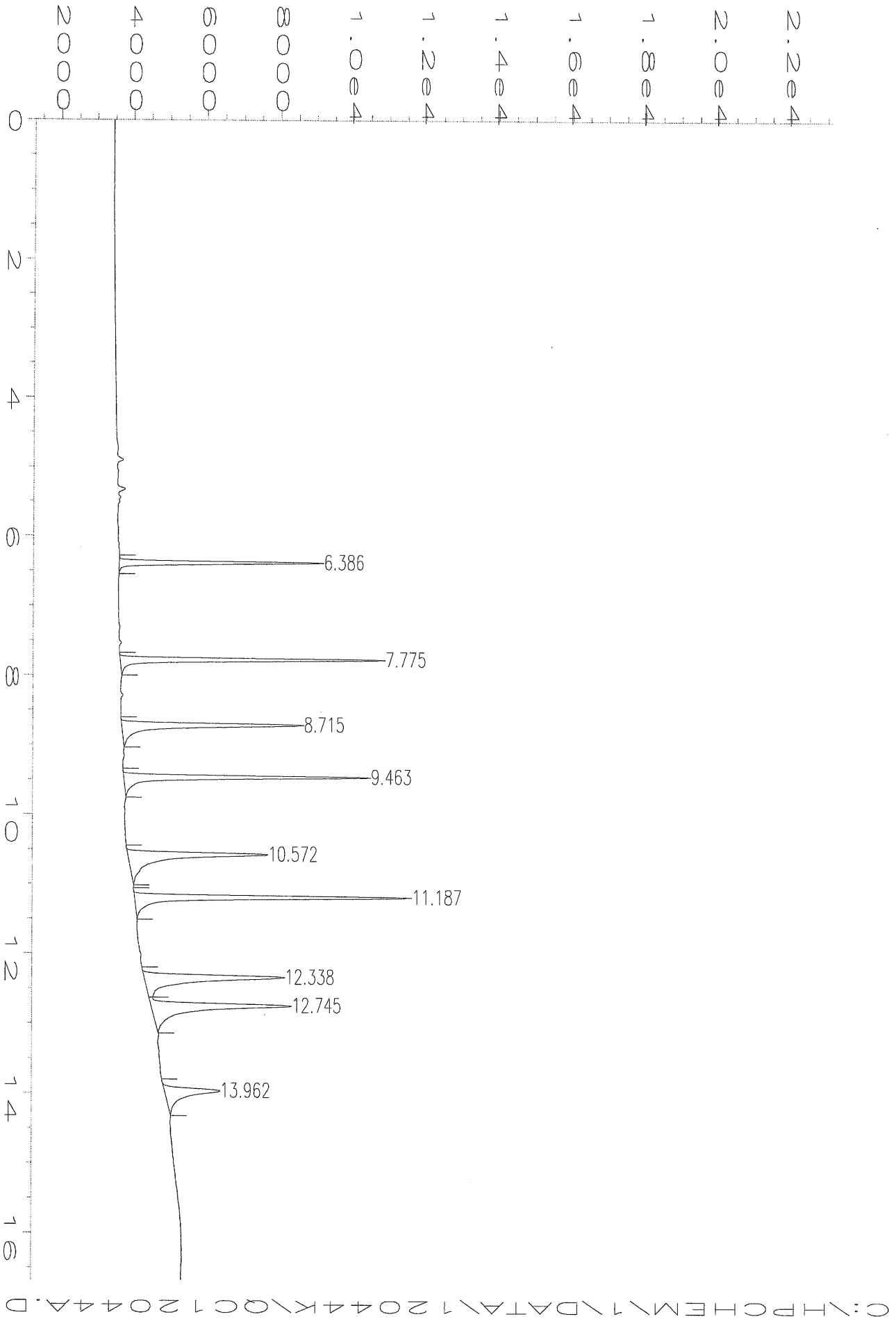
Data File Name : C:\HPCHEM\1\DATA\12044K\QC12044A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 04 Dec 24 08:58 AM
Report Created on: 04 Dec 24 09:15 AM
Sample Info : SPIKE, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12044K\QC12044A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.386	15813	5585	BB	0.044	7.9576
2	7.775	22824	7288	BB	0.048	11.4857
3	8.715	22089	4973	BB	0.067	11.1158
4	9.463	24289	6763	BB	0.055	12.2228
5	10.572	23364	3816	BB	0.087	11.7575
6	11.187	29373	7591	BB	0.058	14.7816
7	12.338	24232	3818	BV	0.091	12.1943
8	12.745	25081	3815	VB	0.093	12.6216
9	13.962	11651	1506	BB	0.108	5.8631

Total area = 198716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Continuing Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B11224
Date: 11/22/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) RRF = (Astdni) / (Cstdni)

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	310466	18.050	17200	21212	-18.9	30	IN

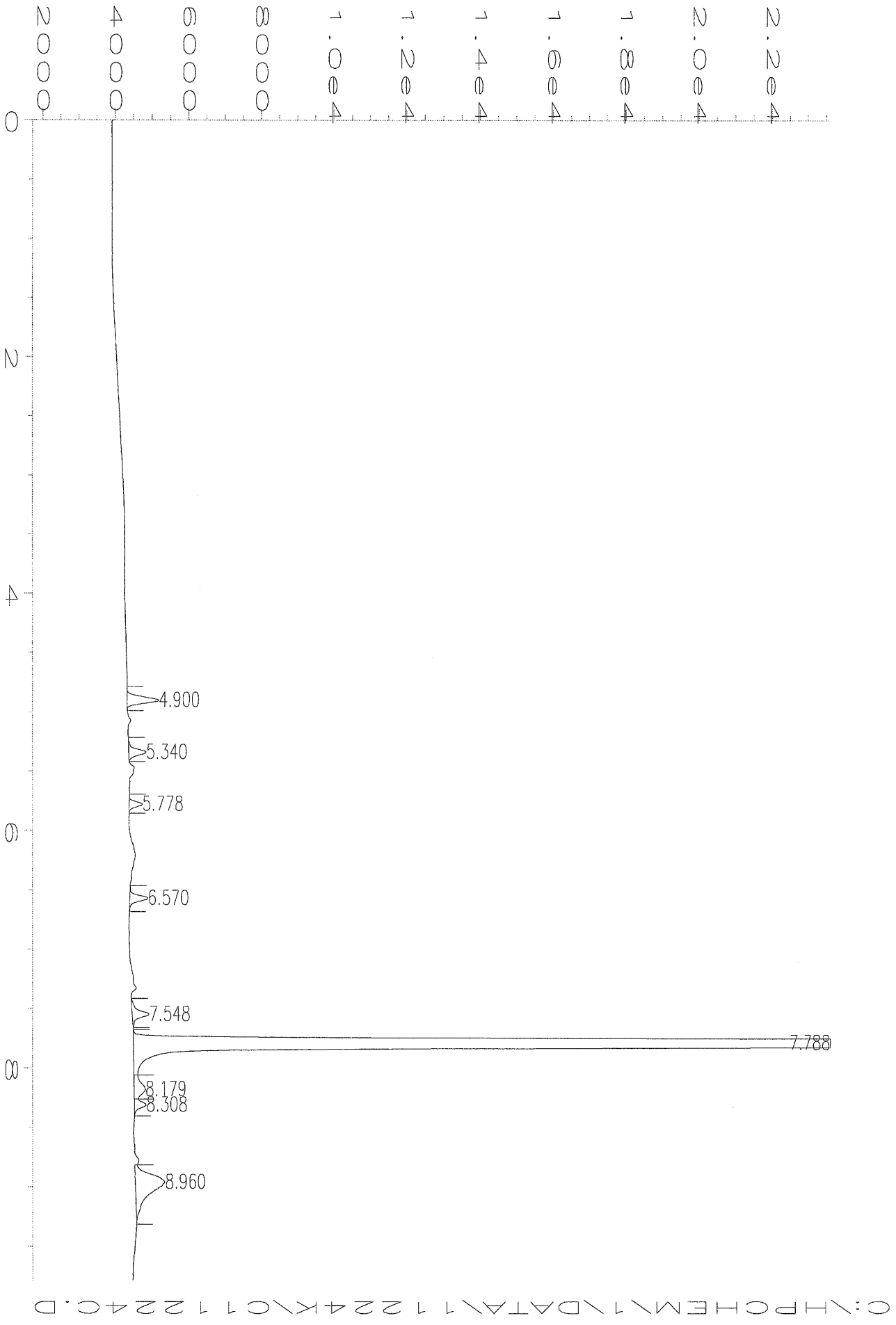
Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\11224K\C11224C.D
Operator : TR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : ST62344
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 22 Nov 24 09:29 AM
Instrument Method: GC1SHORT.MTH
Report Created on: 22 Nov 24 09:38 AM
Analysis Method : GC1SHORT.MTH
Sample Info : 1 ML STANDARD

Sig. 1 in C:\HPCHEM\1\DATA\11224K\C11224C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.900	3098	852	BV	0.056	0.9328
2	5.340	1667	461	BV	0.055	0.5018
3	5.778	1053	347	BB	0.046	0.3172
4	6.570	1622	481	BB	0.053	0.4885
5	7.548	1922	450	BB	0.061	0.5787
6	7.788	310466	100632	BV	0.048	93.4848
7	8.179	2237	298	VV	0.095	0.6737
8	8.308	1146	315	VB	0.057	0.3452
9	8.960	8891	799	VB	0.133	2.6773

Total area = 332103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CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B11254
Date: 11/25/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) $RRF = \frac{(Astdni)}{(Cstdni)}$

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	318104	18.050	17623	21212	-16.9	30	IN

Area Percent Report

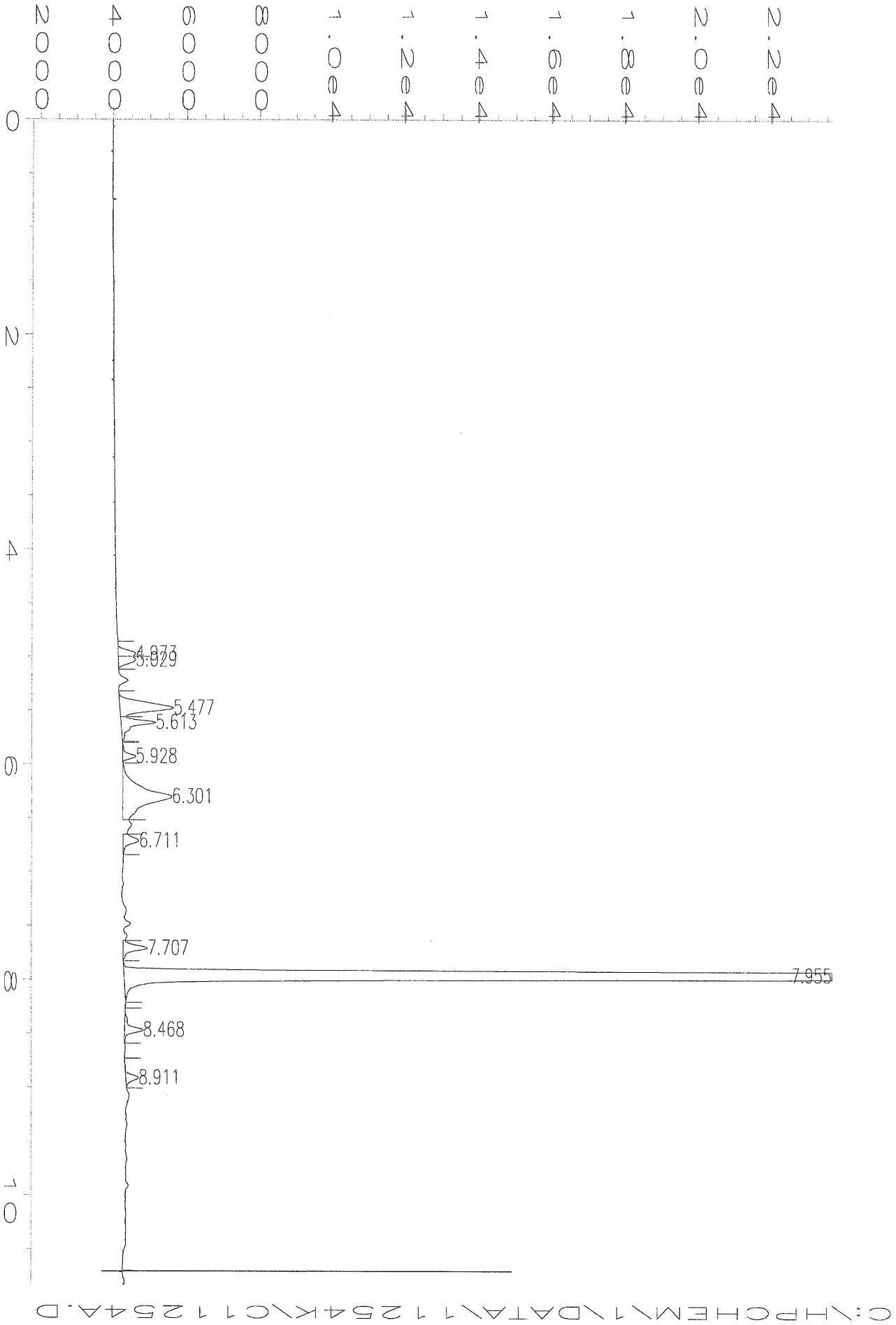
Data File Name : C:\HPCHEM\1\DATA\11254K\C11254A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 25 Nov 24 08:30 AM
Report Created on: 25 Nov 24 08:41 AM
Sample Info : 1 ML, STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11254K\C11254A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.973	1648	466	BV	0.054	0.4614
2	5.029	2003	466	VB	0.059	0.5607
3	5.477	8175	1444	BV	0.085	2.2890
4	5.613	3861	929	VB	0.061	1.0812
5	5.928	1203	356	BV	0.051	0.3369
6	6.301	14301	1317	VV	0.145	4.0042
7	6.711	1929	427	VB	0.069	0.5403
8	7.707	2525	658	VV	0.058	0.7069
9	7.955	318104	106227	PB	0.047	89.0675
10	8.468	2110	499	BB	0.063	0.5909
11	8.911	1290	342	BB	0.059	0.3611

Total area = 357149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7.955
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8.911
C:\HPCHEM\1\DATA\1 1 254K\C1 1 254A.D

CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B11264
Date: 11/26/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) $RRF = \frac{(Astdni)}{(Cstdni)}$

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	343092	18.050	19008	21212	-10.4	30	IN

==========

Area Percent Report

==========

11264K\C11264A.D ST62344

Data File Name : C:\HPCHEM\1\DATA\~~11254K\2443516A~~.D T.R. - 11/26/2024

Operator : SS

Page Number : 1

Instrument : ANALYZER1

Vial Number :

Sample Name : T-416

Injection Number :

Run Time Bar Code:

Sequence Line :

Acquired on : 26 Nov 24 08:51 AM

Instrument Method: GC1SHORT.MTH

Report Created on: 26 Nov 24 09:01 AM

Analysis Method : GC1SHORT.MTH

Sample Info : SCHMIDT, 200 ML

Sig. 1 in C:\HPCHEM\1\DATA\11254K\2443516A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.963	4304	934	BV	0.070	1.1889
2	5.408	2997	708	BV	0.064	0.8277
3	5.533	300	147	PV	0.033	0.0827
4	5.846	1308	417	BB	0.049	0.3613
5	6.241	4874	568	BV	0.113	1.3463
6	6.637	1695	525	BB	0.050	0.4681
7	7.624	1424	447	BB	0.044	0.3934
8	7.866	343092	112835	BB	0.048	94.7676
9	8.382	2042	390	BV	0.073	0.5640

Total area = 362035

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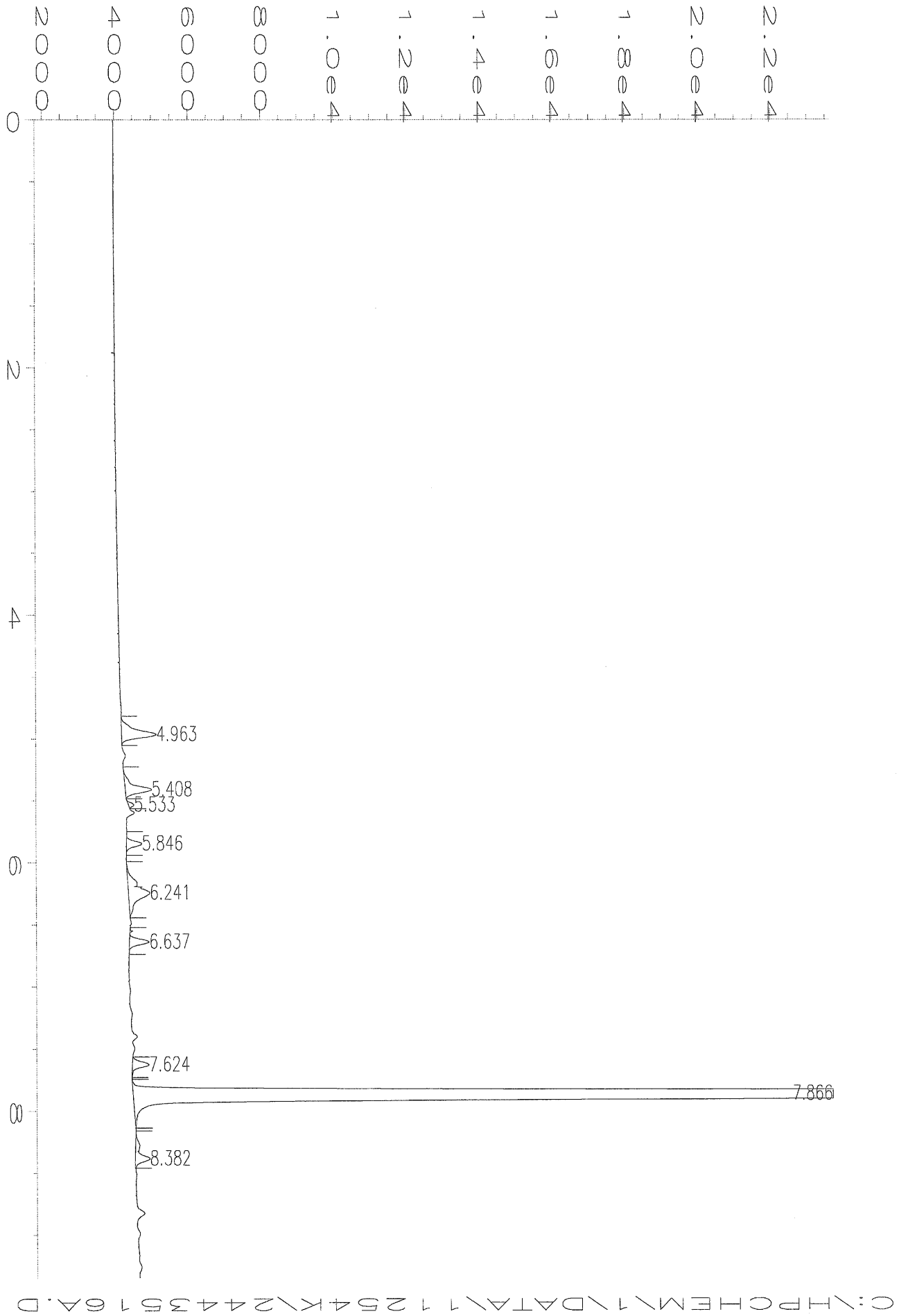
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C:\HPCHEM\1\DATA\1 1 254K\244351 6A.D

CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B11274
Date: 11/27/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) $RRF = \frac{(Astdni)}{(Cstdni)}$

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	335843	18.050	18606	21212	-12.3	30	IN

Area Percent Report

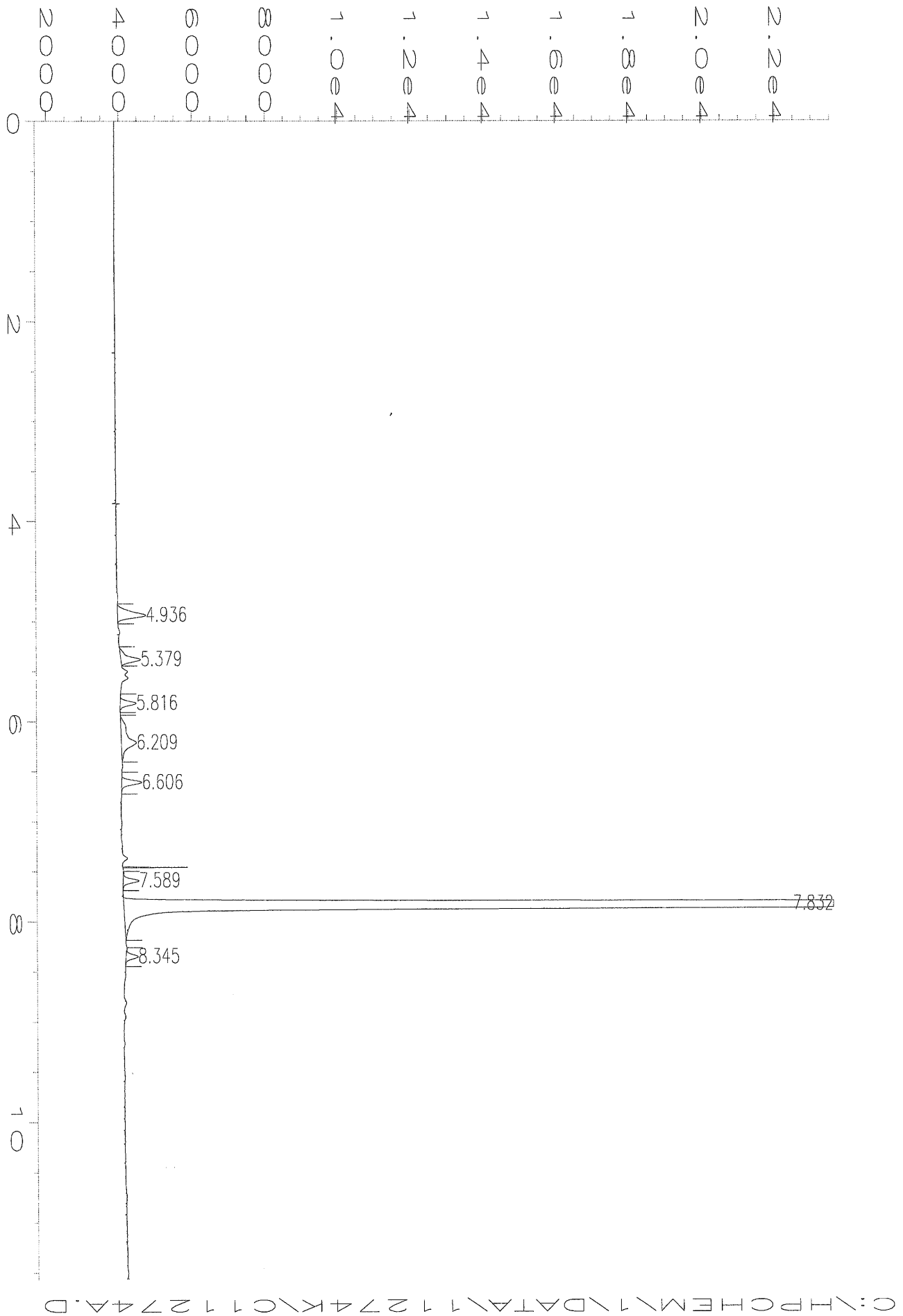
Data File Name : C:\HPCHEM\1\DATA\11274K\C11274A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 27 Nov 24 08:32 AM
Report Created on: 27 Nov 24 08:43 AM
Sample Info : STANDARD, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\11274K\C11274A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.936	3391	761	BB	0.066	0.9664
2	5.379	2177	538	BV	0.063	0.6204
3	5.816	1349	439	BB	0.047	0.3843
4	6.209	3967	416	BB	0.125	1.1305
5	6.606	1793	553	BB	0.051	0.5110
6	7.589	1322	435	BB	0.048	0.3769
7	7.832	335843	115307	BB	0.046	95.7083
8	8.345	1061	330	BB	0.050	0.3023

Total area = 350903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CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B12024
Date: 12/02/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) $RRF = \frac{(Astdni)}{(Cstdni)}$

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	364162	18.050	20175	21212	-4.9	30	IN

Area Percent Report

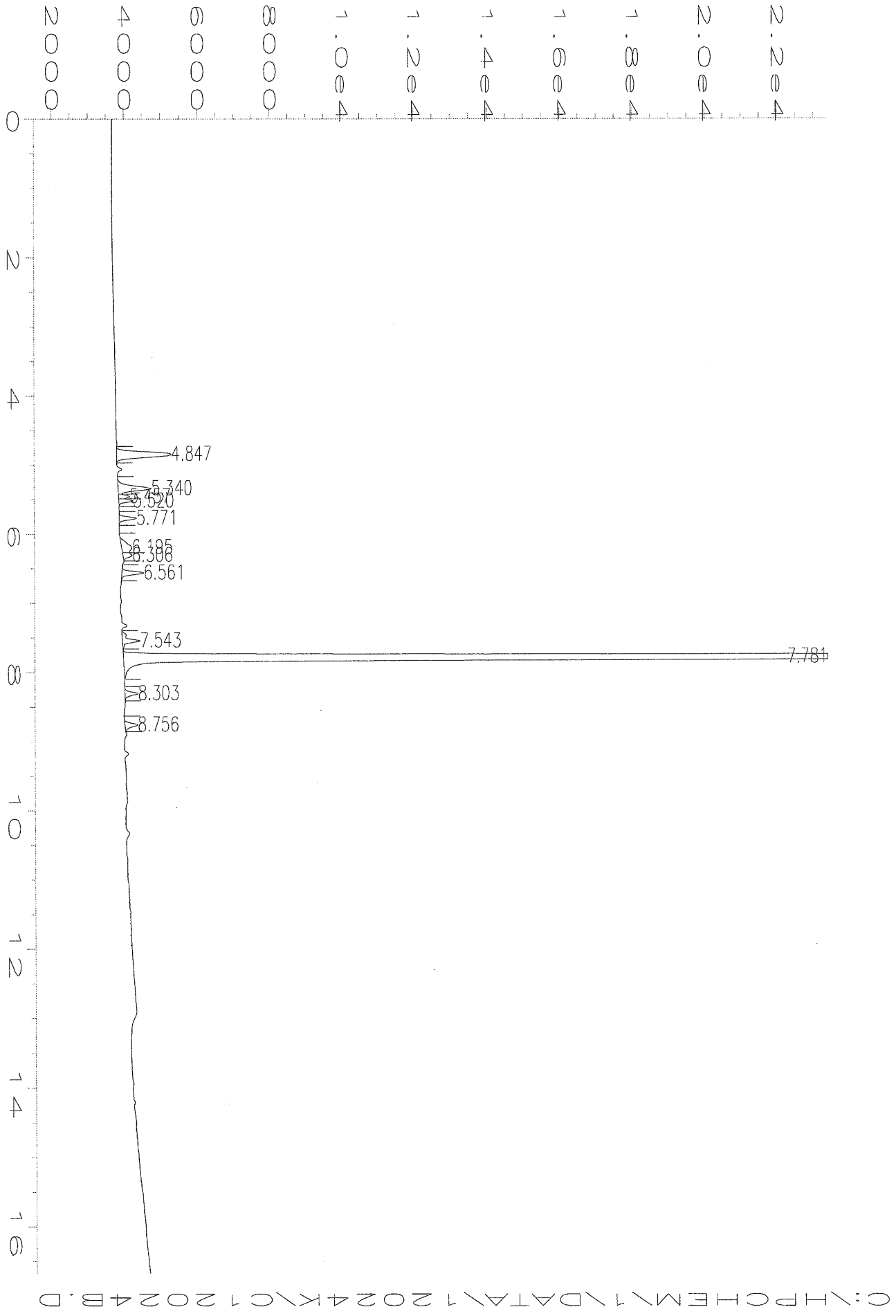
Data File Name : C:\HPCHEM\1\DATA\12024K\C12024B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 02 Dec 24 08:38 AM
Report Created on: 02 Dec 24 08:55 AM
Sample Info : STANDARD, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12024K\C12024B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.847	8113	1478	BB	0.089	2.0802
2	5.340	4336	898	BV	0.071	1.1117
3	5.457	884	302	VV	0.044	0.2267
4	5.520	1104	385	VB	0.044	0.2832
5	5.771	1476	473	BB	0.049	0.3785
6	6.195	2222	280	BV	0.105	0.5696
7	6.306	1053	243	VB	0.063	0.2700
8	6.561	1985	591	BB	0.053	0.5089
9	7.543	2043	474	BB	0.063	0.5238
10	7.781	364162	116767	BB	0.049	93.3727
11	8.303	1278	363	BB	0.051	0.3276
12	8.756	1354	350	BV	0.057	0.3472

Total area = 390009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CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B12034
Date: 12/03/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) $RRF = \frac{(Astdni)}{(Cstdni)}$

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	367502	18.050	20360	21212	-4.0	30	IN

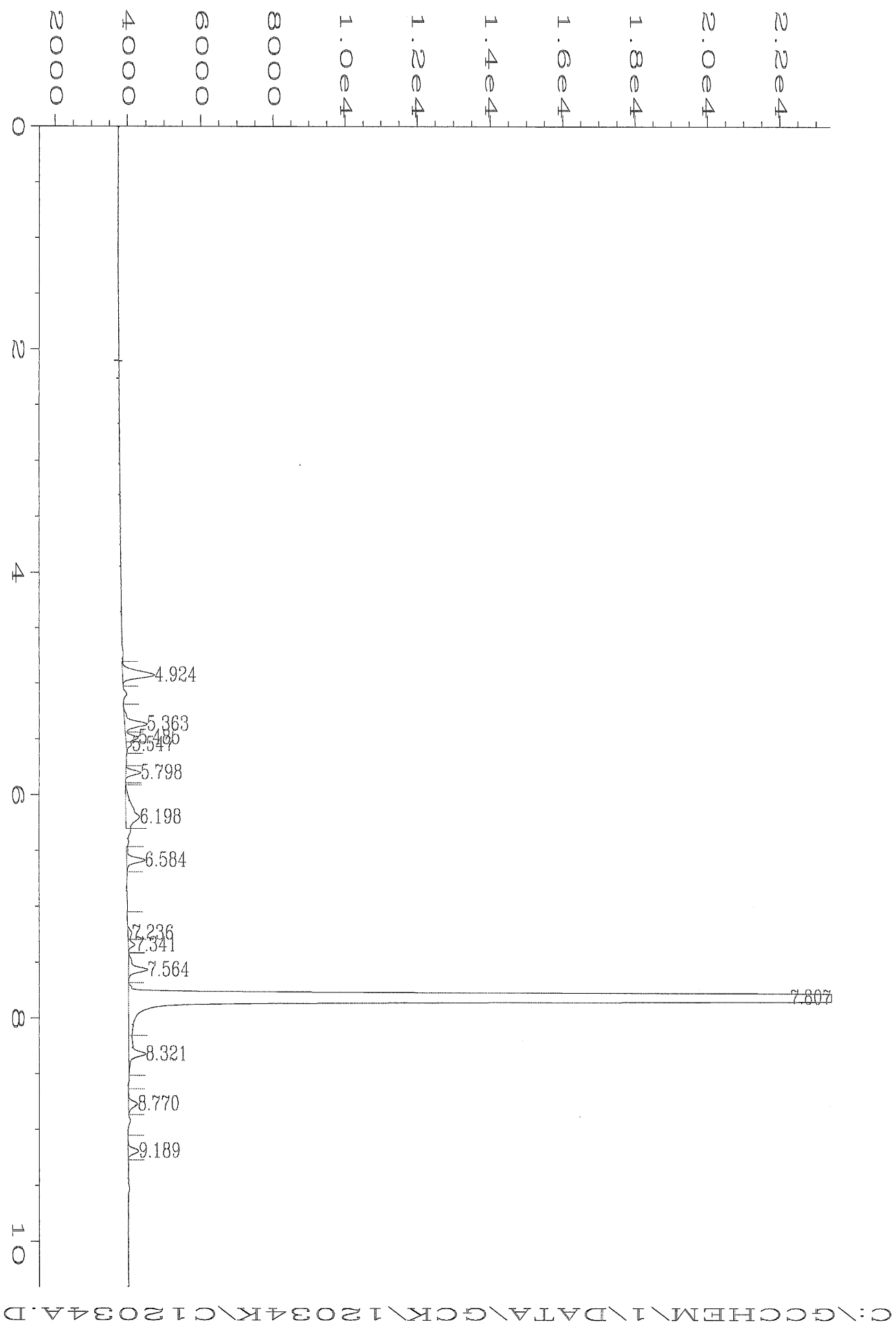
Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\GCK\12034K\C12034A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 03 Dec 24 08:04 AM
Report Created on: 03 Dec 24 01:01 PM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : DEFAULT.MTH

Sig. 1 in C:\GCCHEM\1\DATA\GCK\12034K\C12034A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.924	3911	876	BV	0.067	1.0029
2	5.363	2549	612	BV	0.061	0.6536
3	5.485	1084	344	VV	0.049	0.2779
4	5.547	443	156	VB	0.041	0.1137
5	5.798	1212	404	BB	0.043	0.3108
6	6.198	3839	374	BV	0.130	0.9844
7	6.584	1821	493	VB	0.056	0.4670
8	7.236	443	106	BV	0.059	0.1137
9	7.341	545	174	VB	0.048	0.1397
10	7.564	2093	517	BV	0.056	0.5367
11	7.807	367502	123839	PV	0.046	94.2348
12	8.321	2564	452	VB	0.078	0.6575
13	8.770	956	242	BV	0.057	0.2451
14	9.189	1022	284	BB	0.058	0.2620

Total area = 389986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C:\GCCHEM\1\DATA\GCK\1203AK\C1203A.D

CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: B12044
Date: 12/04/24
Cal Update: 03/20/24
Standard 18.05
Standard Volume 1.0
Standard ID: 1

Sample Calculation:

1) $RRF = \frac{(Astdni)}{(Cstdni)}$

For EPA PAMS Method the Concentrations of Individual Compounds are Calculated form Daily Hexane Std.

Compound	Area Astdi	Cal Level Cstdi ppbv	Daily RRF	ICAL RRF	%DEV	%DEV LIMIT	%DEV FLAG
Hexane	366002	18.050	20277	21212	-4.4	30	IN

Area Percent Report

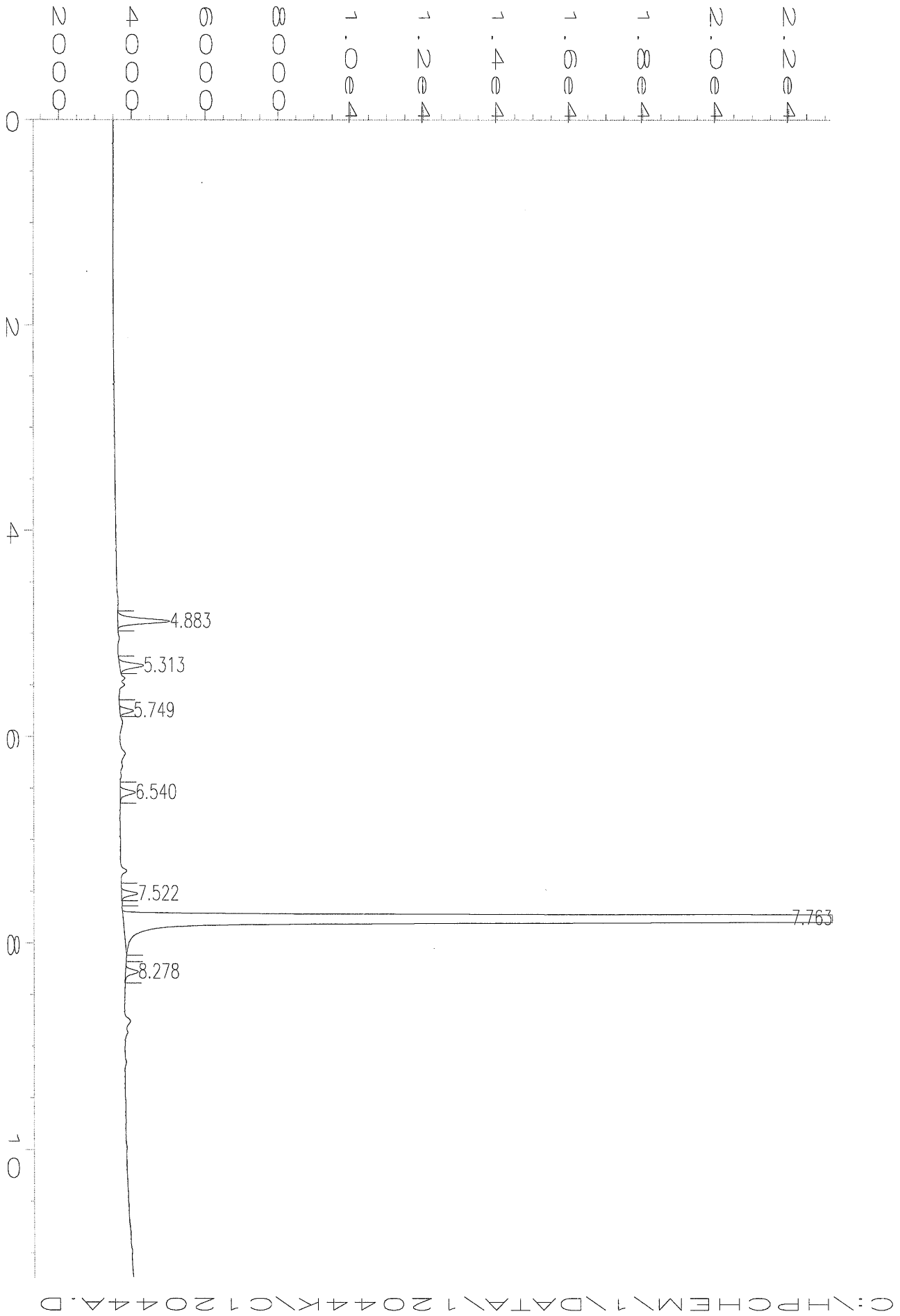
Data File Name : C:\HPCHEM\1\DATA\12044K\C12044A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 04 Dec 24 08:15 AM
Report Created on: 04 Dec 24 08:26 AM
Sample Info : STANDARD, 1 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\12044K\C12044A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.883	4961	1413	BB	0.054	1.3125
2	5.313	2184	651	BV	0.052	0.5778
3	5.749	1023	366	BV	0.046	0.2708
4	6.540	1370	410	BB	0.051	0.3625
5	7.522	1280	442	BB	0.044	0.3388
6	7.763	366002	126224	BB	0.045	96.8360
7	8.278	1140	344	BB	0.050	0.3017

Total area = 377960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Initial Calibration Data Packages

Samples were analyzed using the methods listed in Section 3. For each of the methods there is an Initial Calibration Curve that meets the criteria defined in Section 2 on Quality Control for the modified method.

Index

Response Factors
Instrument Quant Report
Chromatogram

INITIAL CALIBRATION REPORT: Response Factors

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

QC_Batch: **032024-GCK**
Initial Cali Date: 03/20/24

Sample Calculation:

1) Avg RFn = $\text{Sum} \left| \frac{(\text{Astdni})}{(\text{Cstdni})} \right|_i$

Response Factors

Compound	RF1	RF2	RF4	RF5	RF7	RF8	AvgRFn	%RSD	AngRF C Ratio
Hexane	29265	20662	21199	19330	18425	18393	21212	19.37	**2.12E+04**

INITIAL CALIBRATION REPORT

GC/FID Methods EPA TO-03, EPA TO-12, EPA-TO15 FID, EPA-TO-14 , EPA 18 M

SDG: LABQC
QC_Batch: 032024-GCK
Initial Cal Date: 3/20/24
Standard ST2344
Std Concentration 18.05 ppmV

	Calibration Amount CA, ppbv						Calibration Response, Area					
	Level 1	Level 2	Level 4	Level 5	Level 7	Level 8	Level 1	Level 2	Level 4	Level 5	Level 7	Level 8
	Amt	Amt	Amt	Amt	Amt	Amt	C03204A	C03204D	C03204E	C03204F	C03204G	C03204H
Compound	0.03	0.10	0.50	1.00	5.00	10.00	0.030	0.10	0.50	1.00	5.00	10.00
Hexane	**0.54**	**1.81**	**9.03**	**18.05**	**90.25**	**180.50**	**15847**	**37295**	**191321**	**348899**	**1662876**	**3319979**

Hexane ppbc **0.090**

'$%	581	,167	7<3(	6'*	,'	)ID,'	&DQ	'HVFULSWRQ	&RQF	9RO	7HK	4XDO	0HWKRG	&RPPHQW	4HGW	3URF
032024-GCK	01	GCK	BLK		B03204A		METHOD BLANK			1000	TR		GC1SHO			
032024-GCK	02	GCK	STD		C03204A		ST62344		HEXANE CURVE	0.03	TR		GC1SHO			
032024-GCK	03	GCK	STD		C03204B		ST62344			0.03	TR		GC1SHO			
032024-GCK	04	GCK	STD		C03204C		ST62344			0.1	TR		GC1SHO			
032024-GCK	05	GCK	STD		C03204D		ST62344			0.1	TR		GC1SHO			
032024-GCK	06	GCK	STD		C03204E		ST62344			0.5	TR		GC1SHO			
032024-GCK	08	GCK	STD		C03204F		ST62344			1.0	TR		GC1SHO			
032024-GCK	09	GCK	STD		C03204G		ST62344			5.0	TR		GC1SHO			
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Area Percent Report

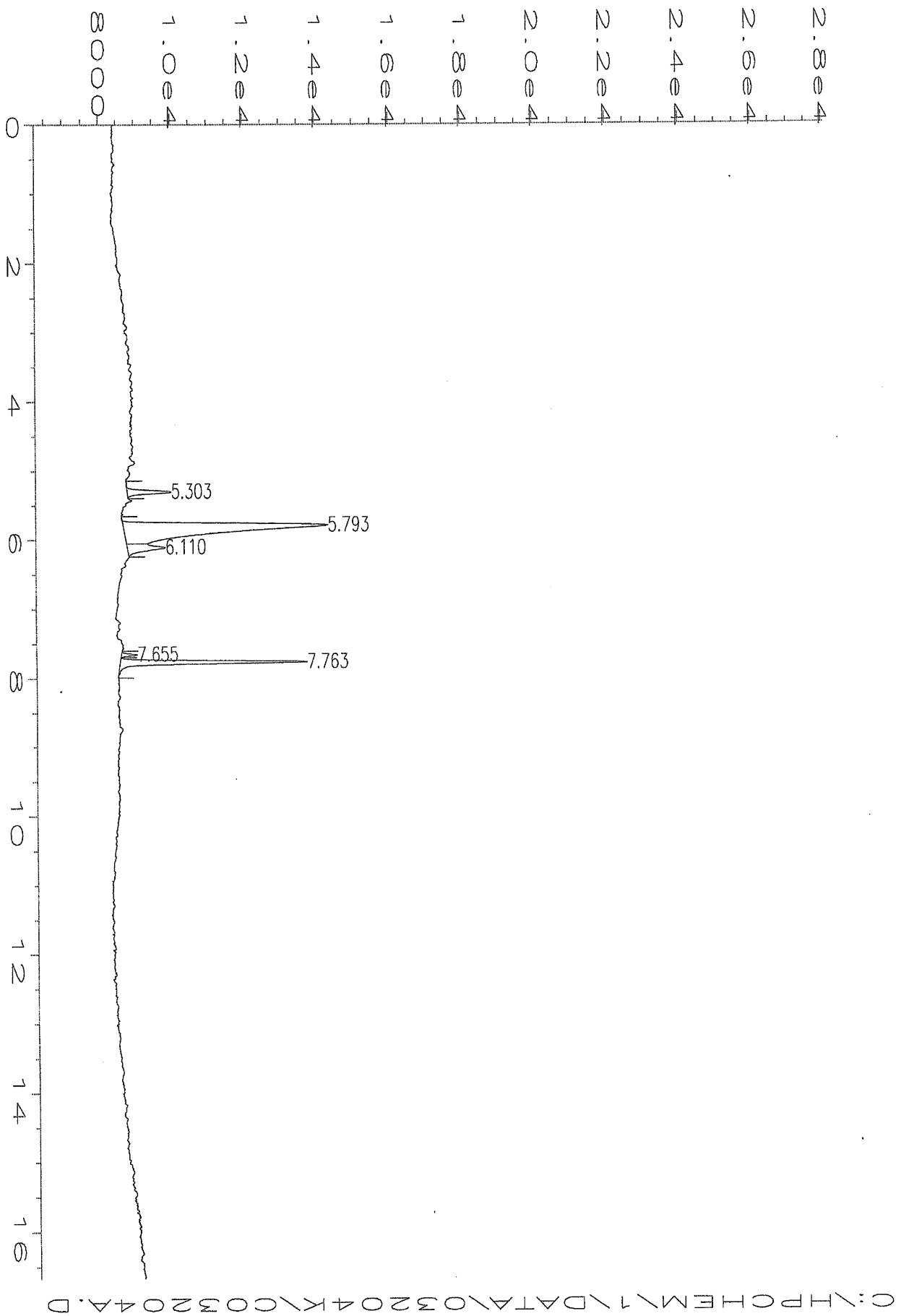
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 11:10 AM
Report Created on: 20 Mar 24 11:27 AM
Sample Info : 0.03 ML

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.303	4105	1207	BV	0.054	5.3069
2	5.793	50811	5635	BV	0.124	65.6883
3	6.110	5640	1045	VV	0.075	7.2914
4	7.655	948	445	BV	0.033	1.2258
5	7.763	15847	5157	PB	0.048	20.4875

Total area = 77351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Area Percent Report

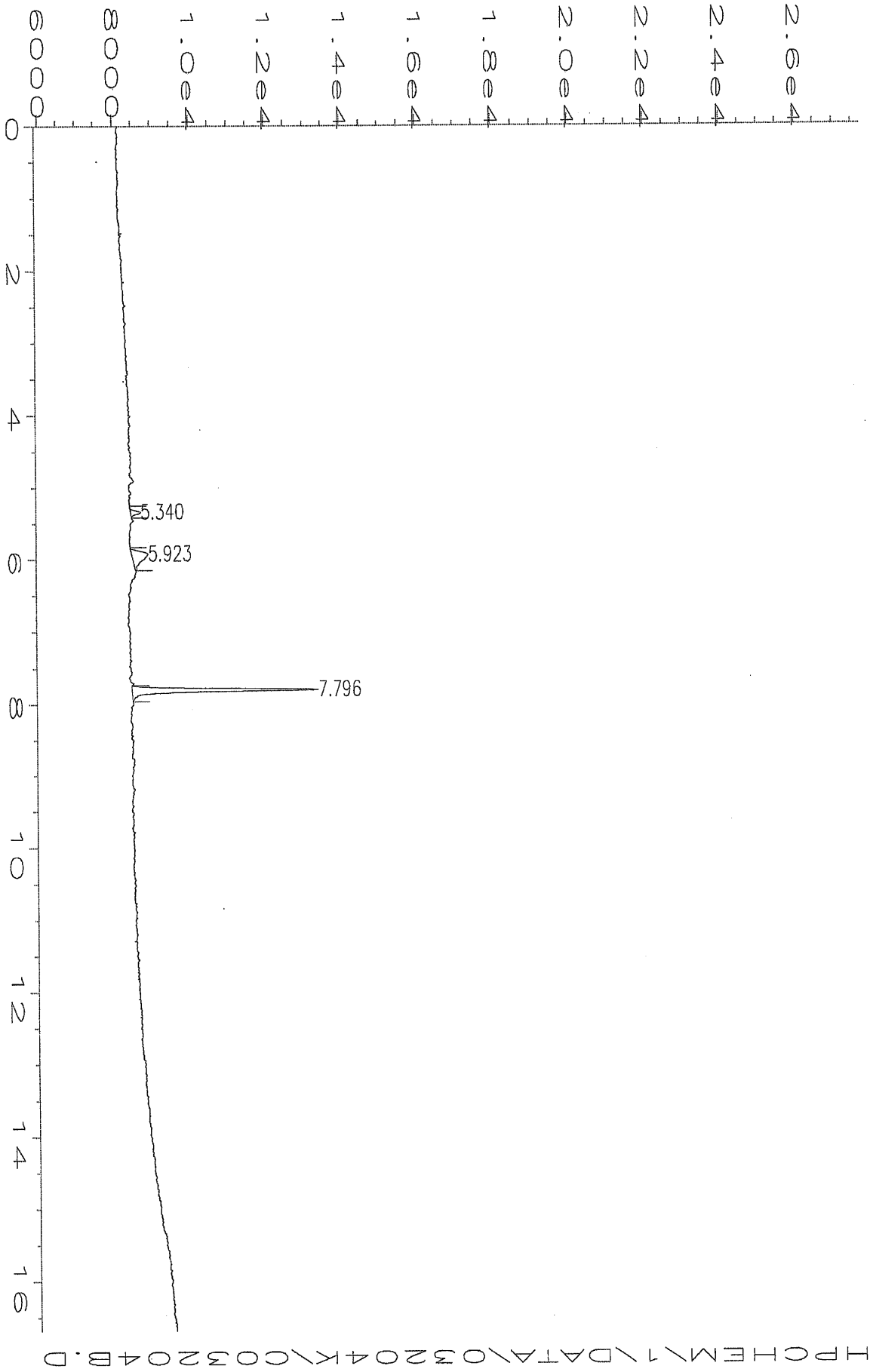
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 11:44 AM
Report Created on: 20 Mar 24 12:01 PM
Sample Info : 0.03 ML, HEXANE STD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.340	864	264	BV	0.052	4.3611
2	5.923	3873	438	BV	0.118	19.5460
3	7.796	15079	4901	VV	0.048	76.0929

Total area = 19816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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\03204K\C03204C.D
Operator : TR
Page Number : 1
Instrument : ANALYZER1
Vial Number :
Sample Name : CURVE
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 20 Mar 24 12:22 PM
Instrument Method: GC1SHORT.MTH
Report Created on: 20 Mar 24 12:39 PM
Analysis Method : GC1SHORT.MTH
Sample Info : 0.1 ML, HEXANE STD

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.328	1053	312	BV	0.053	2.6078
2	5.931	3270	385	PV	0.108	8.0991
3	7.786	36054	12040	VB	0.046	89.2931

Total area = 40378

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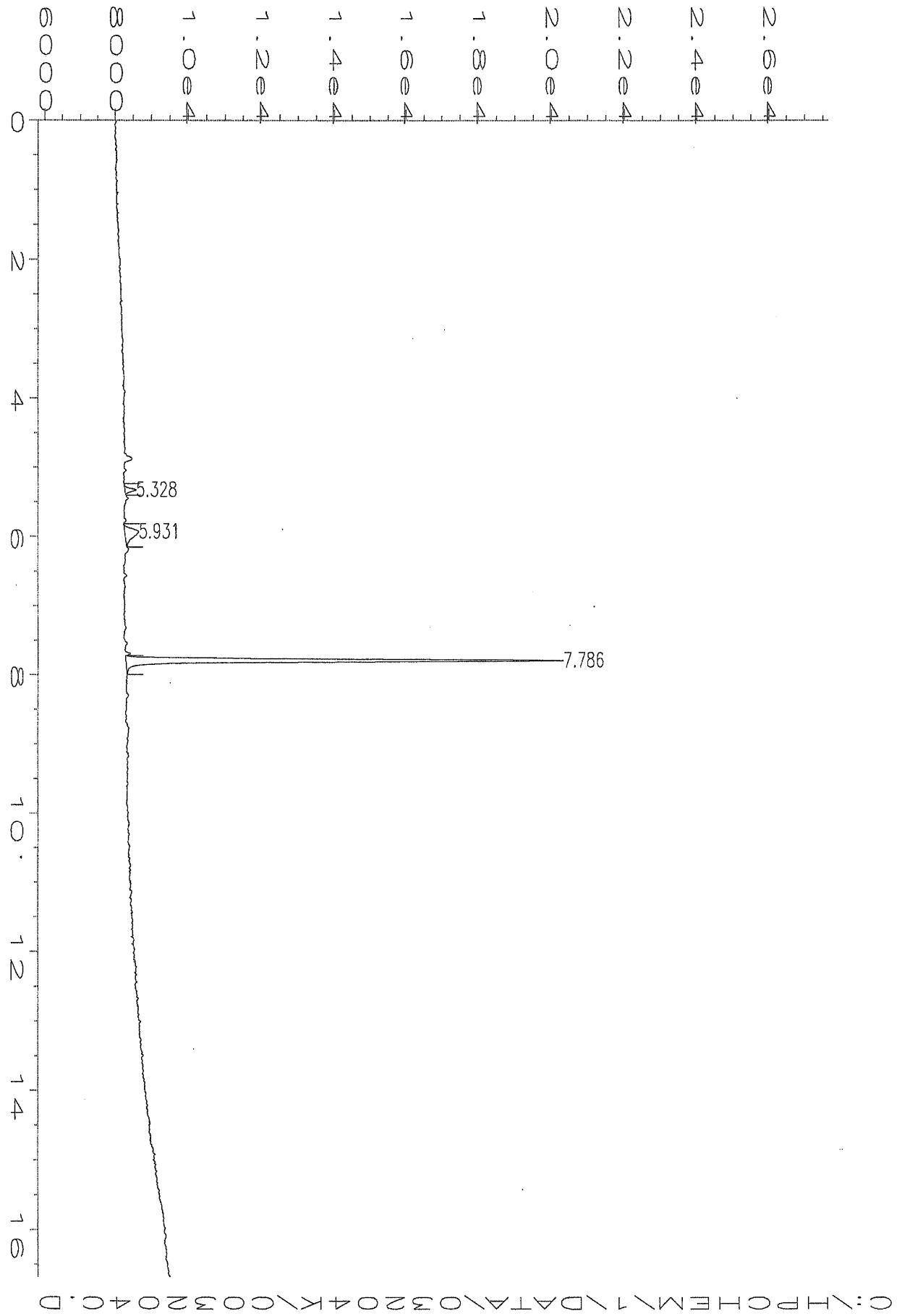
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Area Percent Report

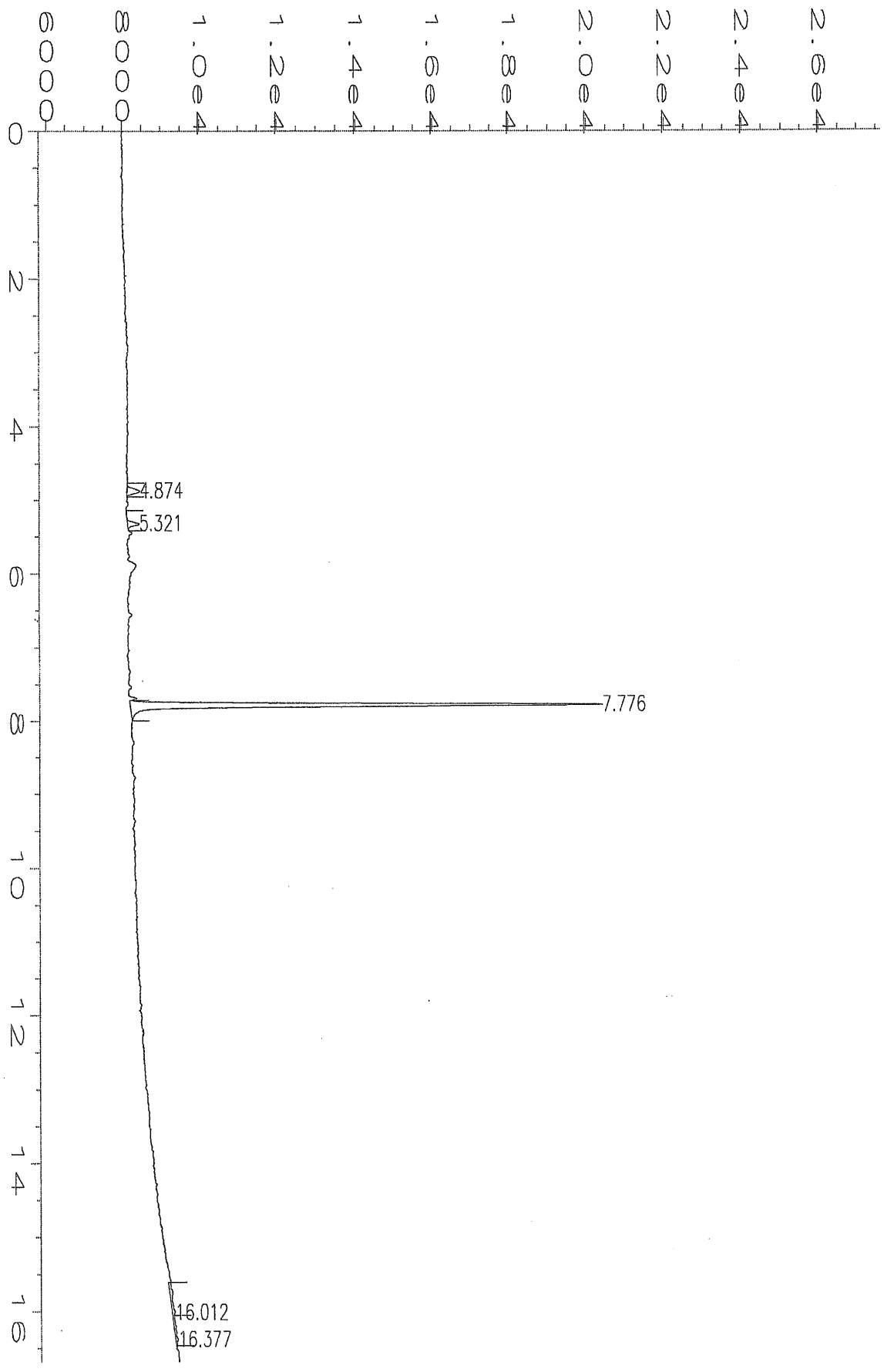
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204D.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 01:03 PM
Report Created on: 20 Mar 24 01:20 PM
Sample Info : 0.1 ML, HEXANE STD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204D.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.874	1433	329	BV	0.063	3.4118
2	5.321	951	301	BV	0.049	2.2624
3	7.776	37295	12207	VB	0.047	88.7696
4	16.012	1425	75	VV	0.235	3.3923
5	16.377	909	62	VB	0.178	2.1639

Total area = 42014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2.6e4
0
2
4
6
8
10
12
14
16
4.874
5.321
7.776
16.012
16.377
C:\HPCHEM\1\DATA\032004K\CO32004D.D

Area Percent Report

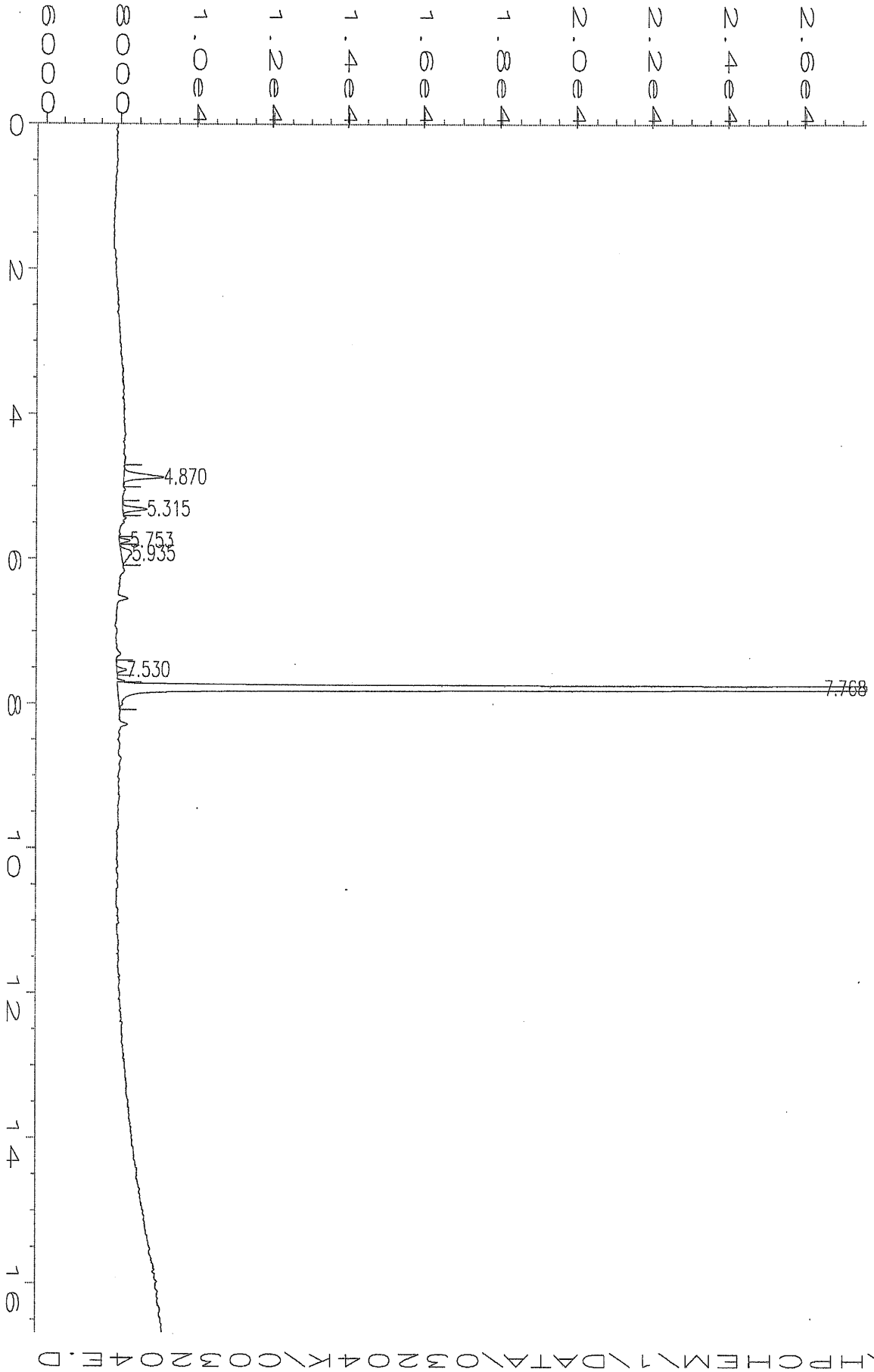
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204E.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 01:34 PM
Report Created on: 20 Mar 24 01:51 PM
Sample Info : 0.5 ML, HEXANE STD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204E.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.870	4595	1015	BV	0.068	2.2761
2	5.315	2198	618	PV	0.055	1.0885
3	5.753	793	274	BV	0.046	0.3927
4	5.935	2174	268	PB	0.100	1.0767
5	7.530	806	255	BB	0.046	0.3993
6	7.768	191321	64099	VV	0.046	94.7668

Total area = 201886


4.870
5.315
5.753
5.935
7.530
7.768
C:\HPCHEM\1\DATA\032004K\CO32004E.D

Area Percent Report

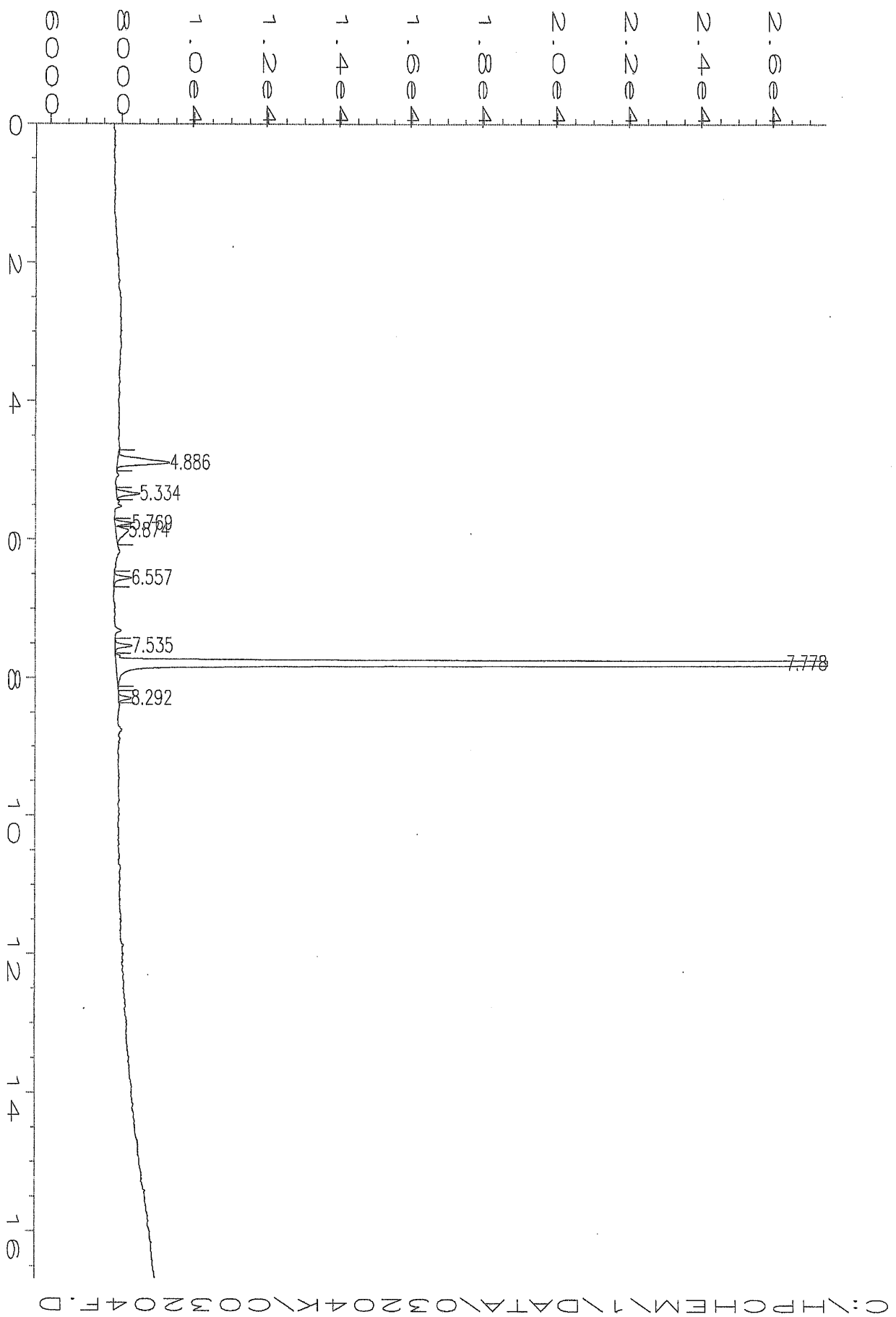
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204F.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 02:09 PM
Report Created on: 20 Mar 24 02:26 PM
Sample Info : 1.0 ML, HEXANE STD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204F.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.886	7919	1430	BV	0.083	2.1528
2	5.334	2341	645	BV	0.054	0.6363
3	5.769	1464	474	BV	0.049	0.3981
4	5.874	2714	362	VB	0.105	0.7377
5	6.557	1770	485	BB	0.055	0.4811
6	7.535	1625	491	BV	0.051	0.4417
7	7.778	348899	119105	PB	0.046	94.8471
8	8.292	1123	349	BB	0.050	0.3053

Total area = 367854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2
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6
8
10
12
14
16
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5.334
5.760
5.874
6.557
7.535
7.778
8.292
C:\HPCHEM\1\DATA\0320AK\CO320AF.D

Area Percent Report

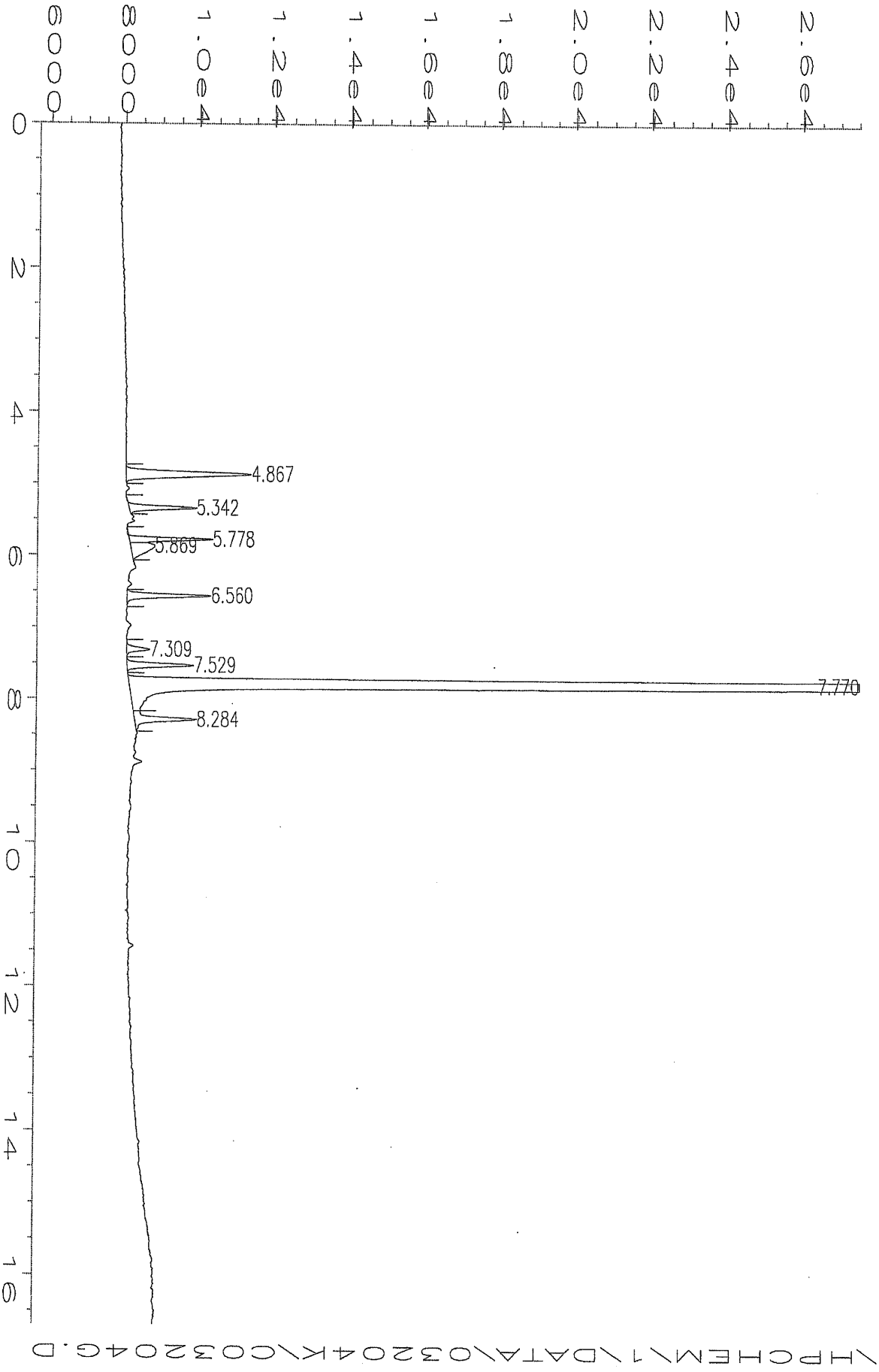
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204G.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 02:50 PM
Report Created on: 20 Mar 24 03:07 PM
Sample Info : 5.0 ML, HEXANE STD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204G.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.867	16622	3328	BV	0.073	0.9655
2	5.342	6288	1802	BV	0.054	0.3652
3	5.778	6671	2216	BV	0.047	0.3875
4	5.869	5516	652	VV	0.114	0.3204
5	6.560	7636	2227	PB	0.053	0.4435
6	7.309	2337	616	BV	0.059	0.1358
7	7.529	6454	1766	PV	0.059	0.3749
8	7.770	1662876	487191	PV	0.054	96.5870
9	8.284	7235	1641	VB	0.066	0.4202

Total area = 1721635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2.6e4
0
2
4
6
8
10
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4.867
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8.284
C:\HPCHEM\1\DATA\032O4K\CO32O4G.D

Area Percent Report

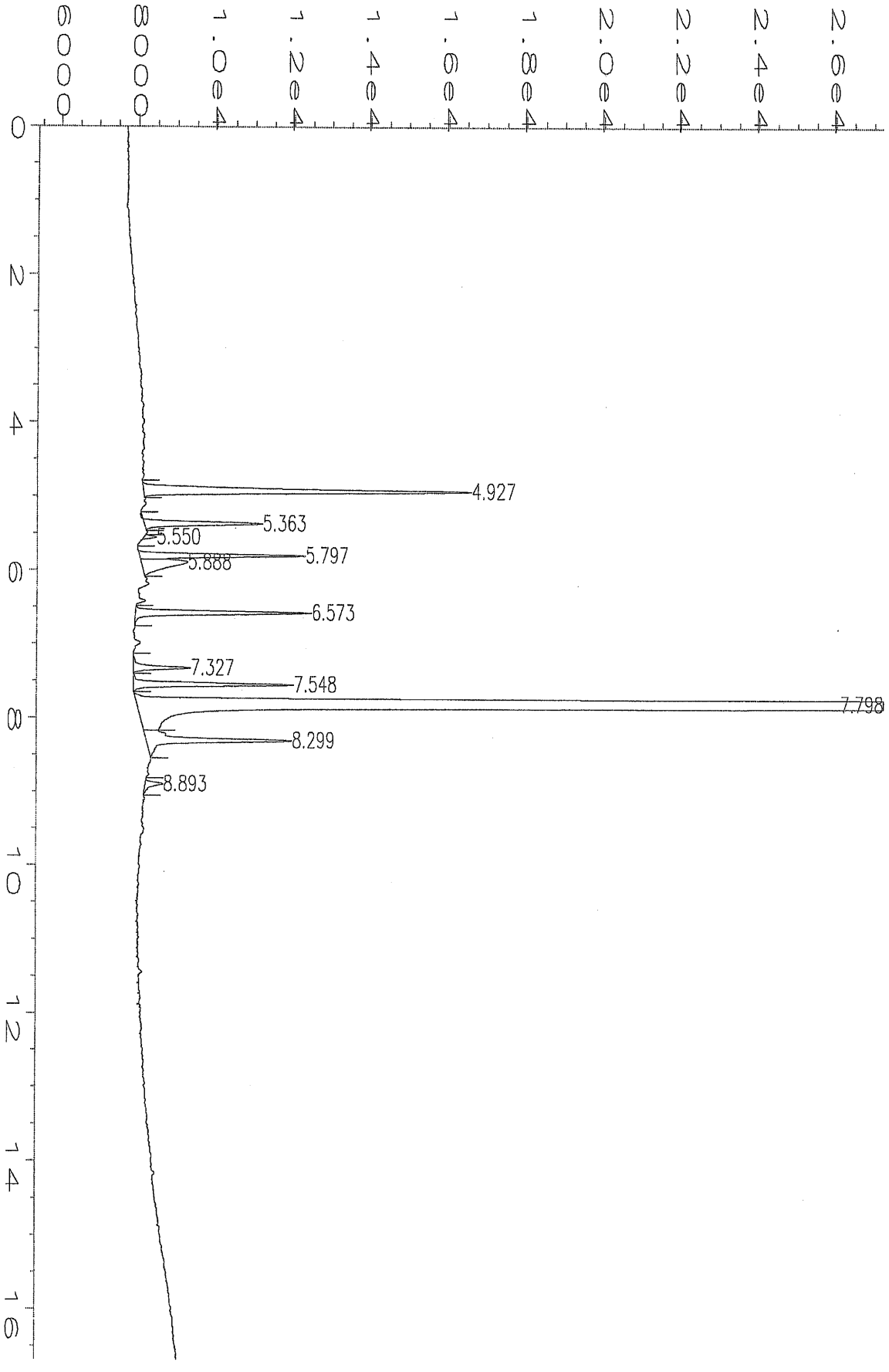
Data File Name : C:\HPCHEM\1\DATA\03204K\C03204H.D
Operator : TR
Instrument : ANALYZER1
Sample Name : CURVE
Run Time Bar Code:
Acquired on : 20 Mar 24 03:20 PM
Report Created on: 20 Mar 24 03:37 PM
Sample Info : ST2344

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03204K\C03204H.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.927	33184	8456	BV	0.059	0.9657
2	5.363	10103	3048	BV	0.052	0.2940
3	5.550	684	319	BB	0.036	0.0199
4	5.797	12699	4269	BV	0.046	0.3696
5	5.888	8519	1174	VV	0.098	0.2479
6	6.573	14804	4528	PV	0.050	0.4308
7	7.327	4824	1454	BV	0.050	0.1404
8	7.548	12894	4118	VV	0.049	0.3753
9	7.798	3319979	1053112	PV	0.049	96.6214
10	8.299	16592	3744	VB	0.064	0.4829
11	8.893	1787	452	BB	0.059	0.0520

Total area = 3436069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C:\HPCHEM\1\DATA\0320404K\C0320404H.D

STANDARD CERTIFICATE

CALIBRATION GAS STANDARD

Standard ID: **ST62344**
Description: **TO-14 Hexane Calibration Standard**
Date Recertified : 10/7/2019
Date Expired: 10/4/2024

Canister: AL150
Analyst: SDH

Component	CAS No	Concentration ppmv
Hexane	110-54-3	18.050

Analyst: Steve Hoyt, Ph.D.

Approved:

ST62344 Hexane Standard 18 ppm.xls

STANDARD PREPARATION WORKSHEET

Instructions: Enter the compound name and date then desired ppmV for final Standard. Check mass and volume to make sure they are in a measurable range, if not enter a diltuion factor to bring in range.
Checked and Validated on 06/22/11

Description: TO-14 Hexane Calibration Standard
Cylinder Volume: 29450 ml

Standard	CAS	MW	Density g/ml	Desired ppmV	ml as Gas	mass grams	liq vol ul	Purity %
Hexane	110-54-3	86.18	0.659	10.00	0.29450	0.00104	1.578	99.0
							1.58	

ST62344 Hexane Standard 18 ppm.xls

Multicomponent Mix Preparation

				Chemist	SDH	Actual	Dif
Save as Template under this STD ID	ST62344			NIST Wgt.	**5.00014**	5.00015	0.00001
				NIST Wgt.	**10.00012**	10.00015	0.00003
Final Mix Volume, ul	2500	Factor	1583.88	(use 1.0 for Factor if not using mix)		Avg	0.00002

	liq vol ul	Target grams	wt Final	wt Initial	ID Number	Actual Weight	Weight Fraction	Density Fraction	% Dif
Hexane	2500.000	1.64750	15.18550	15.05212	68524	0.13338	1.00	0.659000	-91.9
	2500.000	1.64750				0.13338		0.659000	

Standard Preparation

Standard Name:	TO-14 Hexane Calibration Standard				**Dilution 1**	**Dilution 2**	
Standard ID:	ST62344				ST62344	ST62344	
Target Liquid Volume (ul)	120.0	Date Prepared:			10/7/2019	10/7/2019	
Target Wt from Volume (g)		Canister ID:	AL150		AL150	AL150	
NIST 100 mg Weight		Analyst:	SDH			Recertyified Against	
Initial Syringe Wt (g)	15.18500	Pressure	Correction		Corrected	ST62118	
Final Syringe Wt (g)	15.05212	Pressure	1000	0.028	1028	psig	
Liquid Wt (g)	0.13288	Temp	25	C	1.00	1.00	
Gas Volume, ml	2088947	Atm P	760.0	torr	1.00	1.00	
Gas Constant	24454			Factor	1.00	1.00	

	Wt (g) from Vol	moles	ml gas	Conc ppmv	Conc ppmv	Conc ppmv	Weight %Error
Hexane	0.1329	0.001542	37.7052	18.0498	18.0498	18.0498	0.015

ST62344 Hexane Standard 18 ppm.xls

INITIAL CALIBRATION REPORT

EPA TO-12 Total Non-Methane Hydrocarbons

SDG: LABQC
Sample ID: METHOD BLANK
QC_Batch: 032024-GCK
Cal Update: 03/20/24
Standard 18.05 ppmv

	Calibration Amount CA ppbv								Calibration Response, Area							
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
	Amt	Amt	Amt	Amt	Amt	Amt	Amt	Amt	C03204A	C03204D	C03204E	C03204F	C03204G	C03204H	C04094B	C04094B
Compound	0.03	0.10	0.50	1.00	5.00	10.00	20.00	40.00	0.03	0.10	0.50	1.00	5.00	10.00	20	40
Hexane	0.54	1.81	9.03	18.05	90.25	180.50	361.00	722.00	**15847**	**37295**	**191321**	**348899**	**1662876**	**3319979**	**7233892**	**14018400**

Level 7 and Level 8 were added to extend the range of the calibration curve

INITIAL CALIBRATION REPORT: Response Factors

SDG:	LABQC	**Sample Calculation:**	
Sample ID:	METHOD BLANK	1) Avg RFn = Sum	$\frac{(Astdni)}{(Cstdni)}_i$
QC_Batch:	032024-GCK		
Cal Update:	03/20/24		

Response Factors

Compound	RF1	RF2	RF3	RF4	RF5	RF6			AvgRFn	%RSD	AngRF C Ratio
Hexane	2.93E+04	2.07E+04	2.12E+04	1.93E+04	1.84E+04	1.84E+04	2.00E+04	1.94E+04	2.08E+04	18.12	**2.08E+04**

2007

Daily Analytical Batch

DAB: 040924-GCK

GCK

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
040924-GCK	01	GCK	STD			C04094A		ST62344		1	TR		GC1SHO			
040924-GCK	02	GCK	STD			C04094B		ST62344		20	TR		GC1SHO			
040924-GCK	03	GCK	STD			C04094C		ST62344		40	TR		GC1SHO			

REVIEWED

Area Percent Report

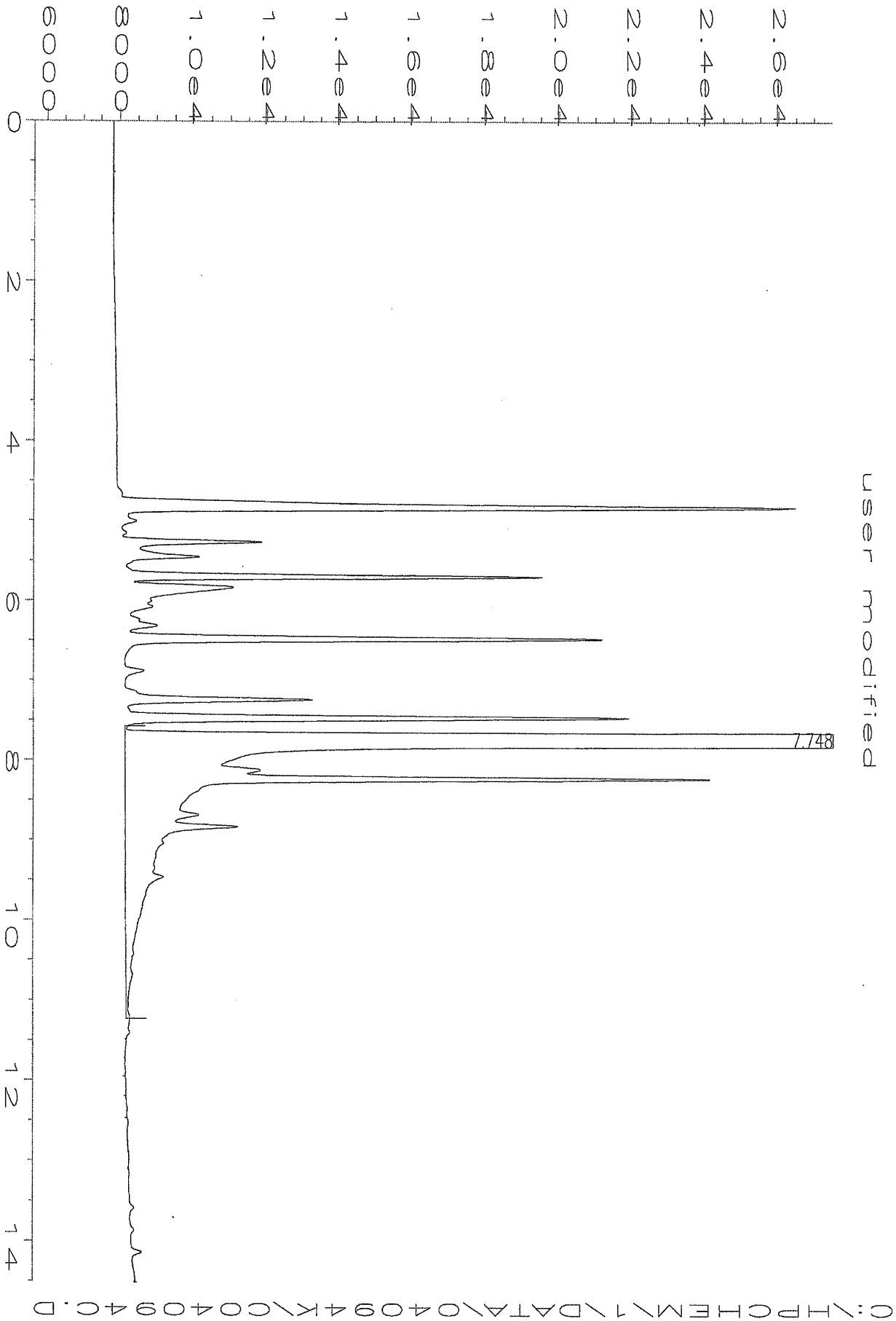
Data File Name : C:\HPCHEM\1\DATA\04094K\C04094C.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 09 Apr 24 09:32 AM
Report Created on: 09 Apr 24 09:56 AM
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\04094K\C04094C.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	7.748	1.40184E+007	3169872	MM	0.074	100.0000

Total area = 1.40184E+007

User Modified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Area Percent Report

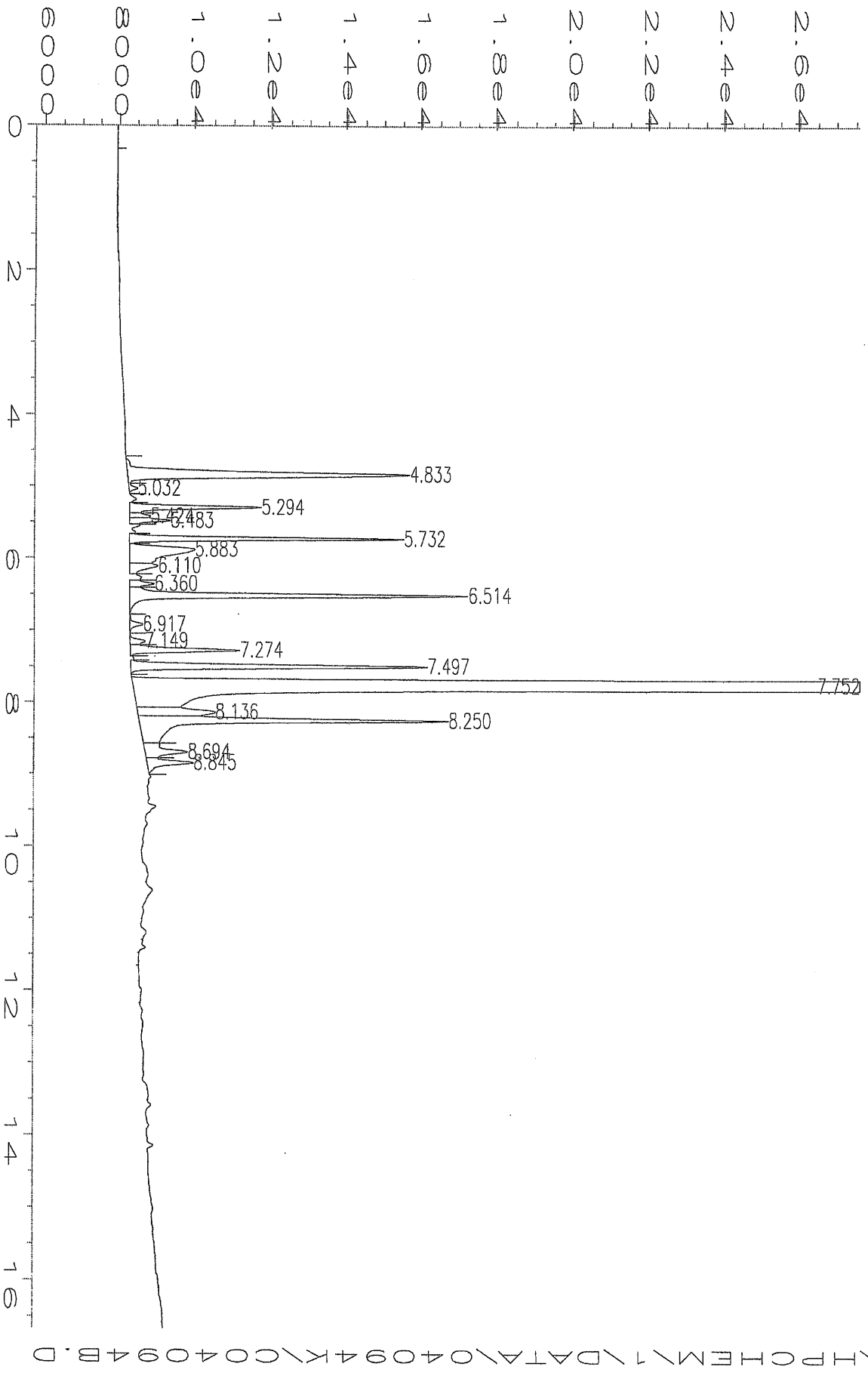
Data File Name : C:\HPCHEM\1\DATA\04094K\C04094B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 09 Apr 24 08:39 AM
Report Created on: 09 Apr 24 08:56 AM
Sample Info : STANDARD, 20 mL

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\04094K\C04094B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.833	39234	7459	BV	0.083	0.5246
2	5.032	865	242	VB	0.053	0.0116
3	5.294	11800	3450	VV	0.051	0.1578
4	5.424	1884	570	VV	0.047	0.0252
5	5.483	3677	1089	VV	0.051	0.0492
6	5.732	22017	7257	VV	0.048	0.2944
7	5.883	16567	1714	VV	0.136	0.2215
8	6.110	4233	755	VV	0.076	0.0566
9	6.360	2585	661	VV	0.057	0.0346
10	6.514	32641	8966	VV	0.055	0.4365
11	6.917	1470	355	PB	0.061	0.0197
12	7.149	1637	405	BV	0.059	0.0219
13	7.274	10666	2862	VV	0.057	0.1426
14	7.497	28554	7838	VV	0.058	0.3818
15	7.752	7233892	1971270	PV	0.058	96.7318
16	8.136	12086	2011	VV	0.089	0.1616
17	8.250	41631	8165	VV	0.073	0.5567
18	8.694	7184	1089	VV	0.092	0.0961
19	8.845	5671	1190	VV	0.070	0.0758

Total area = 7478295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Area Percent Report

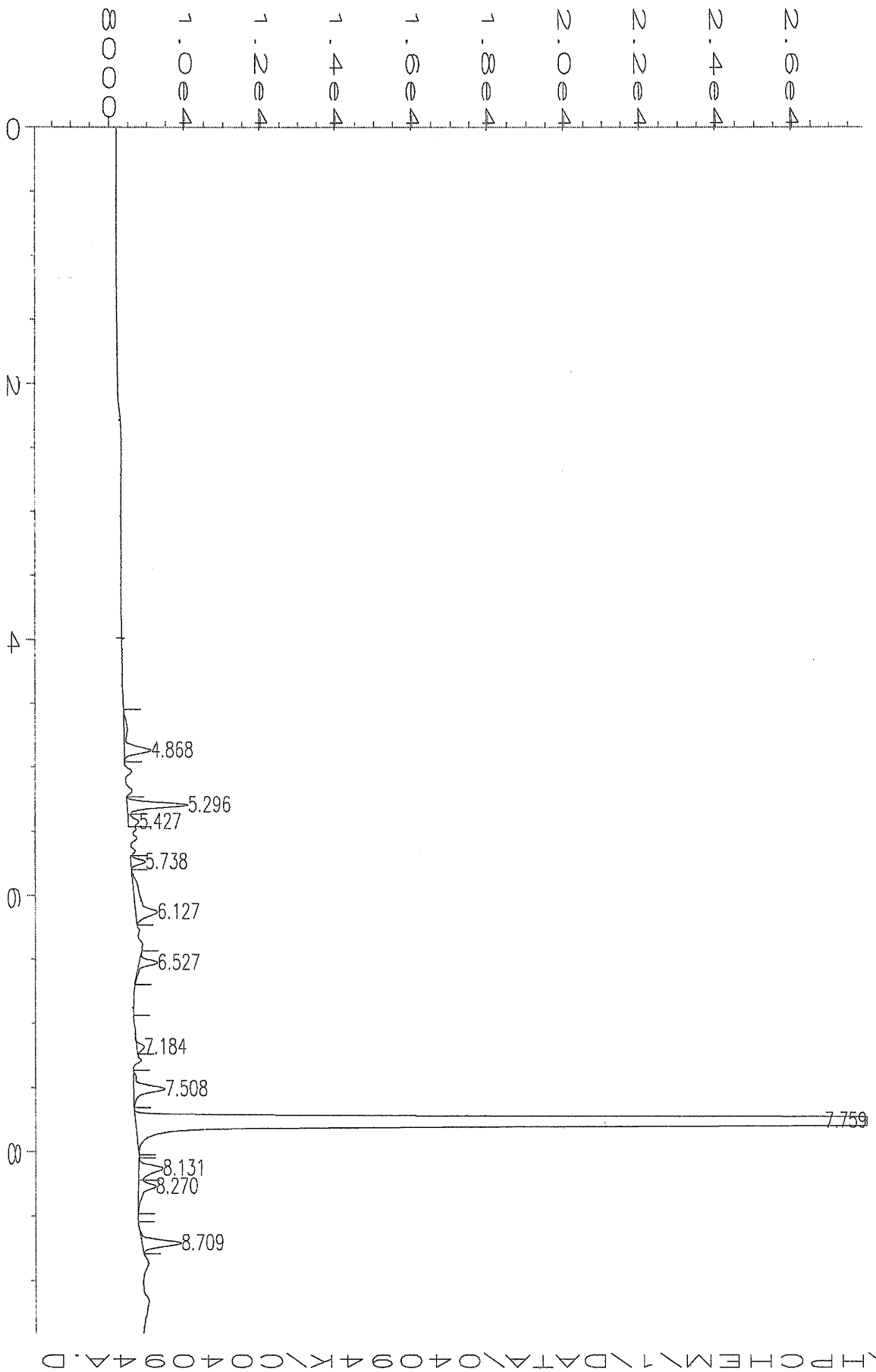
Data File Name : C:\HPCHEM\1\DATA\04094K\C04094A.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62344
Run Time Bar Code:
Acquired on : 09 Apr 24 08:01 AM
Report Created on: 09 Apr 24 08:10 AM
Sample Info : STANDARD, 1 mL

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\04094K\C04094A.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	4.868	3296	693	BB	0.070	0.8237
2	5.296	4856	1605	VV	0.046	1.2136
3	5.427	1049	284	VV	0.049	0.2623
4	5.738	1119	384	VV	0.046	0.2797
5	6.127	4640	578	PV	0.105	1.1598
6	6.527	1737	492	BB	0.054	0.4342
7	7.184	614	203	BV	0.050	0.1534
8	7.508	3520	834	BV	0.058	0.8797
9	7.759	370516	131486	PB	0.044	92.6012
10	8.131	2923	638	BV	0.069	0.7306
11	8.270	2225	461	VB	0.067	0.5561
12	8.709	3624	1038	BV	0.053	0.9058

Total area = 400120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Secondary Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-14 Modified GC/FID

Analytical Method: TO-14FID

SDG: LABQC
Laboratory Number: QC03214

File Name: QC03204C
Description: SECONDARY STANDARD ST62529
Canister:
QC_Batch: 032024-GCK

Date Sampled: **Time:**
Date Analyzed: 03/20/24 **Time:** 9:02
Can Factor: 1.00
Air Volume: 1 ml

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
74-85-1	Ethene	200.00	600.00	ND	230.33	690.98	ND	ND
74-86-2	Acetylene	200.00	600.00	ND	213.11	639.34	ND	ND
74-84-0	Ethane	200.00	600.00	ND	246.72	740.16	ND	ND
115-07-1	Propene	133.33	400.00	ND	230.05	690.16	ND	ND
74-98-6	Propane	133.33	400.00	ND	240.98	722.95	ND	ND
75-28-5	i-Butane	100.00	300.00	ND	238.11	714.34	ND	ND
106-98-9	1-Butene	100.00	300.00	ND	229.92	689.75	ND	ND
106-97-8	n-Butane	100.00	300.00	ND	238.11	714.34	ND	ND
624-64-6	t-2-Butene	100.00	300.00	ND	229.92	689.75	ND	ND
590-18-1	c-2-Butene	100.00	300.00	ND	229.92	689.75	ND	ND
78-78-4	i-Pentane	80.00	240.00	ND	236.72	710.16	ND	ND
109-67-1	1-Pentene	80.00	240.00	ND	229.84	689.51	ND	ND
109-66-0	n-Pentane	80.00	240.00	ND	236.39	709.18	ND	ND
646-04-8	t-2-Pentene	80.00	240.00	ND	229.84	689.51	ND	ND
627-20-3	c-2-Pentene	80.00	240.00	ND	229.84	689.51	ND	ND
75-83-2	2,2-Dimethylbutane	66.67	200.00	ND	235.52	706.56	ND	ND
142-29-0	Cyclopentene	80.00	240.00	ND	223.28	669.84	ND	ND
287-92-3	Cyclopentane	80.00	240.00	ND	229.84	689.51	ND	ND
79-29-8	2,3-Dimethylbutane	66.67	200.00	ND	235.52	706.56	ND	ND
107-83-5	2-Methylpentane	66.67	200.00	ND	235.52	706.56	ND	ND
96-14-0	3-Methylpentane	66.67	200.00	ND	235.52	706.56	ND	ND
592-41-6	1-Hexene	66.67	200.00	ND	230.05	690.16	ND	ND
110-54-3	n-Hexane	66.67	200.00	877.46	235.52	706.56	3,099.88	
1120-62-3	3-Methylcyclopentene	66.67	200.00	ND	224.32	672.95	ND	ND
96-37-7	Methylcyclopentane	66.67	200.00	ND	230.05	690.16	ND	ND
108-08-7	2,4-Dimethylpentane	57.14	171.43	ND	234.66	703.98	ND	ND
71-43-2	Benzene	66.67	200.00	ND	213.39	640.16	ND	ND
110-82-7	Cyclohexane	66.67	200.00	ND	230.05	690.16	ND	ND
591-76-4	2-Methylhexane	57.14	171.43	ND	234.66	703.98	ND	ND
565-59-3	2,3-Dimethylpentane	57.14	171.43	ND	234.66	703.98	ND	ND
589-34-4	3-Methylhexane	57.14	171.43	ND	234.66	703.98	ND	ND
540-84-1	2,2,4-Trimethylpentane	50.00	150.00	ND	234.02	702.05	ND	ND
142-82-5	n-Heptane	57.14	171.43	ND	234.66	703.98	ND	ND
108-87-2	Methylcyclohexane	57.14	171.43	ND	229.98	689.93	ND	ND
592-13-2	2,5-Dimethylhexane	50.00	150.00	ND	234.02	702.05	ND	ND
589-43-5	2,4-Dimethylhexane	50.00	150.00	ND	234.02	702.05	ND	ND
565-75-3	2,3,4-Trimethylpentane	50.00	150.00	ND	234.02	702.05	ND	ND

CAS#	Compound	MDL ppbV	RL ppbV	Amount ppbV	MDL ug/m3	RL ug/m3	Amount ug/m3	Flag
108-88-3	Toluene	57.14	171.43	ND	215.69	647.07	ND	ND
584-94-1	2,3-Dimethylhexane	50.00	150.00	ND	234.02	702.05	ND	ND
592-27-8	2-Methylheptane	50.00	150.00	ND	234.02	702.05	ND	ND
589-53-7	4-Methylheptane	50.00	150.00	ND	234.02	702.05	ND	ND
589-81-1	3-Methylheptane	50.00	150.00	ND	234.02	702.05	ND	ND
111-65-9	n-Octane	50.00	150.00	ND	234.02	702.05	ND	ND
100-41-4	Ethylbenzene	50.00	150.00	ND	217.62	652.87	ND	ND
108-38-3	m,p-xylene	50.00	150.00	ND	217.62	652.87	ND	ND
100-42-5	Styrene	50.00	150.00	ND	213.52	640.57	ND	ND
95-47-6	o-xylene	50.00	150.00	ND	217.62	652.87	ND	ND
111-84-2	n-Nonane	44.44	133.33	ND	233.70	701.09	ND	ND
98-82-8	i-Propylbenzene	44.44	133.33	ND	218.94	656.83	ND	ND
103-65-1	n-propylbenzene	44.44	133.33	ND	218.94	656.83	ND	ND
620-14-4	3-Ethyltoluene	44.44	133.33	ND	218.94	656.83	ND	ND
622-96-8	4-Ethyltoluene	44.44	133.33	ND	218.94	656.83	ND	ND
108-67-8	1,3,5-Trimethylbenzene	44.44	133.33	ND	218.94	656.83	ND	ND
611-14-3	2-Ethyltoluene	44.44	133.33	ND	218.94	656.83	ND	ND
95-63-6	1,2,4-Trimethylbenzene	44.44	133.33	ND	218.94	656.83	ND	ND
124-18-5	n-Decane	40.00	120.00	ND	233.28	699.84	ND	ND
526-73-8	1,2,3-Trimethylbenzene	44.44	133.33	ND	218.94	656.83	ND	ND
141-93-5	1,3-Diethylbenzene	40.00	120.00	ND	220.00	660.00	ND	ND
105-05-5	1,4-Diethylbenzene	40.00	120.00	ND	220.00	660.00	ND	ND
104-51-8	n-Butylbenzene	40.00	120.00	ND	220.00	660.00	ND	ND
1120-21-4	Undecane	36.36	109.09	ND	232.94	698.81	ND	ND
91-20-3	Naphthalene	40.00	120.00	ND	210.16	630.49	ND	ND
112-40-3	Dodecane	33.33	100.00	ND	232.65	697.95	ND	ND
	Total Petroleum Hydrocarbons:							
TNMHC - C6	Total Non-Methane Hydrocarbons	1,500.00	4,500.00	ND	5,299.18	15,897.54	ND	ND
TNMHC - C1	Total Non-Methane Hydrocarbons	9,000.00	27,000.0(	ND	5,901.64	17,704.92	ND	ND

	Sample: Composition	**ppbC**	**Percent**
	Total Identified	5,264.76	100.0
P	Paraffins	5,264.76	100.0
I	Isoparaffins	0.00	0.0
A	Aromatics	0.00	0.0
N	Napthlenes	0.00	0.0
O	Olefins	0.00	0.0

QUANTITATION REPORT

EPA Method TO-14 Modified GC/FID

SDG: **LABQC**
EAS ID: **QC03214**
File Name: **QC03204C**
Sample ID: **SECONDARY STANDARD ST62529**
Sampled: **NA** Time: **NA**
Received: **NA** Time: **NA**
Analyzed: **03/20/24** Time: **9:02**
QCBatch: **032024-GCK**
Can: **NA**
Can Factor: **1.00**
Volume: **1.0**
Type: **SA**

Method: TO-14FID TO-14FID
Not Detected Flag: **ND** TO-15FID
SF: **2** TO-3
Instrument: **GCK** EPA 18M
Matrix **AA**
Chem **TRG**
MDL Fac: **1.0**
Unit Factor **1000** 1000 for ppb 1 for ppm
Hexane Area: **347259**
Hexane Concentration: **18.05**
Standard Volume: **1.00**
Standard ID: **ST62344**

			RT Win	C2-C4	C5-C12
		RT		**0.3**	**0.1**
		RTI		**3**	**3**

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
74-85-1	Ethene	P	4.06	4.06			NA	NA	NA		
74-86-2	Acetylene	P	4.10	4.10			NA	NA	NA		
74-84-0	Ethane	P	4.17	**4.17**	**4.17**		I	I	H	200	200
115-07-1	Propene	P	5.11	5.11						-204	290
74-98-6	Propane	P	5.20	**5.20**	**5.20**		I	I	H	300	300
75-28-5	i-Butane	P	6.60	**6.60**						134	351
67-56-1	Methanol		8.30	8.30						134	401
106-98-9	1-Butene	P	7.29	7.29						134	367
106-99-0	1,3-Butadiene		**7.48**	7.48						134	373
106-97-8	n-Butane	P	8.34	**8.34**	**8.34**		I	I	H	400	400
624-64-6	t-2-Butene	P	8.75	8.75						198	410
590-18-1	c-2-Butene	P	9.63	9.63						198	431
64-17-5	Ethanol		10.85	10.85						198	461
563-45-1	3-Methyl-1-butene	6	**11.05**	11.05						198	465
67-64-1	Acetone		11.52	11.52						198	476
78-78-4	i-Pentane	P	11.37	11.37						198	473
109-67-1	1-Pentene	P	12.30	12.30						198	495
67-63-0	Isopropanol		12.65	12.65						198	504
563-46-2	2-Methyl-1-butene	9	**12.36**	12.36						198	497
109-66-0	n-Pentane	P	12.48	**12.48**	**12.48**		I	I	H	500	500
78-79-5	Isoprene	P	12.55	12.55						768	503
646-04-8	t-2-Pentene	P	12.79	12.79						768	510
627-20-3	c-2-Pentene	P	13.08	13.08						768	518
75-65-0	Tert butyl alcohol		**13.55**	13.55						600	526
513-35-9	2-Methyl-2-butene	13	**13.62**	13.62						600	520
75-83-2	2,2-Dimethylbutane	P	13.77	13.77						768	537
142-29-0	Cyclopentene	15	**14.61**	14.61						768	551
71-23-8	n-Propanol		**14.75**	14.75						768	558
287-92-3	Cyclopentane	P	14.88	14.88						768	567
1634-04-4	Methyl tert butyl ether		**15.00**	15.00						768	569
79-29-8	2,3-Dimethylbutane	P	15.06	15.06						768	570
107-83-5	2-Methylpentane	P	15.08	15.08						768	571
96-14-0	3-Methylpentane	P	15.55	15.55						768	583
592-41-6	1-Hexene	P	**15.80**	15.80						768	590
110-54-3	n-Hexane	P	16.17	**16.17**	**7.82**	18613	O	I	M	600	600
108-20-3	Diisopropyl ether		**16.30**	7.95						700	606

CAS#	Compound		PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
1120-62-3	3-Methylcyclopentene	21		**16.45**	8.10						700	609
637-92-3	Ethyl tert butyl ether			**16.80**	8.45						700	623
96-37-7	Methylcyclopentane		P	16.86	8.51						533	622
108-08-7	2,4-Dimethylpentane		P	17.05	8.70						533	626
71-43-2	Benzene		P	17.87	**9.52**	**17.87**		O	O	L	687	651
110-82-7	Cyclohexane		P	18.14	18.14						533	658
591-76-4	2-Methylhexane		P	18.38	18.38						533	670
565-59-3	2,3-Dimethylpentane		P	18.45	18.45						533	671
589-34-4	3-Methylhexane		P	18.66	18.66						533	678
6094-02-6	2-Methyl-1hexene	33		**18.75**	18.75						533	687
994-05-8	Tert amyl methyl ether			**18.80**	18.80						533	674
540-84-1	2,2,4-Trimethylpentane		P	19.09	19.09						533	690
142-82-5	n-Heptane		P	19.41	19.41	**19.41**		I	I	H	700	700
108-87-2	Methylcyclohexane		P	20.09	20.09						21	722
592-13-2	2,5-Dimethylhexane			20.35	20.35						21	734
589-43-5	2,4-Dimethylhexane			20.43	20.43						21	737
565-75-3	2,3,4-Trimethylpentane		P	20.93	20.93						21	753
108-88-3	Toluene		P	21.12	**21.12**	**21.12**		I	I	H	760	758
584-94-1	2,3-Dimethylhexane			21.20	21.20						21	763
592-27-8	2-Methylheptane		P	21.33	21.33						21	768
589-53-7	4-Methylheptane	48		**21.48**	21.48						21	775
1067-08-9	3-Ethyl-3-methylpentane			**21.50**	21.50						21	772
589-81-1	3-Methylheptane		p	21.55	21.55						21	775
15870-10-7	2-Methyl-1-heptene	52		**22.10**	22.10						21	786
111-65-9	n-Octane		P	22.27	22.27	**22.27**		I	I	H	800	800
100-41-4	Ethylbenzene		P	23.75	23.75						-57	855
108-38-3	m,p-xylene		P	23.95	23.95						-57	863
100-42-5	Styrene		P	24.40	24.40						-57	881
95-47-6	o-xylene		P	24.57	24.57						-57	886
124-11-8	1-Nonene	64		24.60	24.60						-57	889
111-84-2	n-Nonane		P	24.87	24.87	**24.87**		I	I	H	900	900
98-82-8	i-Propylbenzene		P	25.36	25.36						-141	919
103-65-1	n-propylbenzene		P	25.93	25.93						-141	947
80-56-8	a-Pinene			26.09	26.09						-141	950
620-14-4	3-Ethyltoluene		P	26.17	26.17						-141	957
622-96-8	4-Ethyltoluene		P	26.26	26.26						-141	959
108-67-8	1,3,5-Trimethylbenzene		P	26.45	26.45						-141	964
611-14-3	2-Ethyltoluene		P	26.61	26.61						-141	975
127-91-3	b-Pinene			26.80	26.80						-141	979
95-63-6	1,2,4-Trimethylbenzene		P	27.08	27.08						-141	991
124-18-5	n-Decane		P	27.26	27.26	**27.26**		I	I	H	1000	1000
526-73-8	1,2,3-Trimethylbenzene		P	27.55	27.55						-48	1014
496-11-7	Indan	81		27.55	27.55						-48	1020
5989-27-5	d-Limonene			27.65	27.65						-48	1017
141-93-5	1,3-Diethylbenzene		P	28.10	28.10						-48	1032
105-05-5	1,4-Diethylbenzene		P	28.23	28.23						-48	1037
104-51-8	n-Butylbenzene			28.45	28.45						-48	1045
1758-88-9	1,4-Dimethyl-2-ethylbenzene	87		28.60	28.60						-48	1053
874-41-9	1,3-Dimethyl-4-ethylbenzene	88		28.75	28.75						-48	1057
934-80-5	1,2-Dimethyl-4-ethylbenzene	89		28.83	28.83						-48	1060
1120-21-4	Undecane		P	29.86	3.41	**29.86**		O	I	M	1100	1100
95-93-2	1,2,4,5-Tetramethylbenzene			30.45	30.45						-48	1123
527-53-7	1,2,3,5-Tetramethylbenzene			30.50	30.50						-48	1124

CAS#	Compound	PAMS	STD RT	Corrected RT	Samp RT	Sample Area	RT in/out	RTI in/out	Flag	Calc RTI	EAS RTI
91-20-3	Naphthalene		32.25	32.25						-48	1193
112-40-3	Dodecane	P	32.46	6.01	**32.46**		O	I	M	1200	1200
Abbreviation	**Total Petroleum Hydrocarbons:**					0		TPH Subtractions			
TNMHC - C6	Total Non-Methane Hydrocarbons					0		0			
TNMHC - C1	Total Non-Methane Hydrocarbons					0		0			
TVOC	Total Volatile Organic Compounds					0		0			
TPH(g)	TPH (gasoline)					0		0			
TPH(d)	TPH (diesel)					0		0			
TPH(h)	TPH (hexane)					0		0			
TPH(t)	TPH (toluene)					0		0			
TPHC	TPH (methane)					0		0			
TPH(Jet A)	TPH (Jet A Fuel)					0		0	Total Subtracted		
TPH (MS)	TPH (Mineral Spirits)					0					
C6+	**C6+ (hexane)**		16.17	16.17	7.82	0		Sum from 16.17	to	end	
	Sample: Composition										
	Total Identified					Calc					
P	Paraffins					Calc					
I	Isoparaffins					Calc					
A	Aromatics					Calc					
N	Napthlenes					Calc					
O	Olefins					Calc					
	Oxygenates					Calc					
	Carbon Ranges:				Sample RT						
C2	**C2 (ethane)**		Calculated			0		Calculated from C2 sum			
C3	**C3 (propane)**		Calculated			0		Calculated from C3 sum			
C4	**C4 (Butane)**					0		Sum from 0.00	to	8.34	
C5	**C5 (Pentane)**					0		Sum from 8.34	to	12.48	
C6	**C6 (Hexane)**					0		Sum from 12.48	to	16.17	
C7	**C7 (Heptane)**					0		Sum from 16.17	to	19.41	
C8	**C8 (Octane)**					0		Sum from 19.41	to	22.27	
C9	**C9 (Nonane)**					0		Sum from 22.27	to	24.87	
C10	**C10 (Decane)**					0		Sum from 24.87	to	27.26	
C11	**C11 (Undecane)**					0		Sum from 27.26	to	29.86	
C12	**C12 (Decane)**					0		Sum from 29.86	to	32.46	
C12+	**C12+ as (Decane)**					0		Sum from 32.46	to		
	NOTE: THE SUM OF THE CARBON RANGES = TOTAL NMHC					0					
C5 to C12	C5 to C12 Gasoline					0		Sum from 8.34	**to**	32	

Note: The Normal hydrocarbon is the last in the group. Nonane is the end of the C9 range
The compounds between Octane C8 and Noname C9 are considered C9
Note: This is not exact because is is violated for a couple of hydrocarbons (usualy trans) and aromatics.

CALCULATIONS

EPA Method TO-14 Modified GC/FID

QCBatch:	032024-GCK		
Hexane Std Area:	347259		
Hexane Conc.	18.05	Oxygenate Response	0.75
Standard Volume:	1.00	ND Flag:	ND
Can Dilution Factor:	1.00	MDL Factor	1
Air Volume:	1.00		
Combined Factor:	200.00		
Gas Constant:	24.4		
Decimal Places:	2		

Compound	M.W.	Carbon #	Result ppbC	RESULTV ppbV	Result ug/m3	FIXED Result ppbC	FIXED RESULTV ppbV	FIXED Result ug/m3	FIXED RESULTQ ug/m3	FIXED RESULTG ug/m3
Ethene	28.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Acetylene	26.0	2	0.00	0.00	0.00	ND	ND	ND	0	
Ethane	30.1	2	0.00	0.00	0.00	ND	ND	ND	0	
Propene	42.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Propane	44.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
Methanol	32.0	1	0.00	0.00	0.00	ND	ND	ND	0	
1-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
1,3-Butadiene	54.1	4	0.00	0.00	0.00	ND	ND	ND	0	
n-Butane	58.1	4	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Butene	56.1	4	0.00	0.00	0.00	ND	ND	ND	0	
Ethanol	46.1	2	0.00	0.00	0.00	ND	ND	ND	0	
3-Methyl-1-butene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
Acetone	58.1	3	0.00	0.00	0.00	ND	ND	ND	0	
i-Pentane	72.2	5	0.00	0.00	0.00	ND	ND	ND	0	
1-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
Isopropanol	60.1	3	0.00	0.00	0.00	ND	ND	ND	0	
2-Methyl-1-butene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Pentane	72.1	5	0.00	0.00	0.00	ND	ND	ND	0	
Isoprene	68.1	5	0.00	0.00	0.00	ND	ND	ND	0	
t-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
c-2-Pentene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
Tert butyl alcohol	74.1	4	0.00	0.00	0.00	ND	ND	ND	0	
2-Methyl-2-butene	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
2,2-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentene	68.1	5	0.00	0.00	0.00	ND	ND	ND	0	
n-Propanol	60.1	3	0.00	0.00	0.00	ND	ND	ND	0	
Cyclopentane	70.1	5	0.00	0.00	0.00	ND	ND	ND	0	
Methyl tert butyl ether	88.2	5	0.00	0.00	0.00	ND	ND	ND	0	
2,3-Dimethylbutane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
2-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylpentane	86.2	6	0.00	0.00	0.00	ND	ND	ND	0	
1-Hexene	84.2	6	0.00	0.00	0.00	ND	ND	ND	0	
n-Hexane	86.2	6	5264.76	**877.46**	3099.88	5,264.76	877.46	3,099.88	3,099.88	3,099.88
Diisopropyl ether	102.2	6	0.00	0.00	0.00	ND	ND	ND	0	
3-Methylcyclopentene	82.1	6	0.00	0.00	0.00	ND	ND	ND	0	

Ethyl tert butyl ether	102.2	6	0.00	0.00	0.00	ND	ND	ND	0
Methylcyclopentane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0
2,4-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0
Benzene	78.1	6	0.00	0.00	0.00	ND	ND	ND	0
Cyclohexane	84.2	6	0.00	0.00	0.00	ND	ND	ND	0
2-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0
2,3-Dimethylpentane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0
3-Methylhexane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0
2-Methyl-1hexene	98.2	7	0.00	0.00	0.00	ND	ND	ND	0
Tert amyl methyl ether	102.2	6	0.00	0.00	0.00	ND	ND	ND	0
2,2,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Heptane	100.2	7	0.00	0.00	0.00	ND	ND	ND	0
Methylcyclohexane	98.2	7	0.00	0.00	0.00	ND	ND	ND	0
2,5-Dimethylhexane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
2,4-Dimethylhexane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
2,3,4-Trimethylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
Toluene	92.1	7	0.00	0.00	0.00	ND	ND	ND	0
2,3-Dimethylhexane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
2-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
4-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyl-3-methylpentane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
3-Methylheptane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
2-Methyl-1-heptene	112.2	8	0.00	0.00	0.00	ND	ND	ND	0
n-Octane	114.2	8	0.00	0.00	0.00	ND	ND	ND	0
Ethylbenzene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
m,p-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
Styrene	104.2	8	0.00	0.00	0.00	ND	ND	ND	0
o-xylene	106.2	8	0.00	0.00	0.00	ND	ND	ND	0
1-Nonene	126.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Nonane	128.3	9	0.00	0.00	0.00	ND	ND	ND	0
i-Propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-propylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
a-Pinene	136.2	10	0.00	0.00	0.00	ND	ND	ND	0
3-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
4-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
1,3,5-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
2-Ethyltoluene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
b-Pinene	136.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,4-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
n-Decane	142.3	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3-Trimethylbenzene	120.2	9	0.00	0.00	0.00	ND	ND	ND	0
Indan	118.2	9	0.00	0.00	0.00	ND	ND	ND	0
d-Limonene	136.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,3-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Diethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
n-Butylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,4-Dimethyl-2-ethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,3-Dimethyl-4-ethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,2-Dimethyl-4-ethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Undecane	156.3	11	0.00	0.00	0.00	ND	ND	ND	0
1,2,4,5-Tetramethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
1,2,3,5-Tetramethylbenzene	134.2	10	0.00	0.00	0.00	ND	ND	ND	0
Naphthalene	128.2	10	0.00	0.00	0.00	ND	ND	ND	0
Dodecane	170.3	12	0.00	0.00	0.00	ND	ND	ND	0
Total Petroleum Hydrocarbons:				ppbV	ug/m3				ug/m3

SDG: LABQC
Laboratory Number: QC03214

Mole % Result %	(1) MDL ppbC	(2) MDL ppbV	Calc MDL ppbV	Calc MDL ug/m3	Calc MDL ppbC	Calc RL ppbV	Calc RL ug/m3	Calc RL ppbC	Flag	Detect Flan	EPA Flag	Rept Res
0.0	2.000	1.00	200.00	230.33	400.00	600.00	690.98	1200.0	U	ND		Y
0.0	2.000	1.00	200.00	213.11	400.00	600.00	639.34	1200.0	U	ND		Y
0.0	2.000	1.00	200.00	246.72	400.00	600.00	740.16	1200.0	U	ND		Y
0.0	2.000	0.67	133.33	230.05	400.00	400.00	690.16	1200.0	U	ND		Y
0.0	2.000	0.67	133.33	240.98	400.00	400.00	722.95	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	238.11	400.00	300.00	714.34	1200.0	U	ND		Y
0.0	2.000	2.00	400.00	524.59	400.00	1200.00	1573.77	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	229.92	400.00	300.00	689.75	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	221.72	400.00	300.00	665.16	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	238.11	400.00	300.00	714.34	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	229.92	400.00	300.00	689.75	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	229.92	400.00	300.00	689.75	1200.0	U	ND		Y
0.0	2.000	1.00	200.00	377.87	400.00	600.00	1133.61	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.67	133.33	317.49	400.00	400.00	952.46	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	236.72	400.00	240.00	710.16	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.67	133.33	328.42	400.00	400.00	985.25	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	236.39	400.00	240.00	709.18	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	223.28	400.00	240.00	669.84	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.50	100.00	303.69	400.00	300.00	911.07	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.33	66.67	235.52	400.00	200.00	706.56	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	223.28	400.00	240.00	669.84	1200.0	U	ND		Y
0.0	2.000	0.67	133.33	328.42	400.00	400.00	985.25	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	229.84	400.00	240.00	689.51	1200.0	U	ND		Y
0.0	2.000	0.40	80.00	289.18	400.00	240.00	867.54	1200.0	U	ND		Y
0.0	2.000	0.33	66.67	235.52	400.00	200.00	706.56	1200.0	U	ND		Y
0.0	2.000	0.33	66.67	235.52	400.00	200.00	706.56	1200.0	U	ND		Y
0.0	2.000	0.33	66.67	235.52	400.00	200.00	706.56	1200.0	U	ND		Y
0.0	2.000	0.33	66.67	230.05	400.00	200.00	690.16	1200.0	U	ND		Y
100.0	2.000	0.33	66.67	235.52	400.00	200.00	706.56	1200.0		=		Y
0.0	2.000	0.33	66.67	279.23	400.00	200.00	837.70	1200.0	U	ND		Y
0.0	2.000	0.33	66.67	224.32	400.00	200.00	672.95	1200.0	U	ND		Y

0.0	2.000	0.33	66.67	279.23	400.00	200.00	837.70	1200.0	U	ND	Y
0.0	2.000	0.33	66.67	230.05	400.00	200.00	690.16	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	234.66	400.00	171.43	703.98	1200.0	U	ND	Y
0.0	2.000	0.33	66.67	213.39	400.00	200.00	640.16	1200.0	U	ND	Y
0.0	2.000	0.33	66.67	230.05	400.00	200.00	690.16	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	234.66	400.00	171.43	703.98	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	234.66	400.00	171.43	703.98	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	234.66	400.00	171.43	703.98	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	229.98	400.00	171.43	689.93	1200.0	U	ND	Y
0.0	2.000	0.33	66.67	279.23	400.00	200.00	837.70	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	234.66	400.00	171.43	703.98	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	229.98	400.00	171.43	689.93	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.29	57.14	215.69	400.00	171.43	647.07	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	229.92	400.00	150.00	689.75	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	234.02	400.00	150.00	702.05	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	217.62	400.00	150.00	652.87	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	217.62	400.00	150.00	652.87	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	213.52	400.00	150.00	640.57	1200.0	U	ND	Y
0.0	2.000	0.25	50.00	217.62	400.00	150.00	652.87	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	229.87	400.00	133.33	689.62	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	233.70	400.00	133.33	701.09	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	223.28	400.00	120.00	669.84	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	223.28	400.00	120.00	669.84	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	233.28	400.00	120.00	699.84	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	218.94	400.00	133.33	656.83	1200.0	U	ND	Y
0.0	2.000	0.22	44.44	215.30	400.00	133.33	645.90	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	223.28	400.00	120.00	669.84	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.18	36.36	232.94	400.00	109.09	698.81	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	220.00	400.00	120.00	660.00	1200.0	U	ND	Y
0.0	2.000	0.20	40.00	210.16	400.00	120.00	630.49	1200.0	U	ND	Y
0.0	2.000	0.17	33.33	232.65	400.00	100.00	697.95	1200.0	U	ND	Y
%											Y

Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\03284K\QC03284B.D
Operator : TR
Instrument : ANALYZER1
Sample Name : ST62529
Run Time Bar Code:
Acquired on : 28 Mar 24 09:25 AM
Report Created on: 28 Mar 24 09:42 AM
Sample Info : SPIKE, 1 mL

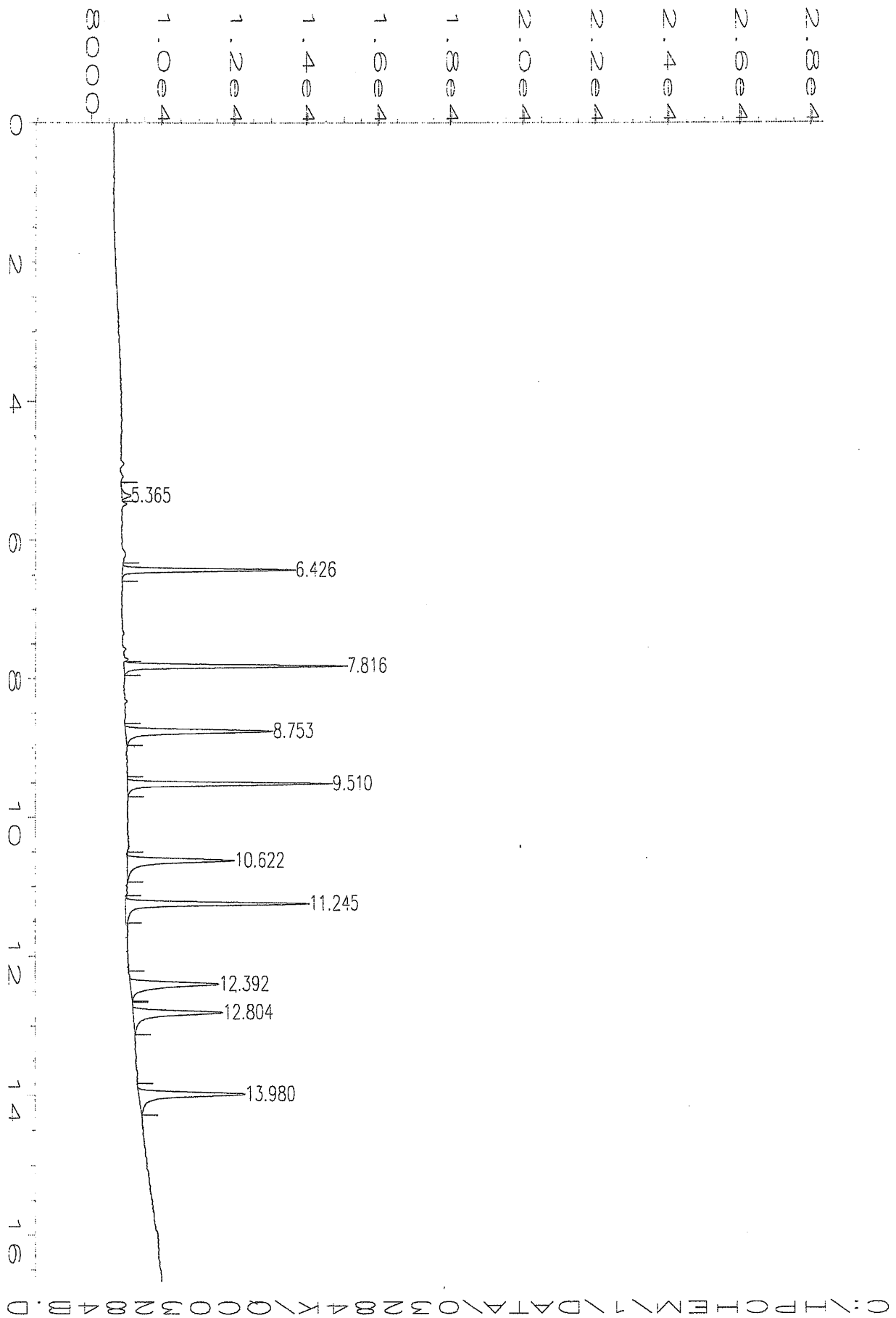
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: GC1SHORT.MTH
Analysis Method : GC1SHORT.MTH

Sig. 1 in C:\HPCHEM\1\DATA\03284K\QC03284B.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.365	987	241	BV	0.058	0.6973
2	6.426	13781	4766	BB	0.045	9.7373
3	7.816	18613	6140	VB	0.047	13.1515
4	8.753	16388	4049	BV	0.062	11.5795
5	9.510	18238	5636	BB	0.050	12.8866
6	10.622	13851	2957	BB	0.070	9.7870
7	11.245	18947	5054	PB	0.056	13.3872
8	12.392	12977	2447	BB	0.078	9.1691
9	12.804	13051	2462	BB	0.078	9.2212
10	13.980	14695	2912	BB	0.074	10.3832

1 — hexane

Total area = 141527


5.365
6.426
7.816
8.753
9.510
10.622
11.245
12.392
12.804
13.980
C:\HPCHEM\1\DATA\0328AK\QC0328AB.D

STANDARD CERTIFICATE
CALIBRATION GAS STANDARD

Standard ID: **ST62529**
Description: **TO-3 HC Standard LCS**
Canister: AL20lb

Date Prepared: 11/11/2020
Date Expired: 11/10/2025
Analyst: SDH

Component	CAS No	Concentration ppmv	Uncertainty %
Pentane	109-66-0	0.899	2.3
Hexane	110-54-3	0.945	2.3
Benzene	71-43-2	0.975	2.3
Toluene	108-88-3	0.970	2.3
Heptane	142-82-5	0.931	2.3
Octane	11-65-9	0.926	2.3
p,m-Xylene	108-38-3	0.940	2.3
o-Xylene	95-47-6	0.937	2.3
1,3,5-Trimethylbenzene	108-67-8	0.925	2.3

Analyst: Steve Hoyt, PhD.

Approved:

ST62529 HC Standard LCS.xls

Standard Preparation

Standard Name:	TO-3 HC Standard LCS			**Primary**	**Dilution 1**	**Dilution 2**		
Standard ID:	ST61141			ST62529	ST62529	ST62529		
Target Liquid Volume (ul)	40.0	Date Prepared:		11/11/2020	11/11/2020	11/11/2020		
Target Wt from Volume (g)	0.03144	Canister ID:		AL20lb	AL20lb	AL20lb		
NIST 100 mg Weight	0.10005	Analyst:		SDH				
Initial Syringe Wt (g)	12.51901		Pressure	Correction	Corrected			
Final Syringe Wt (g)	12.4888	Pressure	945	0.028	971.46	psig		
Liquid Wt (g)	0.03017	Temp	25	C	1.00	1.00	psig	
Gas Volume, ml	898144	Atm P	760.0	torr	1.00	1.00	psig	
Gas Constant	24454			Factor	1.00	1.00		

	Wt (g) from Vol	moles	ml gas	Conc ppmv	Conc ppmv	Conc ppmv	Weight %Error
Pentane	0.0024	0.000033	0.80725	0.8988	0.8988	0.8988	0.013
Hexane	0.0030	0.000035	0.84837	0.9446	0.9446	0.9446	0.010
Benzene	0.0028	0.000036	0.87604	0.9754	0.9754	0.9754	0.011
Toluene	0.0033	0.000036	0.87158	0.9704	0.9704	0.9704	0.010
Heptane	0.0034	0.000034	0.83649	0.9314	0.9314	0.9314	0.009
Octane	0.0039	0.000034	0.83193	0.9263	0.9263	0.9263	0.008
p,m-Xylene	0.0037	0.000035	0.844	0.9397	0.9397	0.9397	0.009
o-Xylene	0.0037	0.000034	0.84166	0.9371	0.9371	0.9371	0.009
1,3,5-Trimethylbenzene	0.0041	0.000034	0.83079	0.9250	0.9250	0.9250	0.008

ST62529 HC Standard LCS.xls

Multicomponent Mix Preparation

Save as Template under this STD ID ST61141

Chemist SDH Actual Dif
NIST Wgt. **5.00014** 5.00015 0.00001
NIST Wgt. **10.00012** 10.00015 0.00003

Final Mix Volume, ul 2500 Factor 401.66 (use 1.0 for Factor if not using mix) Avg 0.00002

	liq vol ul	Target grams	wt Final	wt Initial	ID Number	Actual Weight	Weight Fraction	Density Fraction	% Dif
Pentane	254.004	0.15901	5.42814	5.27596		0.15218	0.08	0.049419	-4.3
Hexane	288.204	0.18993	5.61917	5.42814		0.19103	0.10	0.065306	0.6
Benzene	196.958	0.17214	5.79796	5.61917		0.17879	0.09	0.081062	3.9
Toluene	234.753	0.20306	6.00779	5.79796		0.20983	0.11	0.094156	3.3
Heptane	322.875	0.22085	6.22681	6.00779		0.21902	0.11	0.077715	-0.8
Octane	358.100	0.25174	6.47511	6.22681		0.24830	0.13	0.090552	-1.4
p,m-Xylene	269.564	0.23398	6.70924	6.47511		0.23413	0.12	0.105425	0.1
o-Xylene	268.944	0.23398	6.94272	6.70924		0.23348	0.12	0.105374	-0.2
1,3,5-Trimethylbenzene	306.598	0.26490	7.20364	6.94272		0.26092	0.14	0.116946	-1.5
	2500.000	1.92959				1.92768		0.785956	

ST62529 HC Standard LCS.xls

STANDARD PREPARATION WORKSHEET

Instructions: Enter the compound name and date then desired ppmV for final Standard. Check mass and volume to make sure they are in a measurable range, if not enter a diltuion factor to bring in range.
Checked and Validated on 06/22/11

Description:	TO-3 HC Standard LCS		10lb	6701 ml
Cylinder Volume:	13388 ml	AL CO2 10lb	20lb	13388 ml

Standard	CAS	MW	Density g/ml	Desired ppmV	ml as Gas	mass grams	liq vol ul	Purity %
Pentane	109-66-0	72.15	0.626	10.00	0.13388	0.00040	0.632	99.0
Hexane	110-54-3	86.18	0.659	10.00	0.13388	0.00047	0.718	99.0
Benzene	71-43-2	78.11	0.874	10.00	0.13388	0.00043	0.490	99.0
Toluene	108-88-3	92.14	0.865	10.00	0.13388	0.00051	0.584	99.0
Heptane	142-82-5	100.21	0.684	10.00	0.13388	0.00055	0.804	99.0
Octane	11-65-9	114.23	0.703	10.00	0.13388	0.00063	0.892	99.0
p,m-Xylene	108-38-3	106.17	0.868	10.00	0.13388	0.00058	0.671	99.0
o-Xylene	95-47-6	106.17	0.870	10.00	0.13388	0.00058	0.670	99.0
1,3,5-Trimethylbenzene	108-67-8	120.2	0.864	10.00	0.13388	0.00066	0.763	99.0
							6.22	

ST62529 HC Standard LCS.xls

Section 5 Standard Calibration Certificates

This section contains the Standard Calibration Certificates for the Standards and Internal Standards.

Section Contents

Standard Calibration Certificates

STANDARD CERTIFICATE
CALIBRATION GAS STANDARD

Standard ID: **ST62344**
Description: **TO-14 Hexane Calibration Standard**
Date Recertified : 10/7/2019
Date Expired: 10/4/2024

Canister: AL150
Analyst: SDH

Component	CAS No	Concentration ppmv
Hexane	110-54-3	18.050

Analyst: Steve Hoyt, PH.D.

Approved:

ST62344 Hexane Standard 18 ppm.xls

Standard Preparation

Standard Name:	TO-14 Hexane Calibration Standard					**Dilution 1**	**Dilution 2**	
Standard ID:	ST62344					ST62344	ST62344	
Target Liquid Volume (ul)	120.0	Date Prepared:				10/7/2019	10/7/2019	
Target Wt from Volume (g)		Canister ID:	AL150			AL150	AL150	
NIST 100 mg Weight		Analyst:	SDH				Recertyified Against	
Initial Syringe Wt (g)	15.18500	Pressure	Correction			Corrected	ST62118	
Final Syringe Wt (g)	15.05212	Pressure	1000	0.028		1028	psig	
Liquid Wt (g)	0.13288	Temp	25	C		1.00	1.00	
Gas Volume, ml	2088947	Atm P	760.0	torr		1.00	1.00	
Gas Constant	24454			Factor		1.00	1.00	

	Wt (g) from Vol	moles	ml gas	Conc ppmv	Conc ppmv	Conc ppmv	Weight %Error
Hexane	0.1329	0.001542	37.7052	18.0498	18.0498	18.0498	0.015

Multicomponent Mix Preparation

Save as Template under this STD ID ST62344

Final Mix Volume, ul 2500 Factor 1583.88

	Chemist	SDH	Actual	Dif
NIST Wgt.		**5.00014**	5.00015	0.00001
NIST Wgt.		**10.00012**	10.00015	0.00003
(use 1.0 for Factor if not using mix)			Avg	0.00002

	liq vol ul	Target grams	wt Final	wt Initial	ID Number	Actual Weight	Weight Fraction	Density Fraction	% Dif
Hexane	2500.000	1.64750	15.18550	15.05212	68524	0.13338	1.00	0.659000	-91.9
	2500.000	1.64750				0.13338		0.659000	

ST62344 Hexane Standard 18 ppm.xls

STANDARD PREPARATION WORKSHEET

Instructions: Enter the compound name and date then desired ppmV for final Standard. Check mass and volume to make sure they are in a measurable range, if not enter a diltuion factor to bring in range.
Checked and Validated on 06/22/11

Description: TO-14 Hexane Calibration Standard
Cylinder Volume: 29450 ml

Standard	CAS	MW	Density g/ml	Desired ppmV	ml as Gas	mass grams	liq vol ul	Purity %
Hexane	110-54-3	86.18	0.659	10.00	0.29450	0.00104	1.578	99.0
						1.58		

ST62344 Hexane Standard 18 ppm.xls

ENVIRONMENTAL
Analytical Service, Inc.

Data Deliverable Package

Prepared For:
C.E. Schmidt
19200 Live Oak Road
Red Bluff CA 96080

EAS SDG Number: **224435**
Project Number: 17807
Report Sent:
Sample Event Date: 1/20,11/21/2024

Client Project Manager: Chuck Schmidt
Project Name: Chiquita Canyon
Project Number: Data Package GC TO-15

This is the Laboratory Data Deliverable Package for the samples in the indicated Sample Delivery Group (SDG).

INDEX TO DATA PACKAGE:

Section 1 **Project Summary**
- Laboratory Work Order
- Sample Data
- Laboratory Case Narrative and Chain of Custody

Section 2 **Quality Control**
- Project QC Criteria
- DAB QC Reports

Section 3 **Analytical Methods**
- Analytical Method Description(s)
- Analytical Reports

Section 4 **Data Package with Quant Report and Chromatogram**
- DAB Run Logs and Preparation Log
- Sample Data Package
- Blank Data Package
- Continuing Calibration Package
- Initial Calibration Package

Section 5 **Standard Certificates**

Section 6 **SDG Documentation, Notes, Correspondence**

173 Cross Street, San Luis Obispo, California, 93401 (805) 781-3585

Section 1 Project Summary

The following pages provide detailed information about the sample receipt, log-in, and sample preparation. The Laboratory Work Order provides a cross reference between the Client ID number and the EAS Lab Number as well as a list of the analytical tests preformed. The items included in this section are listed below.

Section Contents

Laboratory Work Order

Sample Data

Laboratory Case Narrative

Chain of Custody

Laboratory Work Order

SDG Number: 224435
Client: Chuck Schmidt
C.E. Schmidt

Project Number: 17807
Received: 11/21/2024

SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-401	224435 1	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-401	224435 1	ASTM D3416 Low Level Methane	11/19/2024
T-401	224435 1	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-401	224435 1	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-401	224435 1	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-402	224435 2	ASTM D3416 Low Level Methane	11/19/2024
T-402	224435 2	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-402	224435 2	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-403	224435 3	ASTM D3416 Low Level Methane	11/19/2024
T-403	224435 3	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-403	224435 3	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-403	224435 3	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-403	224435 3	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-404	224435 4	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-404	224435 4	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-404	224435 4	ASTM D3416 Low Level Methane	11/19/2024
T-404	224435 4	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-404	224435 4	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-405	224435 5	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-405	224435 5	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-405	224435 5	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-405	224435 5	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-405	224435 5	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-406	224435 6	ASTM D3416 Low Level Methane	11/19/2024
T-406	224435 6	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-406	224435 6	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-406	224435 6	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-406	224435 6	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-407	224435 7	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-407	224435 7	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-407	224435 7	ASTM D3416 Low Level Methane	11/19/2024
T-407	224435 7	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-407	224435 7	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-408	224435 8	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-408	224435 8	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-408	224435 8	ASTM D3416 Low Level Methane	11/19/2024
T-408	224435 8	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-408	224435 8	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-409	224435 9	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D3416 Low Level Methane	11/19/2024
T-409	224435 9	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-409	224435 9	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-410	224435 10	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-410	224435 10	ASTM D3416 Low Level Methane	11/19/2024
T-410	224435 10	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-411	224435 11	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-411	224435 11	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-411	224435 11	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-411	224435 11	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-411	224435 11	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-412	224435 12	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-412	224435 12	ASTM D3416 Low Level Methane	11/19/2024
T-412	224435 12	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-413	224435 13	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-413	224435 13	ASTM D3416 Low Level Methane	11/19/2024
T-413	224435 13	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-414	224435 14	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-414	224435 14	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-414	224435 14	ASTM D3416 Low Level Methane	11/19/2024
T-414	224435 14	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-414	224435 14	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-415	224435 15	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-415	224435 15	ASTM D3416 Low Level Methane	11/19/2024
T-415	224435 15	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-416	224435 16	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-416	224435 16	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-416	224435 16	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-416	224435 16	ASTM D3416 Low Level Methane	11/19/2024
T-416	224435 16	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-417	224435 17	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-417	224435 17	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-417	224435 17	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-418	224435 18	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-418	224435 18	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-418	224435 18	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D3416 Low Level Methane	11/19/2024
T-501	224435 19	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-501	224435 19	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-501	224435 19	ASTM D3416 Low Level Methane	11/20/2024
T-501	224435 19	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-501	224435 19	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-502	224435 20	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-502	224435 20	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-502	224435 20	ASTM D3416 Low Level Methane	11/20/2024
T-502	224435 20	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-502	224435 20	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-503	224435 21	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-503	224435 21	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-503	224435 21	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-504	224435 22	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-504	224435 22	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-504	224435 22	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-505	224435 23	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-505	224435 23	ASTM D3416 Low Level Methane	11/20/2024
T-505	224435 23	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-506	224435 24	ASTM D3416 Low Level Methane	11/20/2024
T-506	224435 24	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-506	224435 24	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-507	224435 25	ASTM D3416 Low Level Methane	11/20/2024
T-507	224435 25	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-507	224435 25	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-508	224435 26	ASTM D3416 Low Level Methane	11/20/2024
T-508	224435 26	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-508	224435 26	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-508	224435 26	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-508	224435 26	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-509	224435 27	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-509	224435 27	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-509	224435 27	ASTM D3416 Low Level Methane	11/20/2024
T-509	224435 27	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-509	224435 27	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-510	224435 28	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-510	224435 28	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-510	224435 28	ASTM D3416 Low Level Methane	11/20/2024
T-510	224435 28	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-510	224435 28	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-511	224435 29	ASTM D3416 Low Level Methane	11/20/2024
T-511	224435 29	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-511	224435 29	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-511	224435 29	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-511	224435 29	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-512	224435 30	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-512	224435 30	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-512	224435 30	ASTM D3416 Low Level Methane	11/20/2024
T-512	224435 30	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-512	224435 30	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-513	224435 31	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-513	224435 31	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-513	224435 31	ASTM D3416 Low Level Methane	11/20/2024
T-513	224435 31	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-513	224435 31	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-514	224435 32	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D3416 Low Level Methane	11/20/2024
T-514	224435 32	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-514	224435 32	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-601	224435 33	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-601	224435 33	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-601	224435 33	ASTM D3416 Low Level Methane	11/21/2024
T-601	224435 33	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-601	224435 33	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-602	224435 34	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-602	224435 34	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-602	224435 34	ASTM D3416 Low Level Methane	11/21/2024
T-602	224435 34	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-602	224435 34	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-603	224435 35	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D3416 Low Level Methane	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-603	224435 35	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-603	224435 35	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-604	224435 36	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-604	224435 36	ASTM D3416 Low Level Methane	11/21/2024
T-604	224435 36	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-605	224435 37	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-605	224435 37	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-605	224435 37	ASTM D3416 Low Level Methane	11/21/2024
T-605	224435 37	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-605	224435 37	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-606	224435 38	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-606	224435 38	ASTM D3416 Low Level Methane	11/21/2024
T-606	224435 38	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-607	224435 39	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-607	224435 39	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-607	224435 39	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-607	224435 39	ASTM D3416 Low Level Methane	11/21/2024
T-607	224435 39	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-608	224435 40	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	ASTM D3416 Low Level Methane	11/21/2024
T-608	224435 40	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-608	224435 40	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-609	224435 41	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-609	224435 41	EPA TO-12 C2 to C12 CRYO	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-609	224435 41	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-610	224435 42	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-610	224435 42	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-610	224435 42	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-611	224435 43	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-611	224435 43	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-611	224435 43	ASTM D3416 Low Level Methane	11/21/2024
T-611	224435 43	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-611	224435 43	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-612	224435 44	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-612	224435 44	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-612	224435 44	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-613	224435 45	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-613	224435 45	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-613	224435 45	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-614	224435 46	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-614	224435 46	ASTM D3416 Low Level Methane	11/21/2024
T-614	224435 46	EPA TO-12 C2 to C12 CRYO	11/21/2024

Project Sample Media

SDG Number: 224435

The following sample media was used for this Sample Delivery Group (SDG). The Sample Media column identifies the type of media. For canisters, the Sample Media Batch gives the canister number followed by the cleaning batch number, which is a unique identification. The initial pressure of the canister when it is received is recorded. If the canister is not pressurized, the final pressure will be the same as the initial pressure. If the canister is pessurized the final pressure will be recorded, and the canister dilution factor is calculated as the ratio of the final to initial pressure. The results are adjusted for the can dilution factor.

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Pressure, torr Final	Can Factor
224435	1	T-401	636		737	921	1.25
224435	2	T-402	703		739	922	1.25
224435	3	T-403	547		727	920	1.27
224435	4	T-404	749		740	920	1.24
224435	5	T-405	837		720	921	1.28
224435	6	T-406	626		735	924	1.26
224435	7	T-407	740		698	922	1.32
224435	8	T-408	805		699	917	1.31
224435	9	T-409	631		675	919	1.36
224435	10	T-410	714		678	921	1.36
224435	11	T-411	551		722	922	1.28
224435	12	T-412	881		704	930	1.32
224435	13	T-413	766		690	924	1.34
224435	14	T-414	725		699	923	1.32
224435	15	T-415	896		704	919	1.31
224435	16	T-416	659		651	922	1.42
224435	17	T-417	899		709	920	1.30
224435	18	T-418	522		739	927	1.25
224435	19	T-501	664		721	923	1.28
224435	20	T-502	716		690	920	1.33
224435	21	T-503	751		717	921	1.28
224435	22	T-504	644		719	920	1.28
224435	23	T-505	883		684	921	1.35
224435	24	T-506	784		679	921	1.36
224435	25	T-507	712		670	924	1.38

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	26	T-508	549		669	920	1.38
224435	27	T-509	882		661	924	1.40
224435	28	T-510	860		649	921	1.42
224435	29	T-511	627		674	921	1.37
224435	30	T-512	417		676	916	1.36
224435	31	T-513	781		681	925	1.36
224435	32	T-514	506		669	926	1.38
224435	33	T-601	700		712	929	1.30
224435	34	T-602	673		714	913	1.28
224435	35	T-603	550		736	916	1.24
224435	36	T-604	738		691	922	1.33
224435	37	T-605	892		703	920	1.31
224435	38	T-606	608		666	922	1.38
224435	39	T-607	771		703	920	1.31
224435	40	T-608	531		685	925	1.35
224435	41	T-609	668		707	926	1.31
224435	42	T-610	730		674	921	1.37
224435	43	T-611	701		680	920	1.35
224435	44	T-612	514		666	927	1.39
224435	45	T-613	694		663	924	1.39
224435	46	T-614	880		668	925	1.38

Laboratory Case Narrative

EAS SDG Number: 224435 **Project Number:** 17807

Client: C.E. Schmidt

The Laboratory Case Narrative for the SDG is below. The Chain of Custody form(s) follow the Laboratory Case Narrative.

Sample Control Narrative

The samples were all received in good condition and with proper preservation.

Analytical Methods

The methods used for sample analysis are listed on the Analytyical Report header, and have been modified as described in the EAS Quality Manual..

Case Narrative

QC Narrative

All analyses met EAS method criteria as defined in the Quality Manual, except as noted in the report or QC reports with data qualifiers.

Subcontract Narrative

No sample analysis was subcontracted for this project

Laboratory Certification

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition(s) noted above. The Laboratory Report is property of EAS and its client. The entire report has been reviewed and approved.

Date Approved:

Steven D. Hoyt, Ph.D.
Environmental Analytical Service
Laboratory Director

Section 2 Quality Control

This section contains the QC Reports for each Daily Analytical Batch (DAB) which make up the Sample Delivery Group (SDG). It also contains either the EAS or Project QC criteria that was used for the DAB. The methods used for this project have been modified from the original method. The modifications include modifications to the QC for the method. This is either because the method did not specify certain aspects of the QC, the method was originally designed for a different matrix, or additional compounds were added to the target list of the method which required modified QC. The QC modifications used by EAS follows those used by other air testing laboratories.

The Daily Analytical Batch data was checked against the QC criteria for the method. Any deviations from the QC criteria are listed on the QC Reports for each DAB, which are summarized in this section and are given in more detail in Section 4 which has the Quantitation Reports and Calculations for the Samples, Method Blank, Lab Control Spikes, as well as the Initial Calibration and Continuing Calibration. This section contains the following:

Section Contents

Project QC Critera

DAB Quality Control Reports

- Method Blank
- Laboratory Control Spike
- Laboratory Control Duplicate
- Continuing Calibration

Quality Control Report

EAS SDG Number: 224435

Project Number: 17807

QC Narrative

Samples were anlayzed in a daily analytical batch (DAB) designated by a QC batch number, and were analyzed using EAS standard laboratory QC specified in the EAS Quality Manual which may be different then the referrenced agency method. Any deviations from the EAS QC criteria are flagged in the Laboratory Control Reports or in the sample Analytical Reports.

Standard Laboratory QC Report

Unless project specific QC was requested, this Section containing the standard laboratory QC (Level 2) supplied with the Analytical Reports. Each sample is analyzed in a Daily Analytical Batch (DAB) which includes the method blank, a laboratory control spike (LCS) and a laboratory control duplicate (LCD). A Daily Analytical Batch QC report is supplied for each method requested.

Method Blank

The method blank is a laboratory generated sample which assesses the degree to which laboratory operations cause a false positive. The target analytes in the analytical reports for a daily analytical batch are "B" flagged if their concentrations are present in the Method Blank above the RL, unless the result is greater then ten times the blank value..

Laboratory Control Spike

A laboratory control spike is a well characterized matrix similar to the sample which is spiked and run in duplicate with each Daily Analytical Batch. The laboratory control spike results are reported as a percent recovery. The QC Criteria for the control spike is listed in the Laboratory Control Report. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report. The control spike contains an abbreviated list of compounds in the method, and may contain compounds not on the target list for the specified report.

Laboratory Control Duplicate

The laboratory control duplicate is a duplicate analysis of the laboratory control spike, a standard, or a sample depending on the method. The results are reported as a relative percent difference (RPD). The criteria for the duplicate is in the Laboratory Control Report for the Daily Analytical Batch. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B121044

File Name: B12104D.D
Description: METHOD BLANK
Canister:
QC_Batch: 12104-MA1

Date Sampled: **Time:**
Date Analyzed: 12/10/2024 **Time:** 14:37
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	106	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B121044

File Name: LABQC
Description: B121044
Canister:
QC_Batch: 12104-MA1

Date Sampled:
Date Analyzed: 12/10/2024
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 14:37

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B121144

File Name: B12114D.D
Description: METHOD BLANK
Canister:
QC_Batch: 12114-MA1

Date Sampled: **Time:**
Date Analyzed: 12/11/2024 **Time:** 14:36
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	104	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B121144

File Name: LABQC
Description B121144
Canister:
QC_Batch: 12114-MA1

Date Sampled:
Date Analyzed: 12/11/2024
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 14:36

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12124

File Name: B12124D.D
Description: METHOD BLANK
Canister:
QC_Batch: 121244-MA1

Date Sampled: **Time:**
Date Analyzed: 12/12/2024 **Time:** 13:46
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	110	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12124

File Name: LABQC
Description B12124
Canister:
QC_Batch: 121244-MA1

Date Sampled:
Date Analyzed: 12/12/2024
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 13:46

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12134

File Name: B12134D.D
Description: METHOD BLANK
Canister:
QC_Batch: 121344-MA1

Date Sampled: **Time:**
Date Analyzed: 12/13/2024 **Time:** 14:44
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	122	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12134

File Name: LABQC
Description B12134
Canister:
QC_Batch: 121344-MA1

Date Sampled:
Date Analyzed: 12/13/2024
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 14:44

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12164

File Name: B12164D.D
Description: METHOD BLANK
Canister:
QC_Batch: 121644-MA1

Date Sampled: **Time:**
Date Analyzed: 12/16/2024 **Time:** 15:07
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12164

File Name: LABQC
Description B12164
Canister:
QC_Batch: 121644-MA1

Date Sampled:
Date Analyzed: 12/16/2024
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 15:07

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121024-MA1
Date: 12/10/2024

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	107		104		70	130	3	25	
75-35-4	1,1-Dichloroethene	108		116		70	130	8	25	
75-09-2	Dichloromethane	109		112		70	130	3	25	
75-34-3	1,1-Dichloroethane	101		101		70	130	0	25	
67-66-3	Chloroform	109		111		70	130	2	25	
71-55-6	1,1,1-Trichloroethane	100		108		70	130	7	25	
107-06-2	1,2-Dichloroethane	95		104		70	130	9	25	
71-43-2	Benzene	92		96		70	130	4	25	
56-23-5	Carbon tetrachloride	111		117		70	130	5	25	
79-01-6	Trichloroethene	94		100		70	130	6	25	
108-88-3	Toluene	104		112		70	130	7	25	
106-93-4	1,2-Dibromoethane	95		100		70	130	5	25	
127-18-4	Tetrachloroethene	82		88		70	130	7	25	
100-41-4	Ethylbenzene	96		103		70	130	8	25	
1330-20-7	m,p-Xylenes	96		105		70	130	9	25	
95-47-6	o-Xylene	97		103		70	130	6	25	
108-67-8	1,3,5-Trimethylbenzene	96		98		70	130	2	25	
95-63-6	1,2,4-Trimethylbenzene	97		93		70	130	5	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121124-MA1
Date: 12/11/2024

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	102		113		70	130	10	25	
75-35-4	1,1-Dichloroethene	100		116		70	130	14	25	
75-09-2	Dichloromethane	113		109		70	130	3	25	
75-34-3	1,1-Dichloroethane	89		104		70	130	16	25	
67-66-3	Chloroform	100		115		70	130	14	25	
71-55-6	1,1,1-Trichloroethane	90		107		70	130	17	25	
107-06-2	1,2-Dichloroethane	103		97		70	130	6	25	
71-43-2	Benzene	90		96		70	130	7	25	
56-23-5	Carbon tetrachloride	93		116		70	130	22	25	
79-01-6	Trichloroethene	97		100		70	130	3	25	
108-88-3	Toluene	101		108		70	130	7	25	
106-93-4	1,2-Dibromoethane	91		104		70	130	14	25	
127-18-4	Tetrachloroethene	85		90		70	130	6	25	
100-41-4	Ethylbenzene	81		93		70	130	14	25	
1330-20-7	m,p-Xylenes	80		92		70	130	13	25	
95-47-6	o-Xylene	79		93		70	130	17	25	
108-67-8	1,3,5-Trimethylbenzene	75		88		70	130	16	25	
95-63-6	1,2,4-Trimethylbenzene	77		81		70	130	5	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121224-MA1
Date: 12/12/2024

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	114		103		70	130	9	25	
75-35-4	1,1-Dichloroethene	85		96		70	130	12	25	
75-09-2	Dichloromethane	122		112		70	130	9	25	
75-34-3	1,1-Dichloroethane	87		88		70	130	1	25	
67-66-3	Chloroform	100		100		70	130	0	25	
71-55-6	1,1,1-Trichloroethane	87		87		70	130	0	25	
107-06-2	1,2-Dichloroethane	83		86		70	130	3	25	
71-43-2	Benzene	87		89		70	130	2	25	
56-23-5	Carbon tetrachloride	88		90		70	130	2	25	
79-01-6	Trichloroethene	103		109		70	130	5	25	
108-88-3	Toluene	109		111		70	130	2	25	
106-93-4	1,2-Dibromoethane	100		107		70	130	7	25	
127-18-4	Tetrachloroethene	93		95		70	130	2	25	
100-41-4	Ethylbenzene	93		98		70	130	5	25	
1330-20-7	m,p-Xylenes	93		97		70	130	4	25	
95-47-6	o-Xylene	92		98		70	130	7	25	
108-67-8	1,3,5-Trimethylbenzene	81		92		70	130	13	25	
95-63-6	1,2,4-Trimethylbenzene	75		87		70	130	14	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121324-MA1
Date: 12/13/2024

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	111		115		70	130	4	25	
75-35-4	1,1-Dichloroethene	90		110		70	130	21	25	
75-09-2	Dichloromethane	115		113		70	130	3	25	
75-34-3	1,1-Dichloroethane	82		100		70	130	20	25	
67-66-3	Chloroform	87		109		70	130	22	25	
71-55-6	1,1,1-Trichloroethane	75		85		70	130	13	25	
107-06-2	1,2-Dichloroethane	83		100		70	130	18	25	
71-43-2	Benzene	80		86		70	130	6	25	
56-23-5	Carbon tetrachloride	77		90		70	130	16	25	
79-01-6	Trichloroethene	90		97		70	130	7	25	
108-88-3	Toluene	96		112		70	130	15	25	
106-93-4	1,2-Dibromoethane	83		103		70	130	21	25	
127-18-4	Tetrachloroethene	71		83		70	130	15	25	
100-41-4	Ethylbenzene	99		104		70	130	5	25	
1330-20-7	m,p-Xylenes	97		101		70	130	4	25	
95-47-6	o-Xylene	98		105		70	130	7	25	
108-67-8	1,3,5-Trimethylbenzene	102		97		70	130	4	25	
95-63-6	1,2,4-Trimethylbenzene	97		88		70	130	10	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121624-MA1
Date: 12/16/2024

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	121		115		70	130	5	25	
75-35-4	1,1-Dichloroethene	73		93		70	130	24	25	
75-09-2	Dichloromethane	129		115		70	130	12	25	
75-34-3	1,1-Dichloroethane	87		103		70	130	17	25	
67-66-3	Chloroform	99		114		70	130	14	25	
71-55-6	1,1,1-Trichloroethane	78		95		70	130	19	25	
107-06-2	1,2-Dichloroethane	98		81		70	130	19	25	
71-43-2	Benzene	87		91		70	130	4	25	
56-23-5	Carbon tetrachloride	82		95		70	130	16	25	
79-01-6	Trichloroethene	102		100		70	130	2	25	
108-88-3	Toluene	113		113		70	130	0	25	
106-93-4	1,2-Dibromoethane	108		117		70	130	8	25	
127-18-4	Tetrachloroethene	91		97		70	130	7	25	
100-41-4	Ethylbenzene	97		92		70	130	5	25	
1330-20-7	m,p-Xylenes	96		89		70	130	8	25	
95-47-6	o-Xylene	96		89		70	130	8	25	
108-67-8	1,3,5-Trimethylbenzene	105		86		70	130	20	25	
95-63-6	1,2,4-Trimethylbenzene	102		99		70	130	3	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Section 3 Analytical Methods

This section has information on the analytial methods and a copy of the analytical reports for the Sample Delivery Group (SDG) listed below. The reports are organized in order of the EAS Laboratory Number.

Section Contents

Analytical Method Description(s)

Analytical Reports

Analytical Reports

EAS SDG Number: 224435

Project Number: 17807

The following pages contain the certified Analytical Reports for the samples submitted in the Sample Delivery Group (SDG) and are in order of the EAS Lab ID number. All of the analytical methods used are modifications of the published methods. Procedural method modifications, QC modifications, QC Criteria modifications, target lists, definitions of detection limits, and flags are all explained in detail in the EAS Quality Manual. The Analytical Report has columns for the method detection limit (MDL), the reporting limit (RL), and the Amount. The Amount is the concentration of the compound in the sample. The report usually has the results reported with two commonly used units. The MDL, RL, and Amount are adjusted for the canister dilution factor and any dilution caused by sample matrix effects.

NELAC CERTIFICATION

EAS is accredited by the National Environmental Laboratory Accreditation (NELAC) with the Florida Department of Health, one of the NELAC certifying states. EAS is certified for the EPA TO-15, EPA TO-11 and EPA TO-4 methods. A list of accredited compounds is available on request.

DETECTION LIMITS

MDL: The MDL is lowest concentration that can be measured to be statistically above the noise level and is determined using the EPA 2016 method which uses the standard deviation of replicate measurements made over time. The method also incorporates systematic instrumentation blank levels. See Quality Manual for detailed explanation.

RL: The reporting limit (RL) is the lowest concentration that can be reliably reported for each compound that meets the QC Criteria for the method, background levels, or project specific considerations. The QC criteria level for the method blank is to be less then the RL See Quality Manual for more information.

DATA FLAGS

In the standard report, if a compound is not detected above the method detection limit, a "ND" is in the Amount column. The flag column is used for both the not detect flag and for any data flags.

B - This compound was detected in the batch method blank above the reporting limit and is greater then one tenth the amount in the sample.

E - This compound exceeds the calibration range for this sample volume.

J - The amount reported is estimated because it was below the RL and could be below the lowest calibration point, have higher uncertainty, or could be the result of system background

SIGNIFICANT FIGURES

Based on the uncertainty in the methods, the numbers on the Analytical Reports should be used with only two significant digits. Additional significant figures are reported for ease of use and to avoid rounding errors when used in further calculations.

UNITS

PPBV or PPMV: Parts-per-billion (or million) by volume is a mole (volume) ratio of the moles of analyte divided by the moles of air (gas). This is the primary unit used to report air or gas concentrations and is independent of temperature and pressure.

UG/M3 OR MG/M3: The reported result was calculated based on 1 atm pressure and a temperature of 25C. The conversion from PPBV is: UG/M3 = PPBV x MW/24.46 where 24.26 is the gas constant and MW is the Compounds Molecular Weight (sometimes called Formula Weight)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 01

File Name: 2443501A.D
Description: T-401
Canister: 636
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:51
Date Analyzed: 12/10/2024 **Time:** 18:22
Can Dilution Factor: 1.25
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.63	1.04	ND	3.09	5.16	ND	
67-56-1	Methanol	2.08	2.50	6.71	2.73	3.28	8.79	
74-87-3	Chloromethane	0.63	1.04	3.86	1.29	2.15	7.99	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.04	ND	2.92	7.29	ND	
75-01-4	Vinyl chloride	0.21	1.04	ND	0.54	2.67	ND	
106-99-0	1,3-Butadiene	0.21	1.04	ND	0.46	2.31	ND	
74-83-9	Bromomethane	0.42	1.04	5.61	1.62	4.05	21.79	
75-00-3	Chloroethane	0.42	1.04	1.78	1.10	2.75	4.70	
64-17-5	Ethanol	2.08	13.38	2.12	3.93	25.25	4.00	J
107-02-8	Acrolein	0.42	1.25	2.16	0.96	2.87	4.96	
75-69-4	Trichlorofluoromethane	0.42	1.04	ND	2.34	5.86	ND	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.21	27.28	2.05	12.82	67.15	
75-65-0	t-Butyl alcohol	0.42	4.17	ND	1.26	12.64	ND	
4227-95-6	Methyl iodide	0.42	1.25	ND	2.44	7.32	ND	
75-35-4	1,1-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
107-13-1	Acrylonitrile	0.83	1.25	ND	1.81	2.72	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.04	ND	1.60	7.99	ND	
107-05-1	Allyl chloride	0.21	4.17	ND	0.65	13.05	ND	
75-09-2	Methylene chloride	0.21	1.04	1.21	0.72	3.62	4.20	
75-15-0	Carbon disulfide	0.42	1.04	51.56	1.30	3.25	160.70	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.83	3.31	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.83	ND	1.50	3.01	ND	
107-12-0	Propionitrile	1.04	1.67	ND	2.35	3.76	ND	
75-34-3	1,1-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.04	ND	1.74	4.36	ND	
108-05-4	Vinyl acetate	0.21	4.17	ND	0.73	14.69	ND	
108-20-3	Diisopropyl ether	0.42	2.50	ND	1.74	10.46	ND	
110-54-3	Hexane	0.42	1.04	11.36	1.47	3.68	40.12	
126-98-7	Methacrylonitrile	0.42	1.04	ND	1.15	2.86	ND	
141-78-6	Ethyl acetate	0.42	1.04	ND	1.50	3.76	ND	
74-97-5	Bromochloromethane	0.21	1.04	ND	1.10	5.52	ND	
96-33-3	Methyl acrylate	0.42	2.08	ND	1.47	7.35	ND	
109-99-9	Tetrahydrofuran	0.21	1.25	21.58	0.62	3.69	63.71	
78-83-1	Isobutyl alcohol	0.83	3.33	ND	2.53	10.12	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
594-20-7	2,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
67-66-3	Chloroform	0.21	1.04	0.32	1.02	5.09	1.58	J
71-55-6	1,1,1-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
107-06-2	1,2-Dichloroethane	0.21	1.04	12.20	0.84	4.22	49.45	
563-58-6	1,1-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
110-82-7	Cyclohexane	0.21	1.04	10.43	0.72	3.59	35.98	
71-43-2	Benzene	1.46	2.08	8.58	4.66	6.66	27.44	
56-23-5	Carbon tetrachloride	0.21	1.04	ND	1.31	6.56	ND	
994-05-8	t-Amyl methyl ether	0.42	2.08	ND	1.74	8.72	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.04	ND	0.97	4.87	ND	
142-82-5	n-Heptane	0.42	1.04	22.48	1.71	4.27	92.27	
78-87-5	1,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
123-91-1	1,4 Dioxane	0.42	2.08	ND	1.50	7.52	ND	
74-95-3	Dibromomethane	0.21	1.04	ND	1.48	7.42	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.04	ND	0.56	5.61	ND	
75-27-4	Bromodichloromethane	0.21	1.04	ND	1.40	6.99	ND	
80-62-6	Methyl methacrylate	0.42	1.04	ND	1.71	4.27	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.33	4.81	1.71	13.68	19.72	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
108-88-3	Toluene	0.83	1.04	72.89	3.14	3.93	274.95	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
97-63-2	Ethyl methacrylate	0.42	1.04	ND	1.95	4.87	ND	
591-78-6	2-Hexanone	0.42	3.33	1.79	1.71	13.68	7.34	J
142-28-9	1,3-Dichloropropane	0.21	2.92	ND	0.96	13.50	ND	
111-65-9	Octane	0.42	1.04	10.65	1.95	4.87	49.81	
124-48-1	Dibromochloromethane	0.42	1.04	ND	3.55	8.89	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.04	ND	3.21	8.02	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.04	2.51	0.71	7.07	17.07	
108-90-7	Chlorobenzene	0.42	1.04	ND	1.92	4.80	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.04	ND	2.86	7.16	ND	
100-41-4	Ethylbenzene	0.42	1.04	33.77	1.81	4.53	146.88	
1330-20-7	m,p-Xylenes	0.42	1.04	59.67	1.81	4.53	259.51	
111-84-2	Nonane	0.42	1.04	16.17	2.19	5.47	84.97	
100-42-5	Styrene	0.63	1.04	5.74	2.67	4.45	24.48	
75-25-2	Bromoform	0.42	1.04	ND	4.31	10.78	ND	
95-47-6	o-Xylene	0.42	1.04	24.38	1.81	4.53	106.02	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.08	ND	5.73	14.32	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.50	ND	5.03	15.09	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.50	ND	4.27	12.80	ND	
103-65-1	n-Propylbenzene	0.83	2.92	ND	4.10	14.36	ND	
98-82-8	Isopropylbenzene	0.83	2.92	1.35	4.10	14.36	6.66	J
622-96-8	4-Ethyltoluene	0.83	6.67	2.52	4.10	32.82	12.39	J
108-67-8	1,3,5-Trimethylbenzene	0.83	3.75	1.91	4.10	18.46	9.39	J
124-18-5	Decane	0.83	2.50	7.40	4.86	14.57	43.15	
98-06-6	tert-butyl benzene	0.83	2.50	ND	4.58	13.74	ND	
95-63-6	1,2,4-Trimethylbenzene	0.83	3.75	3.28	4.10	18.46	16.12	J
538-93-2	i-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
135-98-8	sec-butylbenzene	0.83	2.92	ND	4.58	16.03	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.33	ND	5.02	20.07	ND	
99-87-6	Isopropyltoluene	0.83	2.50	11.17	4.58	13.74	61.42	
100-44-7	Benzyl chloride	0.83	2.08	ND	4.32	10.80	ND	
106-46-7	1,4-Dichlorobenzene	0.83	2.08	ND	5.02	12.54	ND	
104-51-8	n-Butylbenzene	0.83	2.50	1.17	4.58	13.74	6.42	J
95-50-1	1,2-Dichlorobenzene	0.83	2.92	ND	5.02	17.56	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
96-12-8	1,2-Dibromo-3-chloropropane	1.25	2.92	ND	12.10	28.23	ND	
120-82-1	1,2,4-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
91-20-3	Naphthalene	2.08	0.42	ND	10.94	2.19	ND	
87-61-6	1,2,3-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
87-68-3	Hexachlorobutadiene	1.04	1.25	ND	11.13	13.35	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	128	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 01

File Name: 2443501A.D
Description: T-401
Canister: 636
QC_Batch: 121624-MA1

Date Sampled: 11/19/2024 **Time:** 08:51
Date Analyzed: 12/16/2024 **Time:** 16:20
Can Dilution Factor: 1.25
Air Volume: 25 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	5.00	12.50	418.33	8.62	21.54	720.95	
67-64-1	Acetone	25.00	30.00	1,410.81	59.49	71.38	3,357.01	
78-93-3	2-Butanone (MEK)	5.00	15.00	2,687.69	14.76	44.29	7,936.36	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	113	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 01

File Name: 224435
Description T-401
Canister: 636
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:51
Date Analyzed: 12/10/2024 **Time:** 18:22
Can Dilution Factor: 1.25
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
2-Methyl propane	2.92	6.25	20.46	11.95	25.60	83.79
Silane	2.92	6.25	18.29	11.95	25.60	74.91
Dimethyl disulfide	2.92	6.25	17.42	11.95	25.60	71.33
Trimethyl 2-hexene	2.92	6.25	11.46	11.95	25.60	46.93
a-Pinene	2.92	6.25	95.17	11.95	25.60	389.75
Octamethylcyclotetrasilo	2.92	6.25	23.92	11.95	25.60	97.95
3-Carene	2.92	6.25	19.21	11.95	25.60	78.67
D-limonene	2.92	6.25	70.58	11.95	25.60	289.07

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 02

File Name: 2443502A.D
Description: T-402
Canister: 703
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:35
Date Analyzed: 12/10/2024 **Time:** 18:59
Can Dilution Factor: 1.25
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.04	1.32	0.72	1.80	2.28	
75-71-8	Dichlorodifluoromethane	0.63	1.04	ND	3.09	5.16	ND	
67-56-1	Methanol	2.08	2.50	5.41	2.73	3.28	7.09	
74-87-3	Chloromethane	0.63	1.04	1.00	1.29	2.15	2.08	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.04	ND	2.92	7.29	ND	
75-01-4	Vinyl chloride	0.21	1.04	ND	0.54	2.67	ND	
106-99-0	1,3-Butadiene	0.21	1.04	ND	0.46	2.31	ND	
74-83-9	Bromomethane	0.42	1.04	ND	1.62	4.05	ND	
75-00-3	Chloroethane	0.42	1.04	ND	1.10	2.75	ND	
64-17-5	Ethanol	2.08	13.38	ND	3.93	25.25	ND	
107-02-8	Acrolein	0.42	1.25	1.27	0.96	2.87	2.91	
75-69-4	Trichlorofluoromethane	0.42	1.04	ND	2.34	5.86	ND	
67-64-1	Acetone	2.08	2.50	7.07	4.96	5.95	16.82	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.21	2.38	2.05	12.82	5.85	J
75-65-0	t-Butyl alcohol	0.42	4.17	ND	1.26	12.64	ND	
4227-95-6	Methyl iodide	0.42	1.25	ND	2.44	7.32	ND	
75-35-4	1,1-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
107-13-1	Acrylonitrile	0.83	1.25	ND	1.81	2.72	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.04	ND	1.60	7.99	ND	
107-05-1	Allyl chloride	0.21	4.17	ND	0.65	13.05	ND	
75-09-2	Methylene chloride	0.21	1.04	ND	0.72	3.62	ND	
75-15-0	Carbon disulfide	0.42	1.04	ND	1.30	3.25	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.83	3.31	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.83	ND	1.50	3.01	ND	
107-12-0	Propionitrile	1.04	1.67	ND	2.35	3.76	ND	
75-34-3	1,1-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.04	ND	1.74	4.36	ND	
108-05-4	Vinyl acetate	0.21	4.17	ND	0.73	14.69	ND	
78-93-3	2-Butanone (MEK)	0.42	1.25	3.04	1.23	3.69	8.98	
108-20-3	Diisopropyl ether	0.42	2.50	ND	1.74	10.46	ND	
110-54-3	Hexane	0.42	1.04	ND	1.47	3.68	ND	
126-98-7	Methacrylonitrile	0.42	1.04	ND	1.15	2.86	ND	
141-78-6	Ethyl acetate	0.42	1.04	ND	1.50	3.76	ND	
74-97-5	Bromochloromethane	0.21	1.04	ND	1.10	5.52	ND	
96-33-3	Methyl acrylate	0.42	2.08	ND	1.47	7.35	ND	
109-99-9	Tetrahydrofuran	0.21	1.25	ND	0.62	3.69	ND	
78-83-1	Isobutyl alcohol	0.83	3.33	ND	2.53	10.12	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
67-66-3	Chloroform	0.21	1.04	ND	1.02	5.09	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
107-06-2	1,2-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
563-58-6	1,1-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
110-82-7	Cyclohexane	0.21	1.04	0.36	0.72	3.59	1.25	J
71-43-2	Benzene	1.46	2.08	ND	4.66	6.66	ND	
56-23-5	Carbon tetrachloride	0.21	1.04	ND	1.31	6.56	ND	
994-05-8	t-Amyl methyl ether	0.42	2.08	ND	1.74	8.72	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.04	ND	0.97	4.87	ND	
142-82-5	n-Heptane	0.42	1.04	ND	1.71	4.27	ND	
78-87-5	1,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
123-91-1	1,4 Dioxane	0.42	2.08	ND	1.50	7.52	ND	
74-95-3	Dibromomethane	0.21	1.04	ND	1.48	7.42	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.04	ND	0.56	5.61	ND	
75-27-4	Bromodichloromethane	0.21	1.04	ND	1.40	6.99	ND	
80-62-6	Methyl methacrylate	0.42	1.04	ND	1.71	4.27	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.33	ND	1.71	13.68	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
108-88-3	Toluene	0.83	1.04	1.03	3.14	3.93	3.89	J
10061-02-6	trans-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
97-63-2	Ethyl methacrylate	0.42	1.04	ND	1.95	4.87	ND	
591-78-6	2-Hexanone	0.42	3.33	ND	1.71	13.68	ND	
142-28-9	1,3-Dichloropropane	0.21	2.92	ND	0.96	13.50	ND	
111-65-9	Octane	0.42	1.04	ND	1.95	4.87	ND	
124-48-1	Dibromochloromethane	0.42	1.04	ND	3.55	8.89	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.04	ND	3.21	8.02	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.04	ND	0.71	7.07	ND	
108-90-7	Chlorobenzene	0.42	1.04	ND	1.92	4.80	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.04	ND	2.86	7.16	ND	
100-41-4	Ethylbenzene	0.42	1.04	ND	1.81	4.53	ND	
1330-20-7	m,p-Xylenes	0.42	1.04	0.60	1.81	4.53	2.61	J
111-84-2	Nonane	0.42	1.04	ND	2.19	5.47	ND	
100-42-5	Styrene	0.63	1.04	ND	2.67	4.45	ND	
75-25-2	Bromoform	0.42	1.04	ND	4.31	10.78	ND	
95-47-6	o-Xylene	0.42	1.04	ND	1.81	4.53	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.08	ND	5.73	14.32	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.50	ND	5.03	15.09	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.50	ND	4.27	12.80	ND	
103-65-1	n-Propylbenzene	0.83	2.92	ND	4.10	14.36	ND	
98-82-8	Isopropylbenzene	0.83	2.92	ND	4.10	14.36	ND	
622-96-8	4-Ethyltoluene	0.83	6.67	ND	4.10	32.82	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
124-18-5	Decane	0.83	2.50	ND	4.86	14.57	ND	
98-06-6	tert-butyl benzene	0.83	2.50	ND	4.58	13.74	ND	
95-63-6	1,2,4-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
538-93-2	i-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
135-98-8	sec-butylbenzene	0.83	2.92	ND	4.58	16.03	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.33	ND	5.02	20.07	ND	
99-87-6	Isopropyltoluene	0.83	2.50	ND	4.58	13.74	ND	
100-44-7	Benzyl chloride	0.83	2.08	ND	4.32	10.80	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.83	2.08	ND	5.02	12.54	ND	
104-51-8	n-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.92	ND	5.02	17.56	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.25	2.92	ND	12.10	28.23	ND	
120-82-1	1,2,4-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
91-20-3	Naphthalene	2.08	0.42	ND	10.94	2.19	ND	
87-61-6	1,2,3-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
87-68-3	Hexachlorobutadiene	1.04	1.25	ND	11.13	13.35	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	127	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 02

File Name: 224435
Description T-402
Canister: 703
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:35
Date Analyzed: 12/10/2024 **Time:** 18:59
Can Dilution Factor: 1.25
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
D-Limonene	2.92	6.25	ND	11.95	25.60	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 03

File Name: 2443503A.D
Description: T-403
Canister: 547
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:12
Date Analyzed: 12/10/2024 **Time:** 19:38
Can Dilution Factor: 1.27
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.06	1.10	0.73	1.82	1.89	
75-71-8	Dichlorodifluoromethane	0.64	1.06	ND	3.14	5.24	ND	
67-56-1	Methanol	2.12	2.54	ND	2.77	3.33	ND	
74-87-3	Chloromethane	0.64	1.06	ND	1.31	2.19	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.06	ND	2.96	7.41	ND	
75-01-4	Vinyl chloride	0.21	1.06	ND	0.55	2.71	ND	
106-99-0	1,3-Butadiene	0.21	1.06	ND	0.47	2.34	ND	
74-83-9	Bromomethane	0.42	1.06	ND	1.65	4.11	ND	
75-00-3	Chloroethane	0.42	1.06	ND	1.12	2.80	ND	
64-17-5	Ethanol	2.12	13.59	ND	4.00	25.66	ND	
107-02-8	Acrolein	0.42	1.27	0.74	0.97	2.92	1.70	J
75-69-4	Trichlorofluoromethane	0.42	1.06	ND	2.38	5.96	ND	
67-64-1	Acetone	2.12	2.54	4.88	5.04	6.04	11.62	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.29	ND	2.08	13.02	ND	
75-65-0	t-Butyl alcohol	0.42	4.23	ND	1.28	12.85	ND	
4227-95-6	Methyl iodide	0.42	1.27	ND	2.48	7.43	ND	
75-35-4	1,1-Dichloroethene	0.21	1.06	ND	0.84	4.20	ND	
107-13-1	Acrylonitrile	0.85	1.27	ND	1.84	2.76	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.06	ND	1.62	8.12	ND	
107-05-1	Allyl chloride	0.21	4.23	ND	0.66	13.26	ND	
75-09-2	Methylene chloride	0.21	1.06	ND	0.74	3.68	ND	
75-15-0	Carbon disulfide	0.42	1.06	ND	1.32	3.30	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.84	3.36	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.85	ND	1.53	3.05	ND	
107-12-0	Propionitrile	1.06	1.69	ND	2.39	3.82	ND	
75-34-3	1,1-Dichloroethane	0.21	1.06	ND	0.86	4.29	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.06	ND	1.77	4.43	ND	
108-05-4	Vinyl acetate	0.21	4.23	ND	0.75	14.93	ND	
78-93-3	2-Butanone (MEK)	0.42	1.27	1.23	1.25	3.75	3.63	J
108-20-3	Diisopropyl ether	0.42	2.54	ND	1.77	10.63	ND	
110-54-3	Hexane	0.42	1.06	0.49	1.49	3.74	1.73	J
126-98-7	Methacrylonitrile	0.42	1.06	ND	1.16	2.91	ND	
141-78-6	Ethyl acetate	0.42	1.06	ND	1.53	3.82	ND	
74-97-5	Bromochloromethane	0.21	1.06	ND	1.12	5.61	ND	
96-33-3	Methyl acrylate	0.42	2.12	ND	1.49	7.46	ND	
109-99-9	Tetrahydrofuran	0.21	1.27	ND	0.63	3.75	ND	
78-83-1	Isobutyl alcohol	0.85	3.39	ND	2.57	10.28	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.06	ND	0.84	4.20	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.06	ND	0.98	4.90	ND	
67-66-3	Chloroform	0.21	1.06	0.24	1.04	5.18	1.15	J
71-55-6	1,1,1-Trichloroethane	0.21	1.06	ND	1.16	5.78	ND	
107-06-2	1,2-Dichloroethane	0.21	1.06	ND	0.86	4.29	ND	
563-58-6	1,1-Dichloropropene	0.21	1.06	ND	0.96	4.81	ND	
110-82-7	Cyclohexane	0.21	1.06	0.40	0.73	3.65	1.39	J
71-43-2	Benzene	1.48	2.12	ND	4.74	6.77	ND	
56-23-5	Carbon tetrachloride	0.21	1.06	ND	1.33	6.67	ND	
994-05-8	t-Amyl methyl ether	0.42	2.12	ND	1.77	8.86	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.06	ND	0.99	4.95	ND	
142-82-5	n-Heptane	0.42	1.06	ND	1.74	4.34	ND	
78-87-5	1,2-Dichloropropane	0.21	1.06	ND	0.98	4.90	ND	
123-91-1	1,4 Dioxane	0.42	2.12	ND	1.53	7.64	ND	
74-95-3	Dibromomethane	0.21	1.06	ND	1.51	7.53	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.06	ND	0.57	5.70	ND	
75-27-4	Bromodichloromethane	0.21	1.06	ND	1.42	7.10	ND	
80-62-6	Methyl methacrylate	0.42	1.06	ND	1.74	4.34	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.39	ND	1.74	13.90	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.06	ND	0.96	4.81	ND	
108-88-3	Toluene	0.85	1.06	0.91	3.19	3.99	3.44	J
10061-02-6	trans-1,3-Dichloropropene	0.21	1.06	ND	0.96	4.81	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.06	ND	1.16	5.78	ND	
97-63-2	Ethyl methacrylate	0.42	1.06	ND	1.98	4.95	ND	
591-78-6	2-Hexanone	0.42	3.39	ND	1.74	13.90	ND	
142-28-9	1,3-Dichloropropane	0.21	2.96	ND	0.98	13.71	ND	
111-65-9	Octane	0.42	1.06	ND	1.98	4.95	ND	
124-48-1	Dibromochloromethane	0.42	1.06	ND	3.61	9.03	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.06	ND	3.26	8.14	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.06	ND	0.72	7.19	ND	
108-90-7	Chlorobenzene	0.42	1.06	ND	1.95	4.88	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.06	ND	2.91	7.27	ND	
100-41-4	Ethylbenzene	0.42	1.06	ND	1.84	4.60	ND	
1330-20-7	m,p-Xylenes	0.42	1.06	ND	1.84	4.60	ND	
111-84-2	Nonane	0.42	1.06	ND	2.22	5.56	ND	
100-42-5	Styrene	0.64	1.06	ND	2.71	4.52	ND	
75-25-2	Bromoform	0.42	1.06	ND	4.38	10.95	ND	
95-47-6	o-Xylene	0.42	1.06	ND	1.84	4.60	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.12	ND	5.82	14.55	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.54	ND	5.11	15.33	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.54	ND	4.33	13.00	ND	
103-65-1	n-Propylbenzene	0.85	2.96	ND	4.17	14.59	ND	
98-82-8	Isopropylbenzene	0.85	2.96	ND	4.17	14.59	ND	
622-96-8	4-Ethyltoluene	0.85	6.77	ND	4.17	33.34	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.81	ND	4.17	18.76	ND	
124-18-5	Decane	0.85	2.54	ND	4.93	14.80	ND	
98-06-6	tert-butyl benzene	0.85	2.54	ND	4.65	13.96	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.81	ND	4.17	18.76	ND	
538-93-2	i-Butylbenzene	0.85	2.54	ND	4.65	13.96	ND	
135-98-8	sec-butylbenzene	0.85	2.96	ND	4.65	16.29	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.39	ND	5.10	20.39	ND	
99-87-6	Isopropyltoluene	0.85	2.54	ND	4.65	13.96	ND	
100-44-7	Benzyl chloride	0.85	2.12	ND	4.39	10.97	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.12	ND	5.10	12.74	ND	
104-51-8	n-Butylbenzene	0.85	2.54	ND	4.65	13.96	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.96	ND	5.10	17.84	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.27	2.96	ND	12.29	28.68	ND	
120-82-1	1,2,4-Trichlorobenzene	1.27	2.12	ND	9.44	15.73	ND	
91-20-3	Naphthalene	2.12	0.42	ND	11.11	2.22	ND	
87-61-6	1,2,3-Trichlorobenzene	1.27	2.12	ND	9.44	15.73	ND	
87-68-3	Hexachlorobutadiene	1.06	1.27	ND	11.30	13.56	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	129	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 03

File Name: 224435
Description T-403
Canister: 547
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:12
Date Analyzed: 12/10/2024 **Time:** 19:38
Can Dilution Factor: 1.27
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.96	6.35	ND	12.14	26.01	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 04

File Name: 2443504A.D
Description: T-404
Canister: 749
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:24
Date Analyzed: 12/10/2024 **Time:** 20:17
Can Dilution Factor: 1.24
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.41	1.03	1.25	0.71	1.78	2.16	
75-71-8	Dichlorodifluoromethane	0.62	1.03	ND	3.07	5.12	ND	
67-56-1	Methanol	2.07	2.48	2.16	2.71	3.25	2.83	J
74-87-3	Chloromethane	0.62	1.03	ND	1.28	2.14	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.41	1.03	ND	2.89	7.23	ND	
75-01-4	Vinyl chloride	0.21	1.03	ND	0.53	2.65	ND	
106-99-0	1,3-Butadiene	0.21	1.03	ND	0.46	2.29	ND	
74-83-9	Bromomethane	0.41	1.03	ND	1.61	4.02	ND	
75-00-3	Chloroethane	0.41	1.03	ND	1.09	2.73	ND	
64-17-5	Ethanol	2.07	13.27	ND	3.90	25.05	ND	
107-02-8	Acrolein	0.41	1.24	0.68	0.95	2.85	1.56	J
75-69-4	Trichlorofluoromethane	0.41	1.03	ND	2.33	5.81	ND	
67-64-1	Acetone	2.07	2.48	5.82	4.92	5.90	13.84	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.17	ND	2.03	12.72	ND	
75-65-0	t-Butyl alcohol	0.41	4.13	ND	1.25	12.54	ND	
4227-95-6	Methyl iodide	0.41	1.24	ND	2.42	7.26	ND	
75-35-4	1,1-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	
107-13-1	Acrylonitrile	0.83	1.24	ND	1.80	2.70	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.03	ND	1.59	7.93	ND	
107-05-1	Allyl chloride	0.21	4.13	ND	0.65	12.95	ND	
75-09-2	Methylene chloride	0.21	1.03	ND	0.72	3.59	ND	
75-15-0	Carbon disulfide	0.41	1.03	ND	1.29	3.22	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.82	3.28	ND	
1634-04-4	Methyl tert butyl ether	0.41	0.83	ND	1.49	2.98	ND	
107-12-0	Propionitrile	1.03	1.65	ND	2.33	3.73	ND	
75-34-3	1,1-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
637-92-3	Ethyl tert butyl ether	0.41	1.03	ND	1.73	4.33	ND	
108-05-4	Vinyl acetate	0.21	4.13	ND	0.73	14.58	ND	
78-93-3	2-Butanone (MEK)	0.41	1.24	0.60	1.22	3.66	1.77	J
108-20-3	Diisopropyl ether	0.41	2.48	ND	1.73	10.38	ND	
110-54-3	Hexane	0.41	1.03	ND	1.46	3.65	ND	
126-98-7	Methacrylonitrile	0.41	1.03	ND	1.14	2.84	ND	
141-78-6	Ethyl acetate	0.41	1.03	ND	1.49	3.73	ND	
74-97-5	Bromochloromethane	0.21	1.03	ND	1.10	5.48	ND	
96-33-3	Methyl acrylate	0.41	2.07	ND	1.46	7.29	ND	
109-99-9	Tetrahydrofuran	0.21	1.24	ND	0.61	3.66	ND	
78-83-1	Isobutyl alcohol	0.83	3.31	ND	2.51	10.03	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
67-66-3	Chloroform	0.21	1.03	ND	1.01	5.05	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
107-06-2	1,2-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
563-58-6	1,1-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
110-82-7	Cyclohexane	0.21	1.03	ND	0.71	3.56	ND	
71-43-2	Benzene	1.45	2.07	ND	4.63	6.61	ND	
56-23-5	Carbon tetrachloride	0.21	1.03	ND	1.30	6.51	ND	
994-05-8	t-Amyl methyl ether	0.41	2.07	ND	1.73	8.65	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.03	ND	0.97	4.83	ND	
142-82-5	n-Heptane	0.41	1.03	ND	1.70	4.24	ND	
78-87-5	1,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
123-91-1	1,4 Dioxane	0.41	2.07	ND	1.49	7.46	ND	
74-95-3	Dibromomethane	0.21	1.03	ND	1.47	7.36	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.03	ND	0.56	5.56	ND	
75-27-4	Bromodichloromethane	0.21	1.03	ND	1.39	6.93	ND	
80-62-6	Methyl methacrylate	0.41	1.03	ND	1.69	4.24	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.41	3.31	ND	1.70	13.57	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
108-88-3	Toluene	0.83	1.03	ND	3.12	3.90	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
97-63-2	Ethyl methacrylate	0.41	1.03	ND	1.93	4.83	ND	
591-78-6	2-Hexanone	0.41	3.31	ND	1.70	13.57	ND	
142-28-9	1,3-Dichloropropane	0.21	2.89	ND	0.96	13.39	ND	
111-65-9	Octane	0.41	1.03	ND	1.93	4.83	ND	
124-48-1	Dibromochloromethane	0.41	1.03	ND	3.53	8.82	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.41	1.03	ND	3.18	7.95	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.03	ND	0.70	7.02	ND	
108-90-7	Chlorobenzene	0.41	1.03	ND	1.91	4.77	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.41	1.03	ND	2.84	7.10	ND	
100-41-4	Ethylbenzene	0.41	1.03	ND	1.80	4.49	ND	
1330-20-7	m,p-Xylenes	0.41	1.03	ND	1.80	4.49	ND	
111-84-2	Nonane	0.41	1.03	ND	2.17	5.43	ND	
100-42-5	Styrene	0.62	1.03	ND	2.65	4.41	ND	
75-25-2	Bromoform	0.41	1.03	ND	4.28	10.69	ND	
95-47-6	o-Xylene	0.41	1.03	ND	1.80	4.49	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.07	ND	5.68	14.20	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.48	ND	4.99	14.97	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.48	ND	4.23	12.70	ND	
103-65-1	n-Propylbenzene	0.83	2.89	ND	4.07	14.24	ND	
98-82-8	Isopropylbenzene	0.83	2.89	ND	4.07	14.24	ND	
622-96-8	4-Ethyltoluene	0.83	6.61	ND	4.07	32.56	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
124-18-5	Decane	0.83	2.48	ND	4.82	14.45	ND	
98-06-6	tert-butyl benzene	0.83	2.48	ND	4.54	13.63	ND	
95-63-6	1,2,4-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
538-93-2	i-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
135-98-8	sec-butylbenzene	0.83	2.89	ND	4.54	15.90	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.31	ND	4.98	19.91	ND	
99-87-6	Isopropyltoluene	0.83	2.48	ND	4.54	13.63	ND	
100-44-7	Benzyl chloride	0.83	2.07	ND	4.29	10.72	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.83	2.07	ND	4.98	12.44	ND	
104-51-8	n-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.89	ND	4.98	17.42	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.24	2.89	ND	12.00	28.00	ND	
120-82-1	1,2,4-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
91-20-3	Naphthalene	2.07	0.41	ND	10.85	2.17	ND	
87-61-6	1,2,3-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
87-68-3	Hexachlorobutadiene	1.03	1.24	ND	11.04	13.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	130	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 04

File Name: 224435
Description T-404
Canister: 749
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 08:24
Date Analyzed: 12/10/2024 **Time:** 20:17
Can Dilution Factor: 1.24
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.89	6.20	ND	11.85	25.39	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 05

File Name: 2443505A.D
Description: T-405
Canister: 837
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:20
Date Analyzed: 12/10/2024 **Time:** 20:54
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	2.38	0.74	1.84	4.10	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	0.71	1.32	2.21	1.48	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	3.49	5.08	6.09	8.32	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	0.45	1.51	3.77	1.60	J
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	0.43	0.74	3.68	1.48	J
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	1.12	3.22	4.02	4.24	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	0.13	0.72	7.24	0.90	J
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 05

File Name: 224435
Description T-405
Canister: 837
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:20
Date Analyzed: 12/10/2024 **Time:** 20:54
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 06

File Name: 2443506A.D
Description: T-406
Canister: 626
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:06
Date Analyzed: 12/10/2024 **Time:** 21:33
Can Dilution Factor: 1.26
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.05	0.80	0.72	1.81	1.38	J
75-71-8	Dichlorodifluoromethane	0.63	1.05	ND	3.12	5.20	ND	
67-56-1	Methanol	2.10	2.52	ND	2.75	3.30	ND	
74-87-3	Chloromethane	0.63	1.05	ND	1.30	2.17	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.05	ND	2.94	7.35	ND	
75-01-4	Vinyl chloride	0.21	1.05	ND	0.54	2.69	ND	
106-99-0	1,3-Butadiene	0.21	1.05	ND	0.47	2.33	ND	
74-83-9	Bromomethane	0.42	1.05	ND	1.63	4.08	ND	
75-00-3	Chloroethane	0.42	1.05	ND	1.11	2.77	ND	
64-17-5	Ethanol	2.10	13.48	ND	3.96	25.45	ND	
107-02-8	Acrolein	0.42	1.26	ND	0.96	2.89	ND	
75-69-4	Trichlorofluoromethane	0.42	1.05	ND	2.36	5.91	ND	
67-64-1	Acetone	2.10	2.52	3.07	5.00	6.00	7.31	
67-63-0	2-propanol (isopropylalcohol)	0.84	5.25	ND	2.07	12.92	ND	
75-65-0	t-Butyl alcohol	0.42	4.20	ND	1.27	12.75	ND	
4227-95-6	Methyl iodide	0.42	1.26	ND	2.46	7.37	ND	
75-35-4	1,1-Dichloroethene	0.21	1.05	ND	0.83	4.17	ND	
107-13-1	Acrylonitrile	0.84	1.26	ND	1.83	2.74	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.05	ND	1.61	8.06	ND	
107-05-1	Allyl chloride	0.21	4.20	ND	0.66	13.16	ND	
75-09-2	Methylene chloride	0.21	1.05	ND	0.73	3.65	ND	
75-15-0	Carbon disulfide	0.42	1.05	ND	1.31	3.27	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.84	ND	0.83	3.33	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.84	ND	1.52	3.03	ND	
107-12-0	Propionitrile	1.05	1.68	ND	2.37	3.79	ND	
75-34-3	1,1-Dichloroethane	0.21	1.05	ND	0.85	4.26	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.05	ND	1.76	4.39	ND	
108-05-4	Vinyl acetate	0.21	4.20	ND	0.74	14.81	ND	
78-93-3	2-Butanone (MEK)	0.42	1.26	ND	1.24	3.72	ND	
108-20-3	Diisopropyl ether	0.42	2.52	ND	1.76	10.55	ND	
110-54-3	Hexane	0.42	1.05	ND	1.48	3.71	ND	
126-98-7	Methacrylonitrile	0.42	1.05	ND	1.15	2.89	ND	
141-78-6	Ethyl acetate	0.42	1.05	ND	1.52	3.79	ND	
74-97-5	Bromochloromethane	0.21	1.05	ND	1.11	5.56	ND	
96-33-3	Methyl acrylate	0.42	2.10	ND	1.48	7.41	ND	
109-99-9	Tetrahydrofuran	0.21	1.26	ND	0.62	3.72	ND	
78-83-1	Isobutyl alcohol	0.84	3.36	ND	2.55	10.20	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.05	ND	0.83	4.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.05	ND	0.97	4.86	ND	
67-66-3	Chloroform	0.21	1.05	ND	1.03	5.13	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.05	ND	1.15	5.74	ND	
107-06-2	1,2-Dichloroethane	0.21	1.05	ND	0.85	4.26	ND	
563-58-6	1,1-Dichloropropene	0.21	1.05	ND	0.95	4.77	ND	
110-82-7	Cyclohexane	0.21	1.05	0.28	0.72	3.62	0.96	J
71-43-2	Benzene	1.47	2.10	ND	4.70	6.72	ND	
56-23-5	Carbon tetrachloride	0.21	1.05	ND	1.32	6.61	ND	
994-05-8	t-Amyl methyl ether	0.42	2.10	ND	1.76	8.79	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.05	ND	0.98	4.91	ND	
142-82-5	n-Heptane	0.42	1.05	ND	1.72	4.31	ND	
78-87-5	1,2-Dichloropropane	0.21	1.05	ND	0.97	4.86	ND	
123-91-1	1,4 Dioxane	0.42	2.10	ND	1.52	7.58	ND	
74-95-3	Dibromomethane	0.21	1.05	ND	1.50	7.48	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.05	ND	0.57	5.65	ND	
75-27-4	Bromodichloromethane	0.21	1.05	ND	1.41	7.04	ND	
80-62-6	Methyl methacrylate	0.42	1.05	ND	1.72	4.30	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.36	ND	1.72	13.79	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.05	ND	0.95	4.77	ND	
108-88-3	Toluene	0.84	1.05	ND	3.17	3.96	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.05	ND	0.95	4.77	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.05	ND	1.15	5.74	ND	
97-63-2	Ethyl methacrylate	0.42	1.05	ND	1.96	4.91	ND	
591-78-6	2-Hexanone	0.42	3.36	ND	1.72	13.79	ND	
142-28-9	1,3-Dichloropropane	0.21	2.94	ND	0.97	13.61	ND	
111-65-9	Octane	0.42	1.05	ND	1.96	4.91	ND	
124-48-1	Dibromochloromethane	0.42	1.05	ND	3.58	8.96	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.05	ND	3.23	8.08	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.05	ND	0.71	7.13	ND	
108-90-7	Chlorobenzene	0.42	1.05	ND	1.94	4.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.05	ND	2.89	7.22	ND	
100-41-4	Ethylbenzene	0.42	1.05	ND	1.83	4.57	ND	
1330-20-7	m,p-Xylenes	0.42	1.05	ND	1.83	4.57	ND	
111-84-2	Nonane	0.42	1.05	ND	2.21	5.52	ND	
100-42-5	Styrene	0.63	1.05	ND	2.69	4.48	ND	
75-25-2	Bromoform	0.42	1.05	ND	4.35	10.87	ND	
95-47-6	o-Xylene	0.42	1.05	ND	1.83	4.57	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.84	2.10	ND	5.77	14.43	ND	
96-18-4	1,2,3-Trichloropropane	0.84	2.52	ND	5.07	15.21	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.84	2.52	ND	4.30	12.90	ND	
103-65-1	n-Propylbenzene	0.84	2.94	ND	4.14	14.47	ND	
98-82-8	Isopropylbenzene	0.84	2.94	ND	4.14	14.47	ND	
622-96-8	4-Ethyltoluene	0.84	6.72	ND	4.14	33.08	ND	
108-67-8	1,3,5-Trimethylbenzene	0.84	3.78	ND	4.14	18.61	ND	
124-18-5	Decane	0.84	2.52	ND	4.90	14.69	ND	
98-06-6	tert-butyl benzene	0.84	2.52	ND	4.62	13.85	ND	
95-63-6	1,2,4-Trimethylbenzene	0.84	3.78	ND	4.14	18.61	ND	
538-93-2	i-Butylbenzene	0.84	2.52	ND	4.62	13.85	ND	
135-98-8	sec-butylbenzene	0.84	2.94	ND	4.62	16.16	ND	
541-73-1	1,3-Dichlorobenzene	0.84	3.36	ND	5.06	20.23	ND	
99-87-6	Isopropyltoluene	0.84	2.52	ND	4.62	13.85	ND	
100-44-7	Benzyl chloride	0.84	2.10	ND	4.36	10.89	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.84	2.10	ND	5.06	12.64	ND	
104-51-8	n-Butylbenzene	0.84	2.52	ND	4.62	13.85	ND	
95-50-1	1,2-Dichlorobenzene	0.84	2.94	ND	5.06	17.70	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.26	2.94	ND	12.19	28.45	ND	
120-82-1	1,2,4-Trichlorobenzene	1.26	2.10	ND	9.36	15.60	ND	
91-20-3	Naphthalene	2.10	0.42	ND	11.03	2.21	ND	
87-61-6	1,2,3-Trichlorobenzene	1.26	2.10	ND	9.36	15.60	ND	
87-68-3	Hexachlorobutadiene	1.05	1.26	ND	11.22	13.46	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	126	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 06

File Name: 224435
Description T-406
Canister: 626
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:06
Date Analyzed: 12/10/2024 **Time:** 21:33
Can Dilution Factor: 1.26
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.94	6.30	ND	12.04	25.80	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 07

File Name: 2443507A.D
Description: T-407
Canister: 740
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:05
Date Analyzed: 12/10/2024 **Time:** 22:11
Can Dilution Factor: 1.32
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.10	0.77	0.76	1.90	1.33	J
75-71-8	Dichlorodifluoromethane	0.66	1.10	ND	3.27	5.45	ND	
67-56-1	Methanol	2.20	2.64	4.77	2.88	3.46	6.26	
74-87-3	Chloromethane	0.66	1.10	ND	1.37	2.28	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.10	ND	3.08	7.70	ND	
75-01-4	Vinyl chloride	0.22	1.10	ND	0.57	2.82	ND	
106-99-0	1,3-Butadiene	0.22	1.10	ND	0.49	2.44	ND	
74-83-9	Bromomethane	0.44	1.10	ND	1.71	4.28	ND	
75-00-3	Chloroethane	0.44	1.10	ND	1.16	2.91	ND	
64-17-5	Ethanol	2.20	14.12	ND	4.15	26.67	ND	
107-02-8	Acrolein	0.44	1.32	ND	1.01	3.03	ND	
75-69-4	Trichlorofluoromethane	0.44	1.10	ND	2.48	6.19	ND	
67-64-1	Acetone	2.20	2.64	3.38	5.23	6.28	8.03	
67-63-0	2-propanol (isopropylalcohol)	0.88	5.50	ND	2.17	13.54	ND	
75-65-0	t-Butyl alcohol	0.44	4.40	ND	1.34	13.35	ND	
4227-95-6	Methyl iodide	0.44	1.32	ND	2.58	7.73	ND	
75-35-4	1,1-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
107-13-1	Acrylonitrile	0.88	1.32	ND	1.91	2.87	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.10	ND	1.69	8.44	ND	
107-05-1	Allyl chloride	0.22	4.40	ND	0.69	13.79	ND	
75-09-2	Methylene chloride	0.22	1.10	ND	0.76	3.82	ND	
75-15-0	Carbon disulfide	0.44	1.10	ND	1.37	3.43	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.88	ND	0.87	3.49	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.88	ND	1.59	3.18	ND	
107-12-0	Propionitrile	1.10	1.76	ND	2.48	3.97	ND	
75-34-3	1,1-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.10	ND	1.84	4.60	ND	
108-05-4	Vinyl acetate	0.22	4.40	ND	0.78	15.52	ND	
78-93-3	2-Butanone (MEK)	0.44	1.32	ND	1.30	3.90	ND	
108-20-3	Diisopropyl ether	0.44	2.64	ND	1.84	11.05	ND	
110-54-3	Hexane	0.44	1.10	ND	1.55	3.88	ND	
126-98-7	Methacrylonitrile	0.44	1.10	ND	1.21	3.02	ND	
141-78-6	Ethyl acetate	0.44	1.10	ND	1.59	3.97	ND	
74-97-5	Bromochloromethane	0.22	1.10	ND	1.17	5.83	ND	
96-33-3	Methyl acrylate	0.44	2.20	ND	1.55	7.76	ND	
109-99-9	Tetrahydrofuran	0.22	1.32	ND	0.65	3.90	ND	
78-83-1	Isobutyl alcohol	0.88	3.52	ND	2.67	10.68	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
67-66-3	Chloroform	0.22	1.10	ND	1.08	5.38	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
107-06-2	1,2-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
563-58-6	1,1-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
110-82-7	Cyclohexane	0.22	1.10	ND	0.76	3.79	ND	
71-43-2	Benzene	1.54	2.20	ND	4.93	7.04	ND	
56-23-5	Carbon tetrachloride	0.22	1.10	ND	1.39	6.93	ND	
994-05-8	t-Amyl methyl ether	0.44	2.20	ND	1.84	9.21	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.10	ND	1.03	5.14	ND	
142-82-5	n-Heptane	0.44	1.10	ND	1.81	4.51	ND	
78-87-5	1,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
123-91-1	1,4 Dioxane	0.44	2.20	ND	1.59	7.94	ND	
74-95-3	Dibromomethane	0.22	1.10	ND	1.57	7.83	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.10	ND	0.59	5.92	ND	
75-27-4	Bromodichloromethane	0.22	1.10	ND	1.48	7.38	ND	
80-62-6	Methyl methacrylate	0.44	1.10	ND	1.80	4.51	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.52	ND	1.81	14.44	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
108-88-3	Toluene	0.88	1.10	ND	3.32	4.15	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
97-63-2	Ethyl methacrylate	0.44	1.10	ND	2.06	5.14	ND	
591-78-6	2-Hexanone	0.44	3.52	ND	1.81	14.44	ND	
142-28-9	1,3-Dichloropropane	0.22	3.08	ND	1.02	14.25	ND	
111-65-9	Octane	0.44	1.10	ND	2.06	5.14	ND	
124-48-1	Dibromochloromethane	0.44	1.10	ND	3.75	9.38	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.10	ND	3.39	8.46	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.10	ND	0.75	7.47	ND	
108-90-7	Chlorobenzene	0.44	1.10	ND	2.03	5.07	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.10	ND	3.02	7.56	ND	
100-41-4	Ethylbenzene	0.44	1.10	ND	1.91	4.78	ND	
1330-20-7	m,p-Xylenes	0.44	1.10	ND	1.91	4.78	ND	
111-84-2	Nonane	0.44	1.10	ND	2.31	5.78	ND	
100-42-5	Styrene	0.66	1.10	ND	2.82	4.69	ND	
75-25-2	Bromoform	0.44	1.10	ND	4.55	11.38	ND	
95-47-6	o-Xylene	0.44	1.10	ND	1.91	4.78	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.88	2.20	ND	6.05	15.12	ND	
96-18-4	1,2,3-Trichloropropane	0.88	2.64	ND	5.31	15.94	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.88	2.64	ND	4.51	13.52	ND	
103-65-1	n-Propylbenzene	0.88	3.08	ND	4.33	15.16	ND	
98-82-8	Isopropylbenzene	0.88	3.08	ND	4.33	15.16	ND	
622-96-8	4-Ethyltoluene	0.88	7.04	ND	4.33	34.66	ND	
108-67-8	1,3,5-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
124-18-5	Decane	0.88	2.64	ND	5.13	15.39	ND	
98-06-6	tert-butyl benzene	0.88	2.64	ND	4.84	14.51	ND	
95-63-6	1,2,4-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
538-93-2	i-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
135-98-8	sec-butylbenzene	0.88	3.08	ND	4.84	16.93	ND	
541-73-1	1,3-Dichlorobenzene	0.88	3.52	ND	5.30	21.19	ND	
99-87-6	Isopropyltoluene	0.88	2.64	ND	4.84	14.51	ND	
100-44-7	Benzyl chloride	0.88	2.20	ND	4.56	11.41	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.88	2.20	ND	5.30	13.24	ND	
104-51-8	n-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
95-50-1	1,2-Dichlorobenzene	0.88	3.08	ND	5.30	18.54	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.32	3.08	ND	12.77	29.81	ND	
120-82-1	1,2,4-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
91-20-3	Naphthalene	2.20	0.44	ND	11.55	2.31	ND	
87-61-6	1,2,3-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
87-68-3	Hexachlorobutadiene	1.10	1.32	ND	11.75	14.10	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	130	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 07

File Name: 224435
Description T-407
Canister: 740
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:05
Date Analyzed: 12/10/2024 **Time:** 22:11
Can Dilution Factor: 1.32
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.08	6.60	ND	12.61	27.03	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 08

File Name: 2443508A.D
Description: T-408
Canister: 805
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:19
Date Analyzed: 12/10/2024 **Time:** 22:47
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	1.11	0.75	1.88	1.91	
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	4.49	2.86	3.43	5.88	
74-87-3	Chloromethane	0.66	1.09	0.85	1.35	2.26	1.76	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	ND	4.12	26.46	ND	
107-02-8	Acrolein	0.44	1.31	1.09	1.00	3.01	2.50	J
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	6.52	5.20	6.23	15.51	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	2.40	2.15	13.44	5.90	J
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	0.54	1.29	3.87	1.60	J
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	
109-99-9	Tetrahydrofuran	0.22	1.31	ND	0.65	3.87	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	128	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 08

File Name: 224435
Description T-408
Canister: 805
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 10:19
Date Analyzed: 12/10/2024 **Time:** 22:47
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 09**

File Name: 2443509A.D **Date Sampled:** 11/19/2024 **Time:** 11:45
Description: T-409 **Date Analyzed:** 12/11/2024 **Time:** 15:13
Canister: 631 **Can Dilution Factor:** 1.36
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	16.16	0.78	1.95	27.85	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	0.93	1.41	2.34	1.92	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	ND	5.39	6.47	ND	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	0.16	0.61	6.10	0.87	J
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	0.13	0.77	7.70	0.89	J
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.97	4.93	ND	
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	0.75	2.90	4.84	3.21	J
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	0.55	1.97	4.93	2.40	J
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	1.57	4.46	35.71	7.71	J
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	1.37	4.46	20.08	6.76	J
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	112	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 09

File Name: 224435
Description T-409
Canister: 631
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 11:45
Date Analyzed: 12/11/2024 **Time:** 15:13
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 10

File Name: 2443510A.D
Description: T-410
Canister: 714
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 11:59
Date Analyzed: 12/11/2024 **Time:** 15:51
Can Dilution Factor: 1.36
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	135.08	0.78	1.95	232.79	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	7.00	2.97	3.56	9.17	
74-87-3	Chloromethane	0.68	1.13	32.94	1.41	2.34	68.12	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	50.10	1.76	4.40	194.73	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	6.67	5.39	6.47	15.87	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	2.19	1.41	3.53	6.82	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	2.22	1.34	4.02	6.55	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	11.52	1.60	4.00	40.66	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	
109-99-9	Tetrahydrofuran	0.23	1.36	2.45	0.67	4.02	7.25	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	27.33	0.78	3.91	94.23	
71-43-2	Benzene	1.59	2.27	4.10	5.08	7.25	13.12	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	5.71	1.06	5.30	26.73	
142-82-5	n-Heptane	0.45	1.13	6.57	1.86	4.65	26.98	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	0.87	0.61	6.10	4.68	J
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	5.52	3.42	4.27	20.81	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	1.90	0.77	7.70	12.88	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	27.89	1.97	4.93	121.31	
1330-20-7	m,p-Xylenes	0.45	1.13	26.32	1.97	4.93	114.46	
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	0.89	2.90	4.84	3.82	J
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	8.11	1.97	4.93	35.26	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	5.30	4.46	35.71	26.12	J
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	7.72	4.46	20.08	38.01	
124-18-5	Decane	0.91	2.72	2.21	5.28	15.85	12.85	J
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	4.14	4.46	20.08	20.36	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	3.40	11.90	2.38	17.88	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	109	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 10

File Name: 224435
Description: T-410
Canister: 714
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 11:59
Date Analyzed: 12/11/2024 **Time:** 15:51
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
2-Butene, Z	3.17	6.80	77.61	13.00	27.85	317.85
2-Butene, E	3.17	6.80	56.30	13.00	27.85	230.59
Unknown	3.17	6.80	62.47	13.00	27.85	255.84
Unknown	3.17	6.80	145.57	13.00	27.85	596.16
Methylcyclohexane	3.17	6.80	43.29	13.00	27.85	177.31
Trimethylcyclopentane	3.17	6.80	26.57	13.00	27.85	108.80
Trimethyl 2-hexene	3.17	6.80	43.02	13.00	27.85	176.19
a-Pinene	3.17	6.80	35.86	13.00	27.85	146.86
Methyl nonane	3.17	6.80	21.62	13.00	27.85	88.56
Octamethyl cyclotetrasiloxane	3.17	6.80	85.09	13.00	27.85	348.49

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 11

File Name: 2443511A.D
Description: T-411
Canister: 551
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 11:51
Date Analyzed: 12/11/2024 **Time:** 16:29
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	0.77	0.74	1.84	1.33	J
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	15.93	2.80	3.36	20.88	
74-87-3	Chloromethane	0.64	1.07	5.44	1.32	2.21	11.26	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	4.83	5.08	6.09	11.48	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	0.91	4.20	33.61	4.48	J
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	1.01	4.20	18.90	4.96	J
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	116	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 11

File Name: 224435
Description T-411
Canister: 551
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 11:51
Date Analyzed: 12/11/2024 **Time:** 16:29
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 12

File Name: 2443512A.D
Description: T-412
Canister: 881
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 12:06
Date Analyzed: 12/11/2024 **Time:** 17:06
Can Dilution Factor: 1.32
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.10	1.90	0.76	1.90	3.28	
75-71-8	Dichlorodifluoromethane	0.66	1.10	ND	3.27	5.45	ND	
67-56-1	Methanol	2.20	2.64	7.15	2.88	3.46	9.37	
74-87-3	Chloromethane	0.66	1.10	3.08	1.37	2.28	6.37	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.10	ND	3.08	7.70	ND	
75-01-4	Vinyl chloride	0.22	1.10	ND	0.57	2.82	ND	
106-99-0	1,3-Butadiene	0.22	1.10	ND	0.49	2.44	ND	
74-83-9	Bromomethane	0.44	1.10	3.36	1.71	4.28	13.05	
75-00-3	Chloroethane	0.44	1.10	ND	1.16	2.91	ND	
64-17-5	Ethanol	2.20	14.12	ND	4.15	26.67	ND	
107-02-8	Acrolein	0.44	1.32	ND	1.01	3.03	ND	
75-69-4	Trichlorofluoromethane	0.44	1.10	ND	2.48	6.19	ND	
67-64-1	Acetone	2.20	2.64	2.91	5.23	6.28	6.93	
67-63-0	2-propanol (isopropylalcohol)	0.88	5.50	ND	2.17	13.54	ND	
75-65-0	t-Butyl alcohol	0.44	4.40	ND	1.34	13.35	ND	
4227-95-6	Methyl iodide	0.44	1.32	ND	2.58	7.73	ND	
75-35-4	1,1-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
107-13-1	Acrylonitrile	0.88	1.32	ND	1.91	2.87	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.10	ND	1.69	8.44	ND	
107-05-1	Allyl chloride	0.22	4.40	ND	0.69	13.79	ND	
75-09-2	Methylene chloride	0.22	1.10	ND	0.76	3.82	ND	
75-15-0	Carbon disulfide	0.44	1.10	ND	1.37	3.43	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.88	ND	0.87	3.49	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.88	ND	1.59	3.18	ND	
107-12-0	Propionitrile	1.10	1.76	ND	2.48	3.97	ND	
75-34-3	1,1-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.10	ND	1.84	4.60	ND	
108-05-4	Vinyl acetate	0.22	4.40	ND	0.78	15.52	ND	
78-93-3	2-Butanone (MEK)	0.44	1.32	ND	1.30	3.90	ND	
108-20-3	Diisopropyl ether	0.44	2.64	ND	1.84	11.05	ND	
110-54-3	Hexane	0.44	1.10	ND	1.55	3.88	ND	
126-98-7	Methacrylonitrile	0.44	1.10	ND	1.21	3.02	ND	
141-78-6	Ethyl acetate	0.44	1.10	ND	1.59	3.97	ND	
74-97-5	Bromochloromethane	0.22	1.10	ND	1.17	5.83	ND	
96-33-3	Methyl acrylate	0.44	2.20	ND	1.55	7.76	ND	
109-99-9	Tetrahydrofuran	0.22	1.32	ND	0.65	3.90	ND	
78-83-1	Isobutyl alcohol	0.88	3.52	ND	2.67	10.68	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
67-66-3	Chloroform	0.22	1.10	ND	1.08	5.38	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
107-06-2	1,2-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
563-58-6	1,1-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
110-82-7	Cyclohexane	0.22	1.10	ND	0.76	3.79	ND	
71-43-2	Benzene	1.54	2.20	ND	4.93	7.04	ND	
56-23-5	Carbon tetrachloride	0.22	1.10	ND	1.39	6.93	ND	
994-05-8	t-Amyl methyl ether	0.44	2.20	ND	1.84	9.21	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.10	ND	1.03	5.14	ND	
142-82-5	n-Heptane	0.44	1.10	ND	1.81	4.51	ND	
78-87-5	1,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
123-91-1	1,4 Dioxane	0.44	2.20	ND	1.59	7.94	ND	
74-95-3	Dibromomethane	0.22	1.10	ND	1.57	7.83	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.10	ND	0.59	5.92	ND	
75-27-4	Bromodichloromethane	0.22	1.10	ND	1.48	7.38	ND	
80-62-6	Methyl methacrylate	0.44	1.10	ND	1.80	4.51	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.52	ND	1.81	14.44	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
108-88-3	Toluene	0.88	1.10	ND	3.32	4.15	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
97-63-2	Ethyl methacrylate	0.44	1.10	ND	2.06	5.14	ND	
591-78-6	2-Hexanone	0.44	3.52	ND	1.81	14.44	ND	
142-28-9	1,3-Dichloropropane	0.22	3.08	ND	1.02	14.25	ND	
111-65-9	Octane	0.44	1.10	ND	2.06	5.14	ND	
124-48-1	Dibromochloromethane	0.44	1.10	ND	3.75	9.38	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.10	ND	3.39	8.46	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.10	ND	0.75	7.47	ND	
108-90-7	Chlorobenzene	0.44	1.10	ND	2.03	5.07	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.10	ND	3.02	7.56	ND	
100-41-4	Ethylbenzene	0.44	1.10	ND	1.91	4.78	ND	
1330-20-7	m,p-Xylenes	0.44	1.10	ND	1.91	4.78	ND	
111-84-2	Nonane	0.44	1.10	ND	2.31	5.78	ND	
100-42-5	Styrene	0.66	1.10	ND	2.82	4.69	ND	
75-25-2	Bromoform	0.44	1.10	ND	4.55	11.38	ND	
95-47-6	o-Xylene	0.44	1.10	ND	1.91	4.78	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.88	2.20	ND	6.05	15.12	ND	
96-18-4	1,2,3-Trichloropropane	0.88	2.64	ND	5.31	15.94	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.88	2.64	ND	4.51	13.52	ND	
103-65-1	n-Propylbenzene	0.88	3.08	ND	4.33	15.16	ND	
98-82-8	Isopropylbenzene	0.88	3.08	ND	4.33	15.16	ND	
622-96-8	4-Ethyltoluene	0.88	7.04	ND	4.33	34.66	ND	
108-67-8	1,3,5-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
124-18-5	Decane	0.88	2.64	ND	5.13	15.39	ND	
98-06-6	tert-butyl benzene	0.88	2.64	ND	4.84	14.51	ND	
95-63-6	1,2,4-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
538-93-2	i-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
135-98-8	sec-butylbenzene	0.88	3.08	ND	4.84	16.93	ND	
541-73-1	1,3-Dichlorobenzene	0.88	3.52	ND	5.30	21.19	ND	
99-87-6	Isopropyltoluene	0.88	2.64	ND	4.84	14.51	ND	
100-44-7	Benzyl chloride	0.88	2.20	ND	4.56	11.41	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.88	2.20	ND	5.30	13.24	ND	
104-51-8	n-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
95-50-1	1,2-Dichlorobenzene	0.88	3.08	ND	5.30	18.54	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.32	3.08	ND	12.77	29.81	ND	
120-82-1	1,2,4-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
91-20-3	Naphthalene	2.20	0.44	ND	11.55	2.31	ND	
87-61-6	1,2,3-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
87-68-3	Hexachlorobutadiene	1.10	1.32	ND	11.75	14.10	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	113	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 12

File Name: 224435
Description T-412
Canister: 881
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 12:06
Date Analyzed: 12/11/2024 **Time:** 17:06
Can Dilution Factor: 1.32
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.08	6.60	ND	12.61	27.03	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 13

File Name: 2443513A.D
Description: T-413
Canister: 766
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:37
Date Analyzed: 12/11/2024 **Time:** 17:56
Can Dilution Factor: 1.34
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.12	0.70	0.77	1.92	1.21	J
75-71-8	Dichlorodifluoromethane	0.67	1.12	ND	3.32	5.53	ND	
67-56-1	Methanol	2.23	2.68	ND	2.93	3.51	ND	
74-87-3	Chloromethane	0.67	1.12	1.91	1.39	2.31	3.95	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.12	ND	3.13	7.82	ND	
75-01-4	Vinyl chloride	0.22	1.12	ND	0.58	2.86	ND	
106-99-0	1,3-Butadiene	0.22	1.12	ND	0.50	2.47	ND	
74-83-9	Bromomethane	0.45	1.12	ND	1.74	4.34	ND	
75-00-3	Chloroethane	0.45	1.12	ND	1.18	2.95	ND	
64-17-5	Ethanol	2.23	14.34	ND	4.22	27.07	ND	
107-02-8	Acrolein	0.45	1.34	ND	1.03	3.08	ND	
75-69-4	Trichlorofluoromethane	0.45	1.12	ND	2.51	6.28	ND	
67-64-1	Acetone	2.23	2.68	2.60	5.31	6.38	6.18	J
67-63-0	2-propanol (isopropylalcohol)	0.89	5.58	ND	2.20	13.74	ND	
75-65-0	t-Butyl alcohol	0.45	4.47	ND	1.36	13.56	ND	
4227-95-6	Methyl iodide	0.45	1.34	ND	2.61	7.84	ND	
75-35-4	1,1-Dichloroethene	0.22	1.12	ND	0.89	4.43	ND	
107-13-1	Acrylonitrile	0.89	1.34	ND	1.94	2.91	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.12	ND	1.71	8.57	ND	
107-05-1	Allyl chloride	0.22	4.47	ND	0.70	13.99	ND	
75-09-2	Methylene chloride	0.22	1.12	ND	0.78	3.88	ND	
75-15-0	Carbon disulfide	0.45	1.12	ND	1.39	3.48	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.89	ND	0.89	3.55	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.89	ND	1.61	3.22	ND	
107-12-0	Propionitrile	1.12	1.79	ND	2.52	4.03	ND	
75-34-3	1,1-Dichloroethane	0.22	1.12	ND	0.90	4.53	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.12	ND	1.87	4.67	ND	
108-05-4	Vinyl acetate	0.22	4.47	ND	0.79	15.75	ND	
78-93-3	2-Butanone (MEK)	0.45	1.34	ND	1.32	3.96	ND	
108-20-3	Diisopropyl ether	0.45	2.68	ND	1.87	11.22	ND	
110-54-3	Hexane	0.45	1.12	ND	1.58	3.94	ND	
126-98-7	Methacrylonitrile	0.45	1.12	ND	1.23	3.07	ND	
141-78-6	Ethyl acetate	0.45	1.12	ND	1.61	4.03	ND	
74-97-5	Bromochloromethane	0.22	1.12	ND	1.18	5.92	ND	
96-33-3	Methyl acrylate	0.45	2.23	ND	1.58	7.88	ND	
109-99-9	Tetrahydrofuran	0.22	1.34	ND	0.66	3.96	ND	
78-83-1	Isobutyl alcohol	0.89	3.57	ND	2.71	10.84	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.12	ND	0.89	4.43	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.12	ND	1.03	5.17	ND	
67-66-3	Chloroform	0.22	1.12	ND	1.10	5.46	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.12	ND	1.22	6.10	ND	
107-06-2	1,2-Dichloroethane	0.22	1.12	ND	0.91	4.53	ND	
563-58-6	1,1-Dichloropropene	0.22	1.12	ND	1.02	5.08	ND	
110-82-7	Cyclohexane	0.22	1.12	ND	0.77	3.85	ND	
71-43-2	Benzene	1.56	2.23	ND	5.00	7.14	ND	
56-23-5	Carbon tetrachloride	0.22	1.12	ND	1.41	7.03	ND	
994-05-8	t-Amyl methyl ether	0.45	2.23	ND	1.87	9.35	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.12	ND	1.04	5.22	ND	
142-82-5	n-Heptane	0.45	1.12	ND	1.83	4.58	ND	
78-87-5	1,2-Dichloropropane	0.22	1.12	ND	1.03	5.17	ND	
123-91-1	1,4 Dioxane	0.45	2.23	ND	1.61	8.06	ND	
74-95-3	Dibromomethane	0.22	1.12	ND	1.59	7.95	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.12	ND	0.60	6.01	ND	
75-27-4	Bromodichloromethane	0.22	1.12	ND	1.50	7.49	ND	
80-62-6	Methyl methacrylate	0.45	1.12	ND	1.83	4.58	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.57	ND	1.83	14.66	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.12	ND	1.02	5.08	ND	
108-88-3	Toluene	0.89	1.12	ND	3.37	4.21	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.12	ND	1.02	5.08	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.12	ND	1.22	6.10	ND	
97-63-2	Ethyl methacrylate	0.45	1.12	ND	2.09	5.22	ND	
591-78-6	2-Hexanone	0.45	3.57	ND	1.83	14.66	ND	
142-28-9	1,3-Dichloropropane	0.22	3.13	ND	1.03	14.47	ND	
111-65-9	Octane	0.45	1.12	ND	2.09	5.22	ND	
124-48-1	Dibromochloromethane	0.45	1.12	ND	3.81	9.53	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.12	ND	3.44	8.59	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.12	ND	0.76	7.58	ND	
108-90-7	Chlorobenzene	0.45	1.12	ND	2.06	5.15	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.12	ND	3.07	7.67	ND	
100-41-4	Ethylbenzene	0.45	1.12	ND	1.94	4.86	ND	
1330-20-7	m,p-Xylenes	0.45	1.12	ND	1.94	4.86	ND	
111-84-2	Nonane	0.45	1.12	ND	2.35	5.87	ND	
100-42-5	Styrene	0.67	1.12	ND	2.86	4.77	ND	
75-25-2	Bromoform	0.45	1.12	ND	4.62	11.56	ND	
95-47-6	o-Xylene	0.45	1.12	ND	1.94	4.86	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.89	2.23	ND	6.14	15.35	ND	
96-18-4	1,2,3-Trichloropropane	0.89	2.68	ND	5.39	16.18	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.89	2.68	ND	4.57	13.72	ND	
103-65-1	n-Propylbenzene	0.89	3.13	ND	4.40	15.39	ND	
98-82-8	Isopropylbenzene	0.89	3.13	ND	4.40	15.39	ND	
622-96-8	4-Ethyltoluene	0.89	7.15	ND	4.40	35.18	ND	
108-67-8	1,3,5-Trimethylbenzene	0.89	4.02	ND	4.40	19.79	ND	
124-18-5	Decane	0.89	2.68	ND	5.21	15.62	ND	
98-06-6	tert-butyl benzene	0.89	2.68	ND	4.91	14.73	ND	
95-63-6	1,2,4-Trimethylbenzene	0.89	4.02	ND	4.40	19.79	ND	
538-93-2	i-Butylbenzene	0.89	2.68	ND	4.91	14.73	ND	
135-98-8	sec-butylbenzene	0.89	3.13	ND	4.91	17.18	ND	
541-73-1	1,3-Dichlorobenzene	0.89	3.57	ND	5.38	21.51	ND	
99-87-6	Isopropyltoluene	0.89	2.68	ND	4.91	14.73	ND	
100-44-7	Benzyl chloride	0.89	2.23	ND	4.63	11.58	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.89	2.23	ND	5.38	13.45	ND	
104-51-8	n-Butylbenzene	0.89	2.68	ND	4.91	14.73	ND	
95-50-1	1,2-Dichlorobenzene	0.89	3.13	ND	5.38	18.82	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.34	3.13	ND	12.97	30.26	ND	
120-82-1	1,2,4-Trichlorobenzene	1.34	2.23	ND	9.96	16.59	ND	
91-20-3	Naphthalene	2.23	0.45	ND	11.73	2.35	ND	
87-61-6	1,2,3-Trichlorobenzene	1.34	2.23	ND	9.96	16.59	ND	
87-68-3	Hexachlorobutadiene	1.12	1.34	ND	11.93	14.31	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 13

File Name: 224435
Description T-413
Canister: 766
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:37
Date Analyzed: 12/11/2024 **Time:** 17:56
Can Dilution Factor: 1.34
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.13	6.70	ND	12.81	27.44	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 14**

File Name: 2443514A.D **Date Sampled:** 11/19/2024 **Time:** 13:37
Description: T-414 **Date Analyzed:** 12/11/2024 **Time:** 18:23
Canister: 725 **Can Dilution Factor:** 1.32
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.10	0.66	0.76	1.90	1.14	J
75-71-8	Dichlorodifluoromethane	0.66	1.10	ND	3.27	5.45	ND	
67-56-1	Methanol	2.20	2.64	ND	2.88	3.46	ND	
74-87-3	Chloromethane	0.66	1.10	1.42	1.37	2.28	2.94	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.10	ND	3.08	7.70	ND	
75-01-4	Vinyl chloride	0.22	1.10	ND	0.57	2.82	ND	
106-99-0	1,3-Butadiene	0.22	1.10	ND	0.49	2.44	ND	
74-83-9	Bromomethane	0.44	1.10	1.79	1.71	4.28	6.95	
75-00-3	Chloroethane	0.44	1.10	ND	1.16	2.91	ND	
64-17-5	Ethanol	2.20	14.12	ND	4.15	26.67	ND	
107-02-8	Acrolein	0.44	1.32	ND	1.01	3.03	ND	
75-69-4	Trichlorofluoromethane	0.44	1.10	ND	2.48	6.19	ND	
67-64-1	Acetone	2.20	2.64	ND	5.23	6.28	ND	
67-63-0	2-propanol (isopropylalcohol)	0.88	5.50	ND	2.17	13.54	ND	
75-65-0	t-Butyl alcohol	0.44	4.40	ND	1.34	13.35	ND	
4227-95-6	Methyl iodide	0.44	1.32	ND	2.58	7.73	ND	
75-35-4	1,1-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
107-13-1	Acrylonitrile	0.88	1.32	ND	1.91	2.87	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.10	ND	1.69	8.44	ND	
107-05-1	Allyl chloride	0.22	4.40	ND	0.69	13.79	ND	
75-09-2	Methylene chloride	0.22	1.10	ND	0.76	3.82	ND	
75-15-0	Carbon disulfide	0.44	1.10	ND	1.37	3.43	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.88	ND	0.87	3.49	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.88	ND	1.59	3.18	ND	
107-12-0	Propionitrile	1.10	1.76	ND	2.48	3.97	ND	
75-34-3	1,1-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.10	ND	1.84	4.60	ND	
108-05-4	Vinyl acetate	0.22	4.40	ND	0.78	15.52	ND	
78-93-3	2-Butanone (MEK)	0.44	1.32	ND	1.30	3.90	ND	
108-20-3	Diisopropyl ether	0.44	2.64	ND	1.84	11.05	ND	
110-54-3	Hexane	0.44	1.10	ND	1.55	3.88	ND	
126-98-7	Methacrylonitrile	0.44	1.10	ND	1.21	3.02	ND	
141-78-6	Ethyl acetate	0.44	1.10	ND	1.59	3.97	ND	
74-97-5	Bromochloromethane	0.22	1.10	ND	1.17	5.83	ND	
96-33-3	Methyl acrylate	0.44	2.20	ND	1.55	7.76	ND	
109-99-9	Tetrahydrofuran	0.22	1.32	ND	0.65	3.90	ND	
78-83-1	Isobutyl alcohol	0.88	3.52	ND	2.67	10.68	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
67-66-3	Chloroform	0.22	1.10	ND	1.08	5.38	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
107-06-2	1,2-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
563-58-6	1,1-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
110-82-7	Cyclohexane	0.22	1.10	ND	0.76	3.79	ND	
71-43-2	Benzene	1.54	2.20	ND	4.93	7.04	ND	
56-23-5	Carbon tetrachloride	0.22	1.10	ND	1.39	6.93	ND	
994-05-8	t-Amyl methyl ether	0.44	2.20	ND	1.84	9.21	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.10	ND	1.03	5.14	ND	
142-82-5	n-Heptane	0.44	1.10	ND	1.81	4.51	ND	
78-87-5	1,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
123-91-1	1,4 Dioxane	0.44	2.20	ND	1.59	7.94	ND	
74-95-3	Dibromomethane	0.22	1.10	ND	1.57	7.83	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.10	ND	0.59	5.92	ND	
75-27-4	Bromodichloromethane	0.22	1.10	ND	1.48	7.38	ND	
80-62-6	Methyl methacrylate	0.44	1.10	ND	1.80	4.51	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.52	ND	1.81	14.44	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
108-88-3	Toluene	0.88	1.10	ND	3.32	4.15	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
97-63-2	Ethyl methacrylate	0.44	1.10	ND	2.06	5.14	ND	
591-78-6	2-Hexanone	0.44	3.52	ND	1.81	14.44	ND	
142-28-9	1,3-Dichloropropane	0.22	3.08	ND	1.02	14.25	ND	
111-65-9	Octane	0.44	1.10	ND	2.06	5.14	ND	
124-48-1	Dibromochloromethane	0.44	1.10	ND	3.75	9.38	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.10	ND	3.39	8.46	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.10	ND	0.75	7.47	ND	
108-90-7	Chlorobenzene	0.44	1.10	ND	2.03	5.07	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.10	ND	3.02	7.56	ND	
100-41-4	Ethylbenzene	0.44	1.10	ND	1.91	4.78	ND	
1330-20-7	m,p-Xylenes	0.44	1.10	ND	1.91	4.78	ND	
111-84-2	Nonane	0.44	1.10	ND	2.31	5.78	ND	
100-42-5	Styrene	0.66	1.10	ND	2.82	4.69	ND	
75-25-2	Bromoform	0.44	1.10	ND	4.55	11.38	ND	
95-47-6	o-Xylene	0.44	1.10	ND	1.91	4.78	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.88	2.20	ND	6.05	15.12	ND	
96-18-4	1,2,3-Trichloropropane	0.88	2.64	ND	5.31	15.94	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.88	2.64	ND	4.51	13.52	ND	
103-65-1	n-Propylbenzene	0.88	3.08	ND	4.33	15.16	ND	
98-82-8	Isopropylbenzene	0.88	3.08	ND	4.33	15.16	ND	
622-96-8	4-Ethyltoluene	0.88	7.04	ND	4.33	34.66	ND	
108-67-8	1,3,5-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
124-18-5	Decane	0.88	2.64	ND	5.13	15.39	ND	
98-06-6	tert-butyl benzene	0.88	2.64	ND	4.84	14.51	ND	
95-63-6	1,2,4-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
538-93-2	i-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
135-98-8	sec-butylbenzene	0.88	3.08	ND	4.84	16.93	ND	
541-73-1	1,3-Dichlorobenzene	0.88	3.52	ND	5.30	21.19	ND	
99-87-6	Isopropyltoluene	0.88	2.64	ND	4.84	14.51	ND	
100-44-7	Benzyl chloride	0.88	2.20	ND	4.56	11.41	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.88	2.20	ND	5.30	13.24	ND	
104-51-8	n-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
95-50-1	1,2-Dichlorobenzene	0.88	3.08	ND	5.30	18.54	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.32	3.08	ND	12.77	29.81	ND	
120-82-1	1,2,4-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
91-20-3	Naphthalene	2.20	0.44	ND	11.55	2.31	ND	
87-61-6	1,2,3-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
87-68-3	Hexachlorobutadiene	1.10	1.32	ND	11.75	14.10	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	118	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 14

File Name: 224435
Description T-414
Canister: 725
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:37
Date Analyzed: 12/11/2024 **Time:** 18:23
Can Dilution Factor: 1.32
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.08	6.60	ND	12.61	27.03	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 15

File Name: 2443515A.D
Description: T-415
Canister: 896
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:38
Date Analyzed: 12/11/2024 **Time:** 19:00
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	0.82	0.75	1.88	1.41	J
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	ND	2.86	3.43	ND	
74-87-3	Chloromethane	0.66	1.09	1.14	1.35	2.26	2.37	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	ND	4.12	26.46	ND	
107-02-8	Acrolein	0.44	1.31	ND	1.00	3.01	ND	
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	2.30	5.20	6.23	5.47	J
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	ND	2.15	13.44	ND	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	ND	1.29	3.87	ND	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	
109-99-9	Tetrahydrofuran	0.22	1.31	ND	0.65	3.87	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	117	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 15

File Name: 224435
Description: T-415
Canister: 896
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:38
Date Analyzed: 12/11/2024 **Time:** 19:00
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 16**

File Name: 2443516A.D **Date Sampled:** 11/19/2024 **Time:** 13:24
Description: T-416 **Date Analyzed:** 12/11/2024 **Time:** 19:38
Canister: 659 **Can Dilution Factor:** 1.42
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.47	1.18	0.83	0.82	2.04	1.43	J
75-71-8	Dichlorodifluoromethane	0.71	1.18	ND	3.52	5.86	ND	
67-56-1	Methanol	2.37	2.84	ND	3.10	3.72	ND	
74-87-3	Chloromethane	0.71	1.18	1.98	1.47	2.45	4.10	
76-14-2	1,2-Dichlorotetrafluoroethane	0.47	1.18	ND	3.31	8.28	ND	
75-01-4	Vinyl chloride	0.24	1.18	ND	0.61	3.03	ND	
106-99-0	1,3-Butadiene	0.24	1.18	ND	0.53	2.62	ND	
74-83-9	Bromomethane	0.47	1.18	ND	1.84	4.60	ND	
75-00-3	Chloroethane	0.47	1.18	ND	1.25	3.13	ND	
64-17-5	Ethanol	2.37	15.19	ND	4.47	28.69	ND	
107-02-8	Acrolein	0.47	1.42	ND	1.09	3.26	ND	
75-69-4	Trichlorofluoromethane	0.47	1.18	ND	2.66	6.66	ND	
67-64-1	Acetone	2.37	2.84	ND	5.63	6.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.95	5.92	ND	2.33	14.56	ND	
75-65-0	t-Butyl alcohol	0.47	4.73	ND	1.44	14.36	ND	
4227-95-6	Methyl iodide	0.47	1.42	ND	2.77	8.31	ND	
75-35-4	1,1-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	
107-13-1	Acrylonitrile	0.95	1.42	ND	2.06	3.09	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.24	1.18	ND	1.82	9.08	ND	
107-05-1	Allyl chloride	0.24	4.73	ND	0.74	14.83	ND	
75-09-2	Methylene chloride	0.24	1.18	ND	0.82	4.11	ND	
75-15-0	Carbon disulfide	0.47	1.18	ND	1.48	3.69	ND	
156-60-5	trans-1,2-Dichloroethene	0.24	0.95	ND	0.94	3.76	ND	
1634-04-4	Methyl tert butyl ether	0.47	0.95	ND	1.71	3.42	ND	
107-12-0	Propionitrile	1.18	1.89	ND	2.67	4.27	ND	
75-34-3	1,1-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
637-92-3	Ethyl tert butyl ether	0.47	1.18	ND	1.98	4.95	ND	
108-05-4	Vinyl acetate	0.24	4.73	ND	0.83	16.69	ND	
78-93-3	2-Butanone (MEK)	0.47	1.42	ND	1.40	4.19	ND	
108-20-3	Diisopropyl ether	0.47	2.84	ND	1.98	11.89	ND	
110-54-3	Hexane	0.47	1.18	ND	1.67	4.18	ND	
126-98-7	Methacrylonitrile	0.47	1.18	ND	1.30	3.25	ND	
141-78-6	Ethyl acetate	0.47	1.18	ND	1.71	4.27	ND	
74-97-5	Bromochloromethane	0.24	1.18	ND	1.25	6.27	ND	
96-33-3	Methyl acrylate	0.47	2.37	ND	1.67	8.35	ND	
109-99-9	Tetrahydrofuran	0.24	1.42	ND	0.70	4.19	ND	
78-83-1	Isobutyl alcohol	0.95	3.79	ND	2.87	11.49	ND	
156-59-2	cis-1,2-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
67-66-3	Chloroform	0.24	1.18	ND	1.16	5.79	ND	
71-55-6	1,1,1-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
107-06-2	1,2-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
563-58-6	1,1-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
110-82-7	Cyclohexane	0.24	1.18	ND	0.82	4.08	ND	
71-43-2	Benzene	1.66	2.37	ND	5.30	7.57	ND	
56-23-5	Carbon tetrachloride	0.24	1.18	ND	1.49	7.45	ND	
994-05-8	t-Amyl methyl ether	0.47	2.37	ND	1.98	9.91	ND	
540-84-1	2,2,4-Trimethylpentane	0.24	1.18	ND	1.11	5.53	ND	
142-82-5	n-Heptane	0.47	1.18	ND	1.94	4.86	ND	
78-87-5	1,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
123-91-1	1,4 Dioxane	0.47	2.37	ND	1.71	8.54	ND	
74-95-3	Dibromomethane	0.24	1.18	ND	1.68	8.42	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.18	ND	0.64	6.37	ND	
75-27-4	Bromodichloromethane	0.24	1.18	ND	1.59	7.94	ND	
80-62-6	Methyl methacrylate	0.47	1.18	ND	1.94	4.85	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.47	3.79	ND	1.94	15.54	ND	
10061-01-5	cis-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
108-88-3	Toluene	0.95	1.18	ND	3.57	4.46	ND	
10061-02-6	trans-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
79-00-5	1,1,2-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
97-63-2	Ethyl methacrylate	0.47	1.18	ND	2.21	5.53	ND	
591-78-6	2-Hexanone	0.47	3.79	ND	1.94	15.54	ND	
142-28-9	1,3-Dichloropropane	0.24	3.31	ND	1.10	15.33	ND	
111-65-9	Octane	0.47	1.18	ND	2.21	5.53	ND	
124-48-1	Dibromochloromethane	0.47	1.18	ND	4.04	10.09	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.47	1.18	ND	3.64	9.11	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.18	ND	0.80	8.04	ND	
108-90-7	Chlorobenzene	0.47	1.18	ND	2.18	5.46	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.47	1.18	ND	3.25	8.13	ND	
100-41-4	Ethylbenzene	0.47	1.18	ND	2.06	5.15	ND	
1330-20-7	m,p-Xylenes	0.47	1.18	ND	2.06	5.15	ND	
111-84-2	Nonane	0.47	1.18	ND	2.49	6.22	ND	
100-42-5	Styrene	0.71	1.18	ND	3.03	5.05	ND	
75-25-2	Bromoform	0.47	1.18	ND	4.90	12.25	ND	
95-47-6	o-Xylene	0.47	1.18	ND	2.06	5.15	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.95	2.37	ND	6.51	16.26	ND	
96-18-4	1,2,3-Trichloropropane	0.95	2.84	ND	5.71	17.14	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.95	2.84	ND	4.85	14.54	ND	
103-65-1	n-Propylbenzene	0.95	3.31	ND	4.66	16.31	ND	
98-82-8	Isopropylbenzene	0.95	3.31	ND	4.66	16.31	ND	
622-96-8	4-Ethyltoluene	0.95	7.57	ND	4.66	37.28	ND	
108-67-8	1,3,5-Trimethylbenzene	0.95	4.26	ND	4.66	20.97	ND	
124-18-5	Decane	0.95	2.84	ND	5.52	16.55	ND	
98-06-6	tert-butyl benzene	0.95	2.84	ND	5.20	15.61	ND	
95-63-6	1,2,4-Trimethylbenzene	0.95	4.26	ND	4.66	20.97	ND	
538-93-2	i-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
135-98-8	sec-butylbenzene	0.95	3.31	ND	5.20	18.21	ND	
541-73-1	1,3-Dichlorobenzene	0.95	3.79	ND	5.70	22.80	ND	
99-87-6	Isopropyltoluene	0.95	2.84	ND	5.20	15.61	ND	
100-44-7	Benzyl chloride	0.95	2.37	ND	4.91	12.27	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.95	2.37	ND	5.70	14.25	ND	
104-51-8	n-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
95-50-1	1,2-Dichlorobenzene	0.95	3.31	ND	5.70	19.95	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.42	3.31	ND	13.74	32.07	ND	
120-82-1	1,2,4-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
91-20-3	Naphthalene	2.37	0.47	ND	12.43	2.49	ND	
87-61-6	1,2,3-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
87-68-3	Hexachlorobutadiene	1.18	1.42	ND	12.64	15.17	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 16

File Name: 224435
Description T-416
Canister: 659
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:24
Date Analyzed: 12/11/2024 **Time:** 19:38
Can Dilution Factor: 1.42
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.31	7.10	ND	13.57	29.08	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 17

File Name: 2443517A.D
Description: T-417
Canister: 899
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:29
Date Analyzed: 12/11/2024 **Time:** 20:16
Can Dilution Factor: 1.30
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.08	0.80	0.75	1.87	1.37	J
75-71-8	Dichlorodifluoromethane	0.65	1.08	ND	3.22	5.36	ND	
67-56-1	Methanol	2.17	2.60	ND	2.84	3.41	ND	
74-87-3	Chloromethane	0.65	1.08	1.52	1.34	2.24	3.13	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.08	ND	3.03	7.58	ND	
75-01-4	Vinyl chloride	0.22	1.08	ND	0.56	2.77	ND	
106-99-0	1,3-Butadiene	0.22	1.08	ND	0.48	2.40	ND	
74-83-9	Bromomethane	0.43	1.08	ND	1.68	4.21	ND	
75-00-3	Chloroethane	0.43	1.08	ND	1.14	2.86	ND	
64-17-5	Ethanol	2.17	13.91	ND	4.09	26.26	ND	
107-02-8	Acrolein	0.43	1.30	ND	1.00	2.99	ND	
75-69-4	Trichlorofluoromethane	0.43	1.08	ND	2.44	6.10	ND	
67-64-1	Acetone	2.17	2.60	ND	5.16	6.19	ND	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.42	ND	2.13	13.33	ND	
75-65-0	t-Butyl alcohol	0.43	4.33	ND	1.32	13.15	ND	
4227-95-6	Methyl iodide	0.43	1.30	ND	2.54	7.61	ND	
75-35-4	1,1-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	
107-13-1	Acrylonitrile	0.87	1.30	ND	1.88	2.83	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.08	ND	1.66	8.31	ND	
107-05-1	Allyl chloride	0.22	4.33	ND	0.68	13.58	ND	
75-09-2	Methylene chloride	0.22	1.08	ND	0.75	3.77	ND	
75-15-0	Carbon disulfide	0.43	1.08	ND	1.35	3.38	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.86	3.44	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.87	ND	1.56	3.13	ND	
107-12-0	Propionitrile	1.08	1.73	ND	2.44	3.91	ND	
75-34-3	1,1-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.08	ND	1.81	4.53	ND	
108-05-4	Vinyl acetate	0.22	4.33	ND	0.76	15.28	ND	
78-93-3	2-Butanone (MEK)	0.43	1.30	ND	1.28	3.84	ND	
108-20-3	Diisopropyl ether	0.43	2.60	ND	1.81	10.88	ND	
110-54-3	Hexane	0.43	1.08	ND	1.53	3.82	ND	
126-98-7	Methacrylonitrile	0.43	1.08	ND	1.19	2.98	ND	
141-78-6	Ethyl acetate	0.43	1.08	ND	1.56	3.91	ND	
74-97-5	Bromochloromethane	0.22	1.08	ND	1.15	5.74	ND	
96-33-3	Methyl acrylate	0.43	2.17	ND	1.53	7.64	ND	
109-99-9	Tetrahydrofuran	0.22	1.30	ND	0.64	3.84	ND	
78-83-1	Isobutyl alcohol	0.87	3.47	ND	2.63	10.52	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
67-66-3	Chloroform	0.22	1.08	ND	1.06	5.30	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
107-06-2	1,2-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
563-58-6	1,1-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
110-82-7	Cyclohexane	0.22	1.08	ND	0.75	3.74	ND	
71-43-2	Benzene	1.52	2.17	ND	4.85	6.93	ND	
56-23-5	Carbon tetrachloride	0.22	1.08	ND	1.36	6.82	ND	
994-05-8	t-Amyl methyl ether	0.43	2.17	ND	1.81	9.07	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.08	ND	1.01	5.07	ND	
142-82-5	n-Heptane	0.43	1.08	ND	1.78	4.45	ND	
78-87-5	1,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
123-91-1	1,4 Dioxane	0.43	2.17	ND	1.56	7.82	ND	
74-95-3	Dibromomethane	0.22	1.08	ND	1.54	7.71	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.08	ND	0.58	5.83	ND	
75-27-4	Bromodichloromethane	0.22	1.08	ND	1.45	7.27	ND	
80-62-6	Methyl methacrylate	0.43	1.08	ND	1.78	4.44	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.47	ND	1.78	14.23	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
108-88-3	Toluene	0.87	1.08	ND	3.27	4.09	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
97-63-2	Ethyl methacrylate	0.43	1.08	ND	2.03	5.07	ND	
591-78-6	2-Hexanone	0.43	3.47	ND	1.78	14.23	ND	
142-28-9	1,3-Dichloropropane	0.22	3.03	ND	1.00	14.04	ND	
111-65-9	Octane	0.43	1.08	ND	2.03	5.07	ND	
124-48-1	Dibromochloromethane	0.43	1.08	ND	3.70	9.24	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.08	ND	3.33	8.34	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.08	ND	0.74	7.36	ND	
108-90-7	Chlorobenzene	0.43	1.08	ND	2.00	5.00	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.08	ND	2.98	7.44	ND	
100-41-4	Ethylbenzene	0.43	1.08	ND	1.88	4.71	ND	
1330-20-7	m,p-Xylenes	0.43	1.08	ND	1.88	4.71	ND	
111-84-2	Nonane	0.43	1.08	ND	2.28	5.69	ND	
100-42-5	Styrene	0.65	1.08	ND	2.77	4.62	ND	
75-25-2	Bromoform	0.43	1.08	ND	4.48	11.21	ND	
95-47-6	o-Xylene	0.43	1.08	ND	1.88	4.71	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.17	ND	5.96	14.89	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.60	ND	5.23	15.70	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.60	ND	4.44	13.31	ND	
103-65-1	n-Propylbenzene	0.87	3.03	ND	4.27	14.93	ND	
98-82-8	Isopropylbenzene	0.87	3.03	ND	4.27	14.93	ND	
622-96-8	4-Ethyltoluene	0.87	6.93	ND	4.27	34.13	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
124-18-5	Decane	0.87	2.60	ND	5.05	15.15	ND	
98-06-6	tert-butyl benzene	0.87	2.60	ND	4.76	14.29	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
538-93-2	i-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
135-98-8	sec-butylbenzene	0.87	3.03	ND	4.76	16.67	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.47	ND	5.22	20.87	ND	
99-87-6	Isopropyltoluene	0.87	2.60	ND	4.76	14.29	ND	
100-44-7	Benzyl chloride	0.87	2.17	ND	4.49	11.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.87	2.17	ND	5.22	13.04	ND	
104-51-8	n-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.03	ND	5.22	18.26	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.30	3.03	ND	12.58	29.36	ND	
120-82-1	1,2,4-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
91-20-3	Naphthalene	2.17	0.43	ND	11.38	2.28	ND	
87-61-6	1,2,3-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
87-68-3	Hexachlorobutadiene	1.08	1.30	ND	11.57	13.89	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 17

File Name: 224435
Description: T-417
Canister: 899
QC_Batch: 121124-MA1

Date Sampled: 11/19/2024 **Time:** 13:29
Date Analyzed: 12/11/2024 **Time:** 20:16
Can Dilution Factor: 1.30
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.03	6.50	ND	12.42	26.62	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 18

File Name: 2443518A.D
Description: T-418
Canister: 522
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 13:40
Date Analyzed: 12/10/2024 **Time:** 15:15
Can Dilution Factor: 1.25
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.04	ND	0.72	1.80	ND	
75-71-8	Dichlorodifluoromethane	0.63	1.04	ND	3.09	5.16	ND	
67-56-1	Methanol	2.08	2.50	ND	2.73	3.28	ND	
74-87-3	Chloromethane	0.63	1.04	ND	1.29	2.15	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.04	ND	2.92	7.29	ND	
75-01-4	Vinyl chloride	0.21	1.04	ND	0.54	2.67	ND	
106-99-0	1,3-Butadiene	0.21	1.04	ND	0.46	2.31	ND	
74-83-9	Bromomethane	0.42	1.04	ND	1.62	4.05	ND	
75-00-3	Chloroethane	0.42	1.04	ND	1.10	2.75	ND	
64-17-5	Ethanol	2.08	13.38	ND	3.93	25.25	ND	
107-02-8	Acrolein	0.42	1.25	ND	0.96	2.87	ND	
75-69-4	Trichlorofluoromethane	0.42	1.04	ND	2.34	5.86	ND	
67-64-1	Acetone	2.08	2.50	ND	4.96	5.95	ND	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.21	ND	2.05	12.82	ND	
75-65-0	t-Butyl alcohol	0.42	4.17	ND	1.26	12.64	ND	
4227-95-6	Methyl iodide	0.42	1.25	ND	2.44	7.32	ND	
75-35-4	1,1-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
107-13-1	Acrylonitrile	0.83	1.25	ND	1.81	2.72	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.04	ND	1.60	7.99	ND	
107-05-1	Allyl chloride	0.21	4.17	ND	0.65	13.05	ND	
75-09-2	Methylene chloride	0.21	1.04	ND	0.72	3.62	ND	
75-15-0	Carbon disulfide	0.42	1.04	ND	1.30	3.25	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.83	3.31	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.83	ND	1.50	3.01	ND	
107-12-0	Propionitrile	1.04	1.67	ND	2.35	3.76	ND	
75-34-3	1,1-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.04	ND	1.74	4.36	ND	
108-05-4	Vinyl acetate	0.21	4.17	ND	0.73	14.69	ND	
78-93-3	2-Butanone (MEK)	0.42	1.25	ND	1.23	3.69	ND	
108-20-3	Diisopropyl ether	0.42	2.50	ND	1.74	10.46	ND	
110-54-3	Hexane	0.42	1.04	ND	1.47	3.68	ND	
126-98-7	Methacrylonitrile	0.42	1.04	ND	1.15	2.86	ND	
141-78-6	Ethyl acetate	0.42	1.04	ND	1.50	3.76	ND	
74-97-5	Bromochloromethane	0.21	1.04	ND	1.10	5.52	ND	
96-33-3	Methyl acrylate	0.42	2.08	ND	1.47	7.35	ND	
109-99-9	Tetrahydrofuran	0.21	1.25	ND	0.62	3.69	ND	
78-83-1	Isobutyl alcohol	0.83	3.33	ND	2.53	10.12	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
67-66-3	Chloroform	0.21	1.04	ND	1.02	5.09	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
107-06-2	1,2-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
563-58-6	1,1-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
110-82-7	Cyclohexane	0.21	1.04	ND	0.72	3.59	ND	
71-43-2	Benzene	1.46	2.08	ND	4.66	6.66	ND	
56-23-5	Carbon tetrachloride	0.21	1.04	ND	1.31	6.56	ND	
994-05-8	t-Amyl methyl ether	0.42	2.08	ND	1.74	8.72	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.04	ND	0.97	4.87	ND	
142-82-5	n-Heptane	0.42	1.04	ND	1.71	4.27	ND	
78-87-5	1,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
123-91-1	1,4 Dioxane	0.42	2.08	ND	1.50	7.52	ND	
74-95-3	Dibromomethane	0.21	1.04	ND	1.48	7.42	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.04	ND	0.56	5.61	ND	
75-27-4	Bromodichloromethane	0.21	1.04	ND	1.40	6.99	ND	
80-62-6	Methyl methacrylate	0.42	1.04	ND	1.71	4.27	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.33	ND	1.71	13.68	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
108-88-3	Toluene	0.83	1.04	ND	3.14	3.93	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
97-63-2	Ethyl methacrylate	0.42	1.04	ND	1.95	4.87	ND	
591-78-6	2-Hexanone	0.42	3.33	ND	1.71	13.68	ND	
142-28-9	1,3-Dichloropropane	0.21	2.92	ND	0.96	13.50	ND	
111-65-9	Octane	0.42	1.04	ND	1.95	4.87	ND	
124-48-1	Dibromochloromethane	0.42	1.04	ND	3.55	8.89	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.04	ND	3.21	8.02	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.04	ND	0.71	7.07	ND	
108-90-7	Chlorobenzene	0.42	1.04	ND	1.92	4.80	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.04	ND	2.86	7.16	ND	
100-41-4	Ethylbenzene	0.42	1.04	ND	1.81	4.53	ND	
1330-20-7	m,p-Xylenes	0.42	1.04	ND	1.81	4.53	ND	
111-84-2	Nonane	0.42	1.04	ND	2.19	5.47	ND	
100-42-5	Styrene	0.63	1.04	ND	2.67	4.45	ND	
75-25-2	Bromoform	0.42	1.04	ND	4.31	10.78	ND	
95-47-6	o-Xylene	0.42	1.04	ND	1.81	4.53	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.08	ND	5.73	14.32	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.50	ND	5.03	15.09	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.50	ND	4.27	12.80	ND	
103-65-1	n-Propylbenzene	0.83	2.92	ND	4.10	14.36	ND	
98-82-8	Isopropylbenzene	0.83	2.92	ND	4.10	14.36	ND	
622-96-8	4-Ethyltoluene	0.83	6.67	ND	4.10	32.82	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
124-18-5	Decane	0.83	2.50	ND	4.86	14.57	ND	
98-06-6	tert-butyl benzene	0.83	2.50	ND	4.58	13.74	ND	
95-63-6	1,2,4-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
538-93-2	i-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
135-98-8	sec-butylbenzene	0.83	2.92	ND	4.58	16.03	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.33	ND	5.02	20.07	ND	
99-87-6	Isopropyltoluene	0.83	2.50	ND	4.58	13.74	ND	
100-44-7	Benzyl chloride	0.83	2.08	ND	4.32	10.80	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.83	2.08	ND	5.02	12.54	ND	
104-51-8	n-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.92	ND	5.02	17.56	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.25	2.92	ND	12.10	28.23	ND	
120-82-1	1,2,4-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
91-20-3	Naphthalene	2.08	0.42	ND	10.94	2.19	ND	
87-61-6	1,2,3-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
87-68-3	Hexachlorobutadiene	1.04	1.25	ND	11.13	13.35	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	110	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 18

File Name: 224435
Description T-418
Canister: 522
QC_Batch: 121024-MA1

Date Sampled: 11/19/2024 **Time:** 13:40
Date Analyzed: 12/10/2024 **Time:** 15:15
Can Dilution Factor: 1.25
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.92	6.25	ND	11.95	25.60	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 19

File Name: 2443519A.D
Description: T-501
Canister: 664
QC_Batch: 121124-MA1

Date Sampled: 11/20/2024 **Time:** 08:30
Date Analyzed: 12/11/2024 **Time:** 20:53
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	1.36	0.74	1.84	2.35	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	2.85	5.08	6.09	6.78	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	3.52	2.10	13.13	8.67	J
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 19

File Name: 224435
Description T-501
Canister: 664
QC_Batch: 121124-MA1

Date Sampled: 11/20/2024 **Time:** 08:30
Date Analyzed: 12/11/2024 **Time:** 20:53
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 20

File Name: 2443520A.D
Description: T-502
Canister: 716
QC_Batch: 121124-MA1

Date Sampled: 11/20/2024 **Time:** 08:37
Date Analyzed: 12/11/2024 **Time:** 21:31
Can Dilution Factor: 1.33
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.11	0.91	0.76	1.91	1.57	J
75-71-8	Dichlorodifluoromethane	0.67	1.11	ND	3.29	5.49	ND	
67-56-1	Methanol	2.22	2.66	ND	2.91	3.49	ND	
74-87-3	Chloromethane	0.67	1.11	1.43	1.38	2.29	2.95	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.11	ND	3.10	7.76	ND	
75-01-4	Vinyl chloride	0.22	1.11	ND	0.57	2.84	ND	
106-99-0	1,3-Butadiene	0.22	1.11	ND	0.49	2.46	ND	
74-83-9	Bromomethane	0.44	1.11	ND	1.72	4.31	ND	
75-00-3	Chloroethane	0.44	1.11	ND	1.17	2.93	ND	
64-17-5	Ethanol	2.22	14.23	ND	4.19	26.87	ND	
107-02-8	Acrolein	0.44	1.33	ND	1.02	3.06	ND	
75-69-4	Trichlorofluoromethane	0.44	1.11	ND	2.49	6.24	ND	
67-64-1	Acetone	2.22	2.66	2.69	5.27	6.33	6.39	
67-63-0	2-propanol (isopropylalcohol)	0.89	5.54	ND	2.18	13.64	ND	
75-65-0	t-Butyl alcohol	0.44	4.43	ND	1.35	13.45	ND	
4227-95-6	Methyl iodide	0.44	1.33	ND	2.59	7.78	ND	
75-35-4	1,1-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	
107-13-1	Acrylonitrile	0.89	1.33	ND	1.93	2.89	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.11	ND	1.70	8.51	ND	
107-05-1	Allyl chloride	0.22	4.43	ND	0.69	13.89	ND	
75-09-2	Methylene chloride	0.22	1.11	ND	0.77	3.85	ND	
75-15-0	Carbon disulfide	0.44	1.11	ND	1.38	3.45	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.89	ND	0.88	3.52	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.89	ND	1.60	3.20	ND	
107-12-0	Propionitrile	1.11	1.77	ND	2.50	4.00	ND	
75-34-3	1,1-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.11	ND	1.86	4.64	ND	
108-05-4	Vinyl acetate	0.22	4.43	ND	0.78	15.63	ND	
78-93-3	2-Butanone (MEK)	0.44	1.33	ND	1.31	3.93	ND	
108-20-3	Diisopropyl ether	0.44	2.66	ND	1.86	11.13	ND	
110-54-3	Hexane	0.44	1.11	ND	1.57	3.91	ND	
126-98-7	Methacrylonitrile	0.44	1.11	ND	1.22	3.05	ND	
141-78-6	Ethyl acetate	0.44	1.11	ND	1.60	4.00	ND	
74-97-5	Bromochloromethane	0.22	1.11	ND	1.17	5.87	ND	
96-33-3	Methyl acrylate	0.44	2.22	ND	1.56	7.82	ND	
109-99-9	Tetrahydrofuran	0.22	1.33	ND	0.66	3.93	ND	
78-83-1	Isobutyl alcohol	0.89	3.55	ND	2.69	10.76	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
67-66-3	Chloroform	0.22	1.11	ND	1.09	5.42	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
107-06-2	1,2-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
563-58-6	1,1-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
110-82-7	Cyclohexane	0.22	1.11	ND	0.76	3.82	ND	
71-43-2	Benzene	1.55	2.22	10.89	4.96	7.09	34.83	
56-23-5	Carbon tetrachloride	0.22	1.11	ND	1.40	6.98	ND	
994-05-8	t-Amyl methyl ether	0.44	2.22	ND	1.86	9.28	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.11	ND	1.04	5.18	ND	
142-82-5	n-Heptane	0.44	1.11	ND	1.82	4.55	ND	
78-87-5	1,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
123-91-1	1,4 Dioxane	0.44	2.22	ND	1.60	8.00	ND	
74-95-3	Dibromomethane	0.22	1.11	ND	1.58	7.89	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.11	ND	0.60	5.96	ND	
75-27-4	Bromodichloromethane	0.22	1.11	ND	1.49	7.44	ND	
80-62-6	Methyl methacrylate	0.44	1.11	ND	1.82	4.54	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.55	ND	1.82	14.55	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
108-88-3	Toluene	0.89	1.11	5.03	3.34	4.18	18.98	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
97-63-2	Ethyl methacrylate	0.44	1.11	ND	2.07	5.18	ND	
591-78-6	2-Hexanone	0.44	3.55	ND	1.82	14.55	ND	
142-28-9	1,3-Dichloropropane	0.22	3.10	ND	1.03	14.36	ND	
111-65-9	Octane	0.44	1.11	0.45	2.07	5.18	2.10	J
124-48-1	Dibromochloromethane	0.44	1.11	ND	3.78	9.46	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.11	ND	3.41	8.53	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.11	ND	0.75	7.53	ND	
108-90-7	Chlorobenzene	0.44	1.11	ND	2.04	5.11	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.11	ND	3.05	7.62	ND	
100-41-4	Ethylbenzene	0.44	1.11	2.15	1.93	4.82	9.34	
1330-20-7	m,p-Xylenes	0.44	1.11	2.71	1.93	4.82	11.78	
111-84-2	Nonane	0.44	1.11	0.56	2.33	5.82	2.96	J
100-42-5	Styrene	0.67	1.11	ND	2.84	4.73	ND	
75-25-2	Bromoform	0.44	1.11	ND	4.59	11.47	ND	
95-47-6	o-Xylene	0.44	1.11	0.58	1.93	4.82	2.52	J
79-34-5	1,1,2,2-Tetrachloroethane	0.89	2.22	ND	6.09	15.23	ND	
96-18-4	1,2,3-Trichloropropane	0.89	2.66	ND	5.35	16.06	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.89	2.66	ND	4.54	13.62	ND	
103-65-1	n-Propylbenzene	0.89	3.10	ND	4.36	15.28	ND	
98-82-8	Isopropylbenzene	0.89	3.10	ND	4.36	15.28	ND	
622-96-8	4-Ethyltoluene	0.89	7.09	ND	4.36	34.92	ND	
108-67-8	1,3,5-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
124-18-5	Decane	0.89	2.66	ND	5.17	15.50	ND	
98-06-6	tert-butyl benzene	0.89	2.66	ND	4.87	14.62	ND	
95-63-6	1,2,4-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
538-93-2	i-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
135-98-8	sec-butylbenzene	0.89	3.10	ND	4.87	17.06	ND	
541-73-1	1,3-Dichlorobenzene	0.89	3.55	ND	5.34	21.35	ND	
99-87-6	Isopropyltoluene	0.89	2.66	9.35	4.87	14.62	51.39	
100-44-7	Benzyl chloride	0.89	2.22	ND	4.60	11.49	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.89	2.22	ND	5.34	13.35	ND	
104-51-8	n-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
95-50-1	1,2-Dichlorobenzene	0.89	3.10	ND	5.34	18.68	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.33	3.10	ND	12.87	30.03	ND	
120-82-1	1,2,4-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
91-20-3	Naphthalene	2.22	0.44	ND	11.64	2.33	ND	
87-61-6	1,2,3-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
87-68-3	Hexachlorobutadiene	1.11	1.33	ND	11.84	14.21	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 20

File Name: 224435
Description: T-502
Canister: 716
QC_Batch: 121124-MA1

Date Sampled: 11/20/2024 **Time:** 08:37
Date Analyzed: 12/11/2024 **Time:** 21:31
Can Dilution Factor: 1.33
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.10	6.65	ND	12.71	27.24	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 21

File Name: 2443521A.D
Description: T-503
Canister: 751
QC_Batch: 121124-MA1

Date Sampled: 11/20/2024 **Time:** 08:32
Date Analyzed: 12/11/2024 **Time:** 22:08
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	0.79	0.74	1.84	1.37	J
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	ND	5.08	6.09	ND	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	1.50	4.78	6.82	4.78	J
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	115	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 21

File Name: 224435
Description T-503
Canister: 751
QC_Batch: 121124-MA1

Date Sampled: 11/20/2024 **Time:** 08:32
Date Analyzed: 12/11/2024 **Time:** 22:08
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 22**

File Name: 2443522A.D **Date Sampled:** 11/20/2024 **Time:** 08:44
Description: T-504 **Date Analyzed:** 12/12/2024 **Time:** 14:24
Canister: 644 **Can Dilution Factor:** 1.28
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	ND	0.74	1.84	ND	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	32.76	4.03	25.86	61.86	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	ND	5.08	6.09	ND	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	0.59	1.86	4.64	2.55	J
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	0.70	2.73	4.55	2.99	J
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	0.52	1.86	4.64	2.27	J
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	1.65	4.20	33.61	8.13	J
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	1.17	4.20	18.90	5.76	J
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 22

File Name: 224435
Description T-504
Canister: 644
QC_Batch: 121224-MA1

Date Sampled: 11/20/2024 **Time:** 08:44
Date Analyzed: 12/12/2024 **Time:** 14:24
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 23**

File Name: 2443523A.D **Date Sampled:** 11/20/2024 **Time:** 10:55
Description: T-505 **Date Analyzed:** 12/12/2024 **Time:** 15:02
Canister: 883 **Can Dilution Factor:** 1.35
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	ND	0.78	1.94	ND	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.34	5.57	ND	
67-56-1	Methanol	2.25	2.70	ND	2.95	3.54	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.40	2.33	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.15	7.87	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.88	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.50	2.49	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.75	4.37	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.19	2.97	ND	
64-17-5	Ethanol	2.25	14.45	20.52	4.25	27.27	38.73	
107-02-8	Acrolein	0.45	1.35	ND	1.03	3.10	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.53	6.33	ND	
67-64-1	Acetone	2.25	2.70	2.50	5.35	6.42	5.95	J
67-63-0	2-propanol (isopropylalcohol)	0.90	5.63	ND	2.22	13.85	ND	
75-65-0	t-Butyl alcohol	0.45	4.50	ND	1.37	13.66	ND	
4227-95-6	Methyl iodide	0.45	1.35	ND	2.63	7.90	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
107-13-1	Acrylonitrile	0.90	1.35	ND	1.96	2.94	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.73	8.63	ND	
107-05-1	Allyl chloride	0.23	4.50	ND	0.70	14.10	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.78	3.91	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.40	3.51	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.90	ND	0.89	3.57	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.90	ND	1.62	3.25	ND	
107-12-0	Propionitrile	1.13	1.80	ND	2.54	4.06	ND	
75-34-3	1,1-Dichloroethane	0.22	1.13	ND	0.91	4.56	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.88	4.71	ND	
108-05-4	Vinyl acetate	0.23	4.50	ND	0.79	15.87	ND	
78-93-3	2-Butanone (MEK)	0.45	1.35	ND	1.33	3.99	ND	
108-20-3	Diisopropyl ether	0.45	2.70	ND	1.88	11.30	ND	
110-54-3	Hexane	0.45	1.13	ND	1.59	3.97	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.24	3.09	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.62	4.06	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.19	5.96	ND	
96-33-3	Methyl acrylate	0.45	2.25	ND	1.59	7.93	ND	
109-99-9	Tetrahydrofuran	0.23	1.35	ND	0.67	3.99	ND	
78-83-1	Isobutyl alcohol	0.90	3.60	ND	2.73	10.93	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.10	5.50	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.91	4.56	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.88	ND	
71-43-2	Benzene	1.58	2.25	ND	5.04	7.20	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.42	7.09	ND	
994-05-8	t-Amyl methyl ether	0.45	2.25	ND	1.88	9.42	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.05	5.26	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.85	4.62	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
123-91-1	1,4 Dioxane	0.45	2.25	ND	1.62	8.12	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.60	8.01	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.05	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.51	7.55	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.84	4.61	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.60	ND	1.85	14.77	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
108-88-3	Toluene	0.90	1.13	ND	3.39	4.24	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.10	5.26	ND	
591-78-6	2-Hexanone	0.45	3.60	ND	1.85	14.77	ND	
142-28-9	1,3-Dichloropropane	0.23	3.15	ND	1.04	14.58	ND	
111-65-9	Octane	0.45	1.13	ND	2.10	5.26	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.84	9.60	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.46	8.66	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.76	7.64	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.08	5.19	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.09	7.73	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.96	4.89	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.96	4.89	ND	
111-84-2	Nonane	0.45	1.13	ND	2.36	5.91	ND	
100-42-5	Styrene	0.68	1.13	ND	2.88	4.80	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.66	11.64	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.96	4.89	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.90	2.25	ND	6.19	15.46	ND	
96-18-4	1,2,3-Trichloropropane	0.90	2.70	ND	5.43	16.30	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.90	2.70	ND	4.61	13.82	ND	
103-65-1	n-Propylbenzene	0.90	3.15	ND	4.43	15.51	ND	
98-82-8	Isopropylbenzene	0.90	3.15	ND	4.43	15.51	ND	
622-96-8	4-Ethyltoluene	0.90	7.20	1.07	4.43	35.44	5.28	J
108-67-8	1,3,5-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
124-18-5	Decane	0.90	2.70	ND	5.25	15.74	ND	
98-06-6	tert-butyl benzene	0.90	2.70	ND	4.95	14.84	ND	
95-63-6	1,2,4-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
538-93-2	i-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
135-98-8	sec-butylbenzene	0.90	3.15	ND	4.95	17.31	ND	
541-73-1	1,3-Dichlorobenzene	0.90	3.60	ND	5.42	21.67	ND	
99-87-6	Isopropyltoluene	0.90	2.70	ND	4.95	14.84	ND	
100-44-7	Benzyl chloride	0.90	2.25	ND	4.67	11.67	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.90	2.25	ND	5.42	13.55	ND	
104-51-8	n-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
95-50-1	1,2-Dichlorobenzene	0.90	3.15	ND	5.42	18.96	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.35	3.15	ND	13.06	30.48	ND	
120-82-1	1,2,4-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
91-20-3	Naphthalene	2.25	0.45	ND	11.81	2.36	ND	
87-61-6	1,2,3-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
87-68-3	Hexachlorobutadiene	1.13	1.35	ND	12.02	14.42	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	112	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 23

File Name: 224435
Description T-505
Canister: 883
QC_Batch: 121224-MA1

Date Sampled: 11/20/2024 **Time:** 10:55
Date Analyzed: 12/12/2024 **Time:** 15:02
Can Dilution Factor: 1.35
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.15	6.75	ND	12.90	27.64	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 24**

File Name: 2443524A.D **Date Sampled:** 11/20/2024 **Time:** 10:11
Description: T-506 **Date Analyzed:** 12/12/2024 **Time:** 15:40
Canister: 784 **Can Dilution Factor:** 1.36
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	1.17	0.78	1.95	2.02	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.41	2.34	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	19.45	4.28	27.47	36.72	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	14.07	5.39	6.47	33.47	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	32.68	2.23	13.95	80.45	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.10	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.77	7.70	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.97	4.93	ND	
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	ND	2.90	4.84	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.97	4.93	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	ND	4.46	35.71	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	114	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 24

File Name: 224435
Descriptio T-506
Canister: 784
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/12/24 **Time:** 15:40
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 25**

File Name: 2443525A.D **Date Sampled:** 11/20/2024 **Time:** 10:56
Description: T-507 **Date Analyzed:** 12/12/2024 **Time:** 16:17
Canister: 712 **Can Dilution Factor:** 1.38
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	10.03	4.34	27.88	18.95	J
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	2.34	5.47	6.57	5.56	J
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	111	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 25

File Name: 224435
Descriptio T-507
Canister: 712
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/12/24 **Time:** 16:17
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 26

File Name: 2443526A.D
Description: T-508
Canister: 549
QC_Batch: 121224-MA1

Date Sampled: 11/20/2024 **Time:** 10:40
Date Analyzed: 12/12/2024 **Time:** 16:54
Can Dilution Factor: 1.38
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	ND	4.34	27.88	ND	
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	ND	5.47	6.57	ND	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	1.89	5.15	7.36	6.04	J
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 26

File Name: 224435
Descriptio T-508
Canister: 549
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/12/24 **Time:** 16:54
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 27**

File Name: 2443527A.D **Date Sampled:** 11/20/2024 **Time:** 12:20
Description: T-509 **Date Analyzed:** 12/12/2024 **Time:** 18:37
Canister: 882 **Can Dilution Factor:** 1.40
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.47	1.17	1.08	0.80	2.01	1.86	J
75-71-8	Dichlorodifluoromethane	0.70	1.17	ND	3.47	5.78	ND	
67-56-1	Methanol	2.33	2.80	ND	3.06	3.67	ND	
74-87-3	Chloromethane	0.70	1.17	ND	1.45	2.41	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.47	1.17	ND	3.27	8.17	ND	
75-01-4	Vinyl chloride	0.23	1.17	ND	0.60	2.99	ND	
106-99-0	1,3-Butadiene	0.23	1.17	ND	0.52	2.58	ND	
74-83-9	Bromomethane	0.47	1.17	ND	1.81	4.53	ND	
75-00-3	Chloroethane	0.47	1.17	ND	1.23	3.08	ND	
64-17-5	Ethanol	2.33	14.98	ND	4.41	28.28	ND	
107-02-8	Acrolein	0.47	1.40	ND	1.07	3.22	ND	
75-69-4	Trichlorofluoromethane	0.47	1.17	ND	2.63	6.57	ND	
67-64-1	Acetone	2.33	2.80	ND	5.55	6.66	ND	
67-63-0	2-propanol (isopropylalcohol)	0.93	5.83	ND	2.30	14.36	ND	
75-65-0	t-Butyl alcohol	0.47	4.67	ND	1.42	14.16	ND	
4227-95-6	Methyl iodide	0.47	1.40	ND	2.73	8.19	ND	
75-35-4	1,1-Dichloroethene	0.23	1.17	ND	0.93	4.63	ND	
107-13-1	Acrylonitrile	0.93	1.40	ND	2.03	3.04	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.17	ND	1.79	8.95	ND	
107-05-1	Allyl chloride	0.23	4.67	ND	0.73	14.62	ND	
75-09-2	Methylene chloride	0.23	1.17	ND	0.81	4.06	ND	
75-15-0	Carbon disulfide	0.47	1.17	ND	1.45	3.64	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.93	ND	0.93	3.70	ND	
1634-04-4	Methyl tert butyl ether	0.47	0.93	ND	1.68	3.37	ND	
107-12-0	Propionitrile	1.17	1.87	ND	2.63	4.21	ND	
75-34-3	1,1-Dichloroethane	0.23	1.17	ND	0.94	4.73	ND	
637-92-3	Ethyl tert butyl ether	0.47	1.17	ND	1.95	4.88	ND	
108-05-4	Vinyl acetate	0.23	4.67	ND	0.82	16.46	ND	
78-93-3	2-Butanone (MEK)	0.47	1.40	ND	1.38	4.13	ND	
108-20-3	Diisopropyl ether	0.47	2.80	ND	1.95	11.72	ND	
110-54-3	Hexane	0.47	1.17	ND	1.65	4.12	ND	
126-98-7	Methacrylonitrile	0.47	1.17	ND	1.28	3.21	ND	
141-78-6	Ethyl acetate	0.47	1.17	ND	1.68	4.21	ND	
74-97-5	Bromochloromethane	0.23	1.17	ND	1.24	6.18	ND	
96-33-3	Methyl acrylate	0.47	2.33	ND	1.65	8.23	ND	
109-99-9	Tetrahydrofuran	0.23	1.40	ND	0.69	4.13	ND	
78-83-1	Isobutyl alcohol	0.93	3.73	ND	2.83	11.33	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.17	ND	0.93	4.63	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.17	ND	1.08	5.40	ND	
67-66-3	Chloroform	0.23	1.17	ND	1.14	5.71	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.17	ND	1.27	6.37	ND	
107-06-2	1,2-Dichloroethane	0.23	1.17	ND	0.95	4.73	ND	
563-58-6	1,1-Dichloropropene	0.23	1.17	ND	1.06	5.30	ND	
110-82-7	Cyclohexane	0.23	1.17	ND	0.80	4.02	ND	
71-43-2	Benzene	1.63	2.33	2.98	5.22	7.46	9.54	
56-23-5	Carbon tetrachloride	0.23	1.17	ND	1.47	7.35	ND	
994-05-8	t-Amyl methyl ether	0.47	2.33	ND	1.95	9.77	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.17	ND	1.09	5.46	ND	
142-82-5	n-Heptane	0.47	1.17	ND	1.92	4.79	ND	
78-87-5	1,2-Dichloropropane	0.23	1.17	ND	1.08	5.40	ND	
123-91-1	1,4 Dioxane	0.47	2.33	ND	1.68	8.42	ND	
74-95-3	Dibromomethane	0.23	1.17	ND	1.66	8.31	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.17	ND	0.63	6.28	ND	
75-27-4	Bromodichloromethane	0.23	1.17	ND	1.57	7.83	ND	
80-62-6	Methyl methacrylate	0.47	1.17	ND	1.91	4.78	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.47	3.73	ND	1.92	15.32	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.17	ND	1.06	5.30	ND	
108-88-3	Toluene	0.93	1.17	1.10	3.52	4.40	4.16	J
10061-02-6	trans-1,3-Dichloropropene	0.23	1.17	ND	1.06	5.30	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.17	ND	1.27	6.37	ND	
97-63-2	Ethyl methacrylate	0.47	1.17	ND	2.18	5.46	ND	
591-78-6	2-Hexanone	0.47	3.73	ND	1.92	15.32	ND	
142-28-9	1,3-Dichloropropane	0.23	3.27	ND	1.08	15.12	ND	
111-65-9	Octane	0.47	1.17	ND	2.18	5.46	ND	
124-48-1	Dibromochloromethane	0.47	1.17	ND	3.98	9.95	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.47	1.17	ND	3.59	8.98	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.17	ND	0.79	7.92	ND	
108-90-7	Chlorobenzene	0.47	1.17	ND	2.15	5.38	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.47	1.17	ND	3.21	8.02	ND	
100-41-4	Ethylbenzene	0.47	1.17	ND	2.03	5.07	ND	
1330-20-7	m,p-Xylenes	0.47	1.17	0.53	2.03	5.07	2.33	J
111-84-2	Nonane	0.47	1.17	ND	2.45	6.13	ND	
100-42-5	Styrene	0.70	1.17	ND	2.99	4.98	ND	
75-25-2	Bromoform	0.47	1.17	ND	4.83	12.07	ND	
95-47-6	o-Xylene	0.47	1.17	ND	2.03	5.07	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.93	2.33	ND	6.41	16.04	ND	
96-18-4	1,2,3-Trichloropropane	0.93	2.80	ND	5.63	16.90	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.93	2.80	ND	4.78	14.33	ND	
103-65-1	n-Propylbenzene	0.93	3.27	ND	4.59	16.08	ND	
98-82-8	Isopropylbenzene	0.93	3.27	ND	4.59	16.08	ND	
622-96-8	4-Ethyltoluene	0.93	7.47	0.95	4.59	36.76	4.69	J
108-67-8	1,3,5-Trimethylbenzene	0.93	4.20	ND	4.59	20.68	ND	
124-18-5	Decane	0.93	2.80	ND	5.44	16.32	ND	
98-06-6	tert-butyl benzene	0.93	2.80	ND	5.13	15.39	ND	
95-63-6	1,2,4-Trimethylbenzene	0.93	4.20	ND	4.59	20.68	ND	
538-93-2	i-Butylbenzene	0.93	2.80	ND	5.13	15.39	ND	
135-98-8	sec-butylbenzene	0.93	3.27	ND	5.13	17.95	ND	
541-73-1	1,3-Dichlorobenzene	0.93	3.73	ND	5.62	22.48	ND	
99-87-6	Isopropyltoluene	0.93	2.80	ND	5.13	15.39	ND	
100-44-7	Benzyl chloride	0.93	2.33	ND	4.84	12.10	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.93	2.33	ND	5.62	14.05	ND	
104-51-8	n-Butylbenzene	0.93	2.80	ND	5.13	15.39	ND	
95-50-1	1,2-Dichlorobenzene	0.93	3.27	ND	5.62	19.67	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.40	3.27	ND	13.55	31.61	ND	
120-82-1	1,2,4-Trichlorobenzene	1.40	2.33	ND	10.40	17.33	ND	
91-20-3	Naphthalene	2.33	0.47	ND	12.25	2.45	ND	
87-61-6	1,2,3-Trichlorobenzene	1.40	2.33	ND	10.40	17.33	ND	
87-68-3	Hexachlorobutadiene	1.17	1.40	ND	12.46	14.95	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	117	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 27

File Name: 224435
Descriptio T-509
Canister: 882
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/12/24 **Time:** 18:37
Can Dilution Factor: 1.40
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.27	7.00	ND	13.38	28.67	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 28**

File Name: 2443528A.D **Date Sampled:** 11/20/2024 **Time:** 12:18
Description: T-510 **Date Analyzed:** 12/13/2024 **Time:** 15:23
Canister: 860 **Can Dilution Factor:** 1.42
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.47	1.18	ND	0.82	2.04	ND	
75-71-8	Dichlorodifluoromethane	0.71	1.18	ND	3.52	5.86	ND	
67-56-1	Methanol	2.37	2.84	ND	3.10	3.72	ND	
74-87-3	Chloromethane	0.71	1.18	ND	1.47	2.45	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.47	1.18	ND	3.31	8.28	ND	
75-01-4	Vinyl chloride	0.24	1.18	ND	0.61	3.03	ND	
106-99-0	1,3-Butadiene	0.24	1.18	ND	0.53	2.62	ND	
74-83-9	Bromomethane	0.47	1.18	ND	1.84	4.60	ND	
75-00-3	Chloroethane	0.47	1.18	ND	1.25	3.13	ND	
64-17-5	Ethanol	2.37	15.19	ND	4.47	28.69	ND	
107-02-8	Acrolein	0.47	1.42	ND	1.09	3.26	ND	
75-69-4	Trichlorofluoromethane	0.47	1.18	ND	2.66	6.66	ND	
67-64-1	Acetone	2.37	2.84	ND	5.63	6.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.95	5.92	ND	2.33	14.56	ND	
75-65-0	t-Butyl alcohol	0.47	4.73	ND	1.44	14.36	ND	
4227-95-6	Methyl iodide	0.47	1.42	ND	2.77	8.31	ND	
75-35-4	1,1-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	
107-13-1	Acrylonitrile	0.95	1.42	ND	2.06	3.09	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.24	1.18	ND	1.82	9.08	ND	
107-05-1	Allyl chloride	0.24	4.73	ND	0.74	14.83	ND	
75-09-2	Methylene chloride	0.24	1.18	ND	0.82	4.11	ND	
75-15-0	Carbon disulfide	0.47	1.18	ND	1.48	3.69	ND	
156-60-5	trans-1,2-Dichloroethene	0.24	0.95	ND	0.94	3.76	ND	
1634-04-4	Methyl tert butyl ether	0.47	0.95	ND	1.71	3.42	ND	
107-12-0	Propionitrile	1.18	1.89	ND	2.67	4.27	ND	
75-34-3	1,1-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
637-92-3	Ethyl tert butyl ether	0.47	1.18	ND	1.98	4.95	ND	
108-05-4	Vinyl acetate	0.24	4.73	ND	0.83	16.69	ND	
78-93-3	2-Butanone (MEK)	0.47	1.42	ND	1.40	4.19	ND	
108-20-3	Diisopropyl ether	0.47	2.84	ND	1.98	11.89	ND	
110-54-3	Hexane	0.47	1.18	ND	1.67	4.18	ND	
126-98-7	Methacrylonitrile	0.47	1.18	ND	1.30	3.25	ND	
141-78-6	Ethyl acetate	0.47	1.18	ND	1.71	4.27	ND	
74-97-5	Bromochloromethane	0.24	1.18	ND	1.25	6.27	ND	
96-33-3	Methyl acrylate	0.47	2.37	ND	1.67	8.35	ND	
109-99-9	Tetrahydrofuran	0.24	1.42	ND	0.70	4.19	ND	
78-83-1	Isobutyl alcohol	0.95	3.79	ND	2.87	11.49	ND	
156-59-2	cis-1,2-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
67-66-3	Chloroform	0.24	1.18	ND	1.16	5.79	ND	
71-55-6	1,1,1-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
107-06-2	1,2-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
563-58-6	1,1-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
110-82-7	Cyclohexane	0.24	1.18	ND	0.82	4.08	ND	
71-43-2	Benzene	1.66	2.37	ND	5.30	7.57	ND	
56-23-5	Carbon tetrachloride	0.24	1.18	ND	1.49	7.45	ND	
994-05-8	t-Amyl methyl ether	0.47	2.37	ND	1.98	9.91	ND	
540-84-1	2,2,4-Trimethylpentane	0.24	1.18	ND	1.11	5.53	ND	
142-82-5	n-Heptane	0.47	1.18	ND	1.94	4.86	ND	
78-87-5	1,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
123-91-1	1,4 Dioxane	0.47	2.37	ND	1.71	8.54	ND	
74-95-3	Dibromomethane	0.24	1.18	ND	1.68	8.42	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.18	ND	0.64	6.37	ND	
75-27-4	Bromodichloromethane	0.24	1.18	ND	1.59	7.94	ND	
80-62-6	Methyl methacrylate	0.47	1.18	ND	1.94	4.85	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.47	3.79	ND	1.94	15.54	ND	
10061-01-5	cis-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
108-88-3	Toluene	0.95	1.18	ND	3.57	4.46	ND	
10061-02-6	trans-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
79-00-5	1,1,2-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
97-63-2	Ethyl methacrylate	0.47	1.18	ND	2.21	5.53	ND	
591-78-6	2-Hexanone	0.47	3.79	ND	1.94	15.54	ND	
142-28-9	1,3-Dichloropropane	0.24	3.31	ND	1.10	15.33	ND	
111-65-9	Octane	0.47	1.18	ND	2.21	5.53	ND	
124-48-1	Dibromochloromethane	0.47	1.18	ND	4.04	10.09	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.47	1.18	ND	3.64	9.11	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.18	ND	0.80	8.04	ND	
108-90-7	Chlorobenzene	0.47	1.18	ND	2.18	5.46	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.47	1.18	ND	3.25	8.13	ND	
100-41-4	Ethylbenzene	0.47	1.18	ND	2.06	5.15	ND	
1330-20-7	m,p-Xylenes	0.47	1.18	1.65	2.06	5.15	7.19	
111-84-2	Nonane	0.47	1.18	ND	2.49	6.22	ND	
100-42-5	Styrene	0.71	1.18	ND	3.03	5.05	ND	
75-25-2	Bromoform	0.47	1.18	ND	4.90	12.25	ND	
95-47-6	o-Xylene	0.47	1.18	0.93	2.06	5.15	4.03	J
79-34-5	1,1,2,2-Tetrachloroethane	0.95	2.37	ND	6.51	16.26	ND	
96-18-4	1,2,3-Trichloropropane	0.95	2.84	ND	5.71	17.14	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.95	2.84	ND	4.85	14.54	ND	
103-65-1	n-Propylbenzene	0.95	3.31	ND	4.66	16.31	ND	
98-82-8	Isopropylbenzene	0.95	3.31	ND	4.66	16.31	ND	
622-96-8	4-Ethyltoluene	0.95	7.57	ND	4.66	37.28	ND	
108-67-8	1,3,5-Trimethylbenzene	0.95	4.26	0.99	4.66	20.97	4.88	J
124-18-5	Decane	0.95	2.84	ND	5.52	16.55	ND	
98-06-6	tert-butyl benzene	0.95	2.84	ND	5.20	15.61	ND	
95-63-6	1,2,4-Trimethylbenzene	0.95	4.26	ND	4.66	20.97	ND	
538-93-2	i-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
135-98-8	sec-butylbenzene	0.95	3.31	ND	5.20	18.21	ND	
541-73-1	1,3-Dichlorobenzene	0.95	3.79	ND	5.70	22.80	ND	
99-87-6	Isopropyltoluene	0.95	2.84	ND	5.20	15.61	ND	
100-44-7	Benzyl chloride	0.95	2.37	ND	4.91	12.27	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.95	2.37	ND	5.70	14.25	ND	
104-51-8	n-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
95-50-1	1,2-Dichlorobenzene	0.95	3.31	ND	5.70	19.95	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.42	3.31	ND	13.74	32.07	ND	
120-82-1	1,2,4-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
91-20-3	Naphthalene	2.37	0.47	ND	12.43	2.49	ND	
87-61-6	1,2,3-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
87-68-3	Hexachlorobutadiene	1.18	1.42	ND	12.64	15.17	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 28

File Name: 224435
Descriptio T-510
Canister: 860
QC_Batch: 121324-MA1

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/13/24 **Time:** 15:23
Can Dilution Factor: 1.42
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.31	7.10	ND	13.57	29.08	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 29**

File Name: 2443529A.D **Date Sampled:** 11/20/2024 **Time:** 12:31
Description: T-511 **Date Analyzed:** 12/12/2024 **Time:** 20:06
Canister: 627 **Can Dilution Factor:** 1.37
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.14	ND	0.79	1.97	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.14	ND	3.39	5.65	ND	
67-56-1	Methanol	2.28	2.74	ND	2.99	3.59	ND	
74-87-3	Chloromethane	0.69	1.14	ND	1.42	2.36	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.14	ND	3.20	7.99	ND	
75-01-4	Vinyl chloride	0.23	1.14	ND	0.59	2.92	ND	
106-99-0	1,3-Butadiene	0.23	1.14	ND	0.51	2.53	ND	
74-83-9	Bromomethane	0.46	1.14	ND	1.77	4.44	ND	
75-00-3	Chloroethane	0.46	1.14	ND	1.21	3.02	ND	
64-17-5	Ethanol	2.28	14.66	ND	4.31	27.68	ND	
107-02-8	Acrolein	0.46	1.37	ND	1.05	3.15	ND	
75-69-4	Trichlorofluoromethane	0.46	1.14	ND	2.57	6.42	ND	
67-64-1	Acetone	2.28	2.74	2.63	5.43	6.52	6.27	J
67-63-0	2-propanol (isopropylalcohol)	0.91	5.71	ND	2.25	14.05	ND	
75-65-0	t-Butyl alcohol	0.46	4.57	ND	1.39	13.86	ND	
4227-95-6	Methyl iodide	0.46	1.37	ND	2.67	8.02	ND	
75-35-4	1,1-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	
107-13-1	Acrylonitrile	0.91	1.37	ND	1.99	2.98	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.14	ND	1.75	8.76	ND	
107-05-1	Allyl chloride	0.23	4.57	ND	0.72	14.31	ND	
75-09-2	Methylene chloride	0.23	1.14	ND	0.79	3.97	ND	
75-15-0	Carbon disulfide	0.46	1.14	ND	1.42	3.56	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.91	3.62	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.91	ND	1.65	3.30	ND	
107-12-0	Propionitrile	1.14	1.83	ND	2.58	4.12	ND	
75-34-3	1,1-Dichloroethane	0.23	1.14	ND	0.92	4.63	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.14	ND	1.91	4.78	ND	
108-05-4	Vinyl acetate	0.23	4.57	ND	0.81	16.10	ND	
78-93-3	2-Butanone (MEK)	0.46	1.37	ND	1.35	4.05	ND	
108-20-3	Diisopropyl ether	0.46	2.74	ND	1.91	11.47	ND	
110-54-3	Hexane	0.46	1.14	ND	1.61	4.03	ND	
126-98-7	Methacrylonitrile	0.46	1.14	ND	1.25	3.14	ND	
141-78-6	Ethyl acetate	0.46	1.14	ND	1.65	4.12	ND	
74-97-5	Bromochloromethane	0.23	1.14	ND	1.21	6.05	ND	
96-33-3	Methyl acrylate	0.46	2.28	ND	1.61	8.05	ND	
109-99-9	Tetrahydrofuran	0.23	1.37	ND	0.68	4.05	ND	
78-83-1	Isobutyl alcohol	0.91	3.65	ND	2.77	11.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
67-66-3	Chloroform	0.23	1.14	ND	1.12	5.58	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
107-06-2	1,2-Dichloroethane	0.23	1.14	ND	0.93	4.63	ND	
563-58-6	1,1-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
110-82-7	Cyclohexane	0.23	1.14	ND	0.79	3.94	ND	
71-43-2	Benzene	1.60	2.28	3.65	5.11	7.30	11.68	
56-23-5	Carbon tetrachloride	0.23	1.14	ND	1.44	7.19	ND	
994-05-8	t-Amyl methyl ether	0.46	2.28	ND	1.91	9.56	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.14	ND	1.07	5.34	ND	
142-82-5	n-Heptane	0.46	1.14	ND	1.87	4.69	ND	
78-87-5	1,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
123-91-1	1,4 Dioxane	0.46	2.28	ND	1.65	8.24	ND	
74-95-3	Dibromomethane	0.23	1.14	ND	1.63	8.13	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.14	ND	0.61	6.14	ND	
75-27-4	Bromodichloromethane	0.23	1.14	ND	1.53	7.66	ND	
80-62-6	Methyl methacrylate	0.46	1.14	ND	1.87	4.68	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.65	ND	1.87	14.99	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
108-88-3	Toluene	0.91	1.14	1.39	3.45	4.31	5.23	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
97-63-2	Ethyl methacrylate	0.46	1.14	ND	2.14	5.34	ND	
591-78-6	2-Hexanone	0.46	3.65	ND	1.87	14.99	ND	
142-28-9	1,3-Dichloropropane	0.23	3.20	ND	1.06	14.79	ND	
111-65-9	Octane	0.46	1.14	ND	2.14	5.34	ND	
124-48-1	Dibromochloromethane	0.46	1.14	ND	3.90	9.74	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.14	ND	3.51	8.79	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.14	ND	0.78	7.75	ND	
108-90-7	Chlorobenzene	0.46	1.14	ND	2.11	5.26	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.14	ND	3.14	7.85	ND	
100-41-4	Ethylbenzene	0.46	1.14	ND	1.99	4.97	ND	
1330-20-7	m,p-Xylenes	0.46	1.14	0.64	1.99	4.97	2.79	J
111-84-2	Nonane	0.46	1.14	ND	2.40	6.00	ND	
100-42-5	Styrene	0.69	1.14	ND	2.92	4.87	ND	
75-25-2	Bromoform	0.46	1.14	ND	4.73	11.82	ND	
95-47-6	o-Xylene	0.46	1.14	ND	1.99	4.97	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.28	ND	6.28	15.69	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.74	ND	5.51	16.54	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.74	ND	4.68	14.03	ND	
103-65-1	n-Propylbenzene	0.91	3.20	ND	4.50	15.74	ND	
98-82-8	Isopropylbenzene	0.91	3.20	ND	4.50	15.74	ND	
622-96-8	4-Ethyltoluene	0.91	7.31	ND	4.50	35.97	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
124-18-5	Decane	0.91	2.74	ND	5.32	15.97	ND	
98-06-6	tert-butyl benzene	0.91	2.74	ND	5.02	15.06	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
538-93-2	i-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
135-98-8	sec-butylbenzene	0.91	3.20	ND	5.02	17.57	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.65	ND	5.50	21.99	ND	
99-87-6	Isopropyltoluene	0.91	2.74	ND	5.02	15.06	ND	
100-44-7	Benzyl chloride	0.91	2.28	ND	4.74	11.84	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.28	ND	5.50	13.75	ND	
104-51-8	n-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.20	ND	5.50	19.25	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.37	3.20	ND	13.26	30.94	ND	
120-82-1	1,2,4-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
91-20-3	Naphthalene	2.28	0.46	ND	11.99	2.40	ND	
87-61-6	1,2,3-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
87-68-3	Hexachlorobutadiene	1.14	1.37	ND	12.19	14.63	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	108	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 29

File Name: 224435
Descriptio T-511
Canister: 627
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/12/24 **Time:** 20:06
Can Dilution Factor: 1.37
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.20	6.85	ND	13.09	28.05	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 30**

File Name: 2443530A.D **Date Sampled:** 11/20/2024 **Time:** 12:41
Description: T-512 **Date Analyzed:** 12/12/2024 **Time:** 20:44
Canister: 417 **Can Dilution Factor:** 1.36
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	ND	0.78	1.95	ND	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.41	2.34	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	2.76	5.39	6.47	6.57	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.10	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.77	7.70	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	0.46	1.97	4.93	2.02	J
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	ND	2.90	4.84	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.97	4.93	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	ND	4.46	35.71	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 30

File Name: 224435
Descriptio T-512
Canister: 417
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/12/24 **Time:** 20:44
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 31

File Name: 2443531A.D
Description: T-513
Canister: 781
QC_Batch: 121224-MA1

Date Sampled: 11/20/2024 **Time:** 12:28
Date Analyzed: 12/12/2024 **Time:** 21:22
Can Dilution Factor: 1.36
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	ND	0.78	1.95	ND	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.41	2.34	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	3.55	5.39	6.47	8.44	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.10	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.77	7.70	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	0.47	1.97	4.93	2.05	J
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	ND	2.90	4.84	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.97	4.93	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	ND	4.46	35.71	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 31

File Name: 224435
Descriptio T-513
Canister: 781
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/12/24 **Time:** 21:22
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 32

File Name: 2443532A.D
Description: T-514
Canister: 506
QC_Batch: 121024-MA1

Date Sampled: 11/20/2024 **Time:** 12:45
Date Analyzed: 12/10/2024 **Time:** 15:54
Can Dilution Factor: 1.38
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	ND	4.34	27.88	ND	
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	ND	5.47	6.57	ND	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	106	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 32

File Name: 224435
Descriptio T-514
Canister: 506
QC_Batch: 121024-MA1

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/10/24 **Time:** 15:54
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 33

File Name: 2443533A.D
Description: T-601
Canister: 700
QC_Batch: 121224-MA1

Date Sampled: 11/21/2024 **Time:** 08:18
Date Analyzed: 12/12/2024 **Time:** 22:00
Can Dilution Factor: 1.30
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.08	12.70	0.75	1.87	21.88	
75-71-8	Dichlorodifluoromethane	0.65	1.08	ND	3.22	5.36	ND	
67-56-1	Methanol	2.17	2.60	3.12	2.84	3.41	4.09	
74-87-3	Chloromethane	0.65	1.08	ND	1.34	2.24	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.08	ND	3.03	7.58	ND	
75-01-4	Vinyl chloride	0.22	1.08	ND	0.56	2.77	ND	
106-99-0	1,3-Butadiene	0.22	1.08	ND	0.48	2.40	ND	
74-83-9	Bromomethane	0.43	1.08	ND	1.68	4.21	ND	
75-00-3	Chloroethane	0.43	1.08	ND	1.14	2.86	ND	
64-17-5	Ethanol	2.17	13.91	ND	4.09	26.26	ND	
107-02-8	Acrolein	0.43	1.30	ND	1.00	2.99	ND	
75-69-4	Trichlorofluoromethane	0.43	1.08	ND	2.44	6.10	ND	
67-64-1	Acetone	2.17	2.60	6.95	5.16	6.19	16.53	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.42	ND	2.13	13.33	ND	
75-65-0	t-Butyl alcohol	0.43	4.33	ND	1.32	13.15	ND	
4227-95-6	Methyl iodide	0.43	1.30	ND	2.54	7.61	ND	
75-35-4	1,1-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	
107-13-1	Acrylonitrile	0.87	1.30	ND	1.88	2.83	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.08	ND	1.66	8.31	ND	
107-05-1	Allyl chloride	0.22	4.33	ND	0.68	13.58	ND	
75-09-2	Methylene chloride	0.22	1.08	ND	0.75	3.77	ND	
75-15-0	Carbon disulfide	0.43	1.08	1.51	1.35	3.38	4.70	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.86	3.44	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.87	ND	1.56	3.13	ND	
107-12-0	Propionitrile	1.08	1.73	ND	2.44	3.91	ND	
75-34-3	1,1-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.08	ND	1.81	4.53	ND	
108-05-4	Vinyl acetate	0.22	4.33	ND	0.76	15.28	ND	
78-93-3	2-Butanone (MEK)	0.43	1.30	ND	1.28	3.84	ND	
108-20-3	Diisopropyl ether	0.43	2.60	ND	1.81	10.88	ND	
110-54-3	Hexane	0.43	1.08	ND	1.53	3.82	ND	
126-98-7	Methacrylonitrile	0.43	1.08	ND	1.19	2.98	ND	
141-78-6	Ethyl acetate	0.43	1.08	ND	1.56	3.91	ND	
74-97-5	Bromochloromethane	0.22	1.08	ND	1.15	5.74	ND	
96-33-3	Methyl acrylate	0.43	2.17	ND	1.53	7.64	ND	
109-99-9	Tetrahydrofuran	0.22	1.30	0.65	0.64	3.84	1.91	J
78-83-1	Isobutyl alcohol	0.87	3.47	ND	2.63	10.52	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
67-66-3	Chloroform	0.22	1.08	ND	1.06	5.30	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
107-06-2	1,2-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
563-58-6	1,1-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
110-82-7	Cyclohexane	0.22	1.08	ND	0.75	3.74	ND	
71-43-2	Benzene	1.52	2.17	ND	4.85	6.93	ND	
56-23-5	Carbon tetrachloride	0.22	1.08	ND	1.36	6.82	ND	
994-05-8	t-Amyl methyl ether	0.43	2.17	ND	1.81	9.07	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.08	ND	1.01	5.07	ND	
142-82-5	n-Heptane	0.43	1.08	ND	1.78	4.45	ND	
78-87-5	1,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
123-91-1	1,4 Dioxane	0.43	2.17	ND	1.56	7.82	ND	
74-95-3	Dibromomethane	0.22	1.08	ND	1.54	7.71	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.08	ND	0.58	5.83	ND	
75-27-4	Bromodichloromethane	0.22	1.08	ND	1.45	7.27	ND	
80-62-6	Methyl methacrylate	0.43	1.08	ND	1.78	4.44	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.47	ND	1.78	14.23	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
108-88-3	Toluene	0.87	1.08	ND	3.27	4.09	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
97-63-2	Ethyl methacrylate	0.43	1.08	ND	2.03	5.07	ND	
591-78-6	2-Hexanone	0.43	3.47	ND	1.78	14.23	ND	
142-28-9	1,3-Dichloropropane	0.22	3.03	ND	1.00	14.04	ND	
111-65-9	Octane	0.43	1.08	ND	2.03	5.07	ND	
124-48-1	Dibromochloromethane	0.43	1.08	ND	3.70	9.24	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.08	ND	3.33	8.34	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.08	ND	0.74	7.36	ND	
108-90-7	Chlorobenzene	0.43	1.08	ND	2.00	5.00	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.08	ND	2.98	7.44	ND	
100-41-4	Ethylbenzene	0.43	1.08	ND	1.88	4.71	ND	
1330-20-7	m,p-Xylenes	0.43	1.08	ND	1.88	4.71	ND	
111-84-2	Nonane	0.43	1.08	ND	2.28	5.69	ND	
100-42-5	Styrene	0.65	1.08	ND	2.77	4.62	ND	
75-25-2	Bromoform	0.43	1.08	ND	4.48	11.21	ND	
95-47-6	o-Xylene	0.43	1.08	ND	1.88	4.71	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.17	ND	5.96	14.89	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.60	ND	5.23	15.70	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.60	ND	4.44	13.31	ND	
103-65-1	n-Propylbenzene	0.87	3.03	ND	4.27	14.93	ND	
98-82-8	Isopropylbenzene	0.87	3.03	ND	4.27	14.93	ND	
622-96-8	4-Ethyltoluene	0.87	6.93	ND	4.27	34.13	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
124-18-5	Decane	0.87	2.60	ND	5.05	15.15	ND	
98-06-6	tert-butyl benzene	0.87	2.60	ND	4.76	14.29	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
538-93-2	i-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
135-98-8	sec-butylbenzene	0.87	3.03	ND	4.76	16.67	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.47	ND	5.22	20.87	ND	
99-87-6	Isopropyltoluene	0.87	2.60	ND	4.76	14.29	ND	
100-44-7	Benzyl chloride	0.87	2.17	ND	4.49	11.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.87	2.17	ND	5.22	13.04	ND	
104-51-8	n-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.03	ND	5.22	18.26	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.30	3.03	ND	12.58	29.36	ND	
120-82-1	1,2,4-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
91-20-3	Naphthalene	2.17	0.43	ND	11.38	2.28	ND	
87-61-6	1,2,3-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
87-68-3	Hexachlorobutadiene	1.08	1.30	ND	11.57	13.89	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	132	70	130	Q

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 33

File Name: 224435
Descriptio T-601
Canister: 700
QC_Batch: 121224-MA1

Date Sampled: 11/21/24 **Time:** 08:18
Date Analyzed: 12/12/24 **Time:** 22:00
Can Dilution Factor: 1.30
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.03	6.50	ND	12.42	26.62	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 34

File Name: 2443534A.D
Description: T-602
Canister: 673
QC_Batch: 121224-MA1

Date Sampled: 11/21/2024 **Time:** 08:29
Date Analyzed: 12/12/2024 **Time:** 22:38
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	139.95	0.74	1.84	241.19	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	6.33	5.08	6.09	15.06	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	2.20	1.33	3.32	6.85	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	0.76	0.74	3.68	2.63	J
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	0.15	0.57	5.74	0.83	J
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	0.87	3.22	4.02	3.29	J
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	0.20	0.72	7.24	1.36	J
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	0.62	1.86	4.64	2.69	J
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	125	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 34

File Name: 224435
Descriptio T-602
Canister: 673
QC_Batch: 121224-MA1

Date Sampled: 11/21/24 **Time:** 08:29
Date Analyzed: 12/12/24 **Time:** 22:38
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 35

File Name: 2443535A.D
Description: T-603
Canister: 550
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 08:31
Date Analyzed: 12/13/2024 **Time:** 16:00
Can Dilution Factor: 1.24
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.41	1.03	5.25	0.71	1.78	9.05	
75-71-8	Dichlorodifluoromethane	0.62	1.03	ND	3.07	5.12	ND	
67-56-1	Methanol	2.07	2.48	ND	2.71	3.25	ND	
74-87-3	Chloromethane	0.62	1.03	ND	1.28	2.14	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.41	1.03	ND	2.89	7.23	ND	
75-01-4	Vinyl chloride	0.21	1.03	ND	0.53	2.65	ND	
106-99-0	1,3-Butadiene	0.21	1.03	ND	0.46	2.29	ND	
74-83-9	Bromomethane	0.41	1.03	ND	1.61	4.02	ND	
75-00-3	Chloroethane	0.41	1.03	ND	1.09	2.73	ND	
64-17-5	Ethanol	2.07	13.27	ND	3.90	25.05	ND	
107-02-8	Acrolein	0.41	1.24	ND	0.95	2.85	ND	
75-69-4	Trichlorofluoromethane	0.41	1.03	ND	2.33	5.81	ND	
67-64-1	Acetone	2.07	2.48	2.93	4.92	5.90	6.97	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.17	ND	2.03	12.72	ND	
75-65-0	t-Butyl alcohol	0.41	4.13	ND	1.25	12.54	ND	
4227-95-6	Methyl iodide	0.41	1.24	ND	2.42	7.26	ND	
75-35-4	1,1-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	
107-13-1	Acrylonitrile	0.83	1.24	ND	1.80	2.70	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.03	ND	1.59	7.93	ND	
107-05-1	Allyl chloride	0.21	4.13	ND	0.65	12.95	ND	
75-09-2	Methylene chloride	0.21	1.03	ND	0.72	3.59	ND	
75-15-0	Carbon disulfide	0.41	1.03	ND	1.29	3.22	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.82	3.28	ND	
1634-04-4	Methyl tert butyl ether	0.41	0.83	ND	1.49	2.98	ND	
107-12-0	Propionitrile	1.03	1.65	ND	2.33	3.73	ND	
75-34-3	1,1-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
637-92-3	Ethyl tert butyl ether	0.41	1.03	ND	1.73	4.33	ND	
108-05-4	Vinyl acetate	0.21	4.13	ND	0.73	14.58	ND	
78-93-3	2-Butanone (MEK)	0.41	1.24	ND	1.22	3.66	ND	
108-20-3	Diisopropyl ether	0.41	2.48	ND	1.73	10.38	ND	
110-54-3	Hexane	0.41	1.03	ND	1.46	3.65	ND	
126-98-7	Methacrylonitrile	0.41	1.03	ND	1.14	2.84	ND	
141-78-6	Ethyl acetate	0.41	1.03	ND	1.49	3.73	ND	
74-97-5	Bromochloromethane	0.21	1.03	ND	1.10	5.48	ND	
96-33-3	Methyl acrylate	0.41	2.07	ND	1.46	7.29	ND	
109-99-9	Tetrahydrofuran	0.21	1.24	ND	0.61	3.66	ND	
78-83-1	Isobutyl alcohol	0.83	3.31	ND	2.51	10.03	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
67-66-3	Chloroform	0.21	1.03	ND	1.01	5.05	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
107-06-2	1,2-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
563-58-6	1,1-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
110-82-7	Cyclohexane	0.21	1.03	ND	0.71	3.56	ND	
71-43-2	Benzene	1.45	2.07	ND	4.63	6.61	ND	
56-23-5	Carbon tetrachloride	0.21	1.03	ND	1.30	6.51	ND	
994-05-8	t-Amyl methyl ether	0.41	2.07	ND	1.73	8.65	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.03	ND	0.97	4.83	ND	
142-82-5	n-Heptane	0.41	1.03	ND	1.70	4.24	ND	
78-87-5	1,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
123-91-1	1,4 Dioxane	0.41	2.07	ND	1.49	7.46	ND	
74-95-3	Dibromomethane	0.21	1.03	ND	1.47	7.36	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.03	ND	0.56	5.56	ND	
75-27-4	Bromodichloromethane	0.21	1.03	ND	1.39	6.93	ND	
80-62-6	Methyl methacrylate	0.41	1.03	ND	1.69	4.24	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.41	3.31	ND	1.70	13.57	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
108-88-3	Toluene	0.83	1.03	ND	3.12	3.90	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
97-63-2	Ethyl methacrylate	0.41	1.03	ND	1.93	4.83	ND	
591-78-6	2-Hexanone	0.41	3.31	ND	1.70	13.57	ND	
142-28-9	1,3-Dichloropropane	0.21	2.89	ND	0.96	13.39	ND	
111-65-9	Octane	0.41	1.03	ND	1.93	4.83	ND	
124-48-1	Dibromochloromethane	0.41	1.03	ND	3.53	8.82	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.41	1.03	ND	3.18	7.95	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.03	ND	0.70	7.02	ND	
108-90-7	Chlorobenzene	0.41	1.03	ND	1.91	4.77	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.41	1.03	ND	2.84	7.10	ND	
100-41-4	Ethylbenzene	0.41	1.03	ND	1.80	4.49	ND	
1330-20-7	m,p-Xylenes	0.41	1.03	ND	1.80	4.49	ND	
111-84-2	Nonane	0.41	1.03	ND	2.17	5.43	ND	
100-42-5	Styrene	0.62	1.03	ND	2.65	4.41	ND	
75-25-2	Bromoform	0.41	1.03	ND	4.28	10.69	ND	
95-47-6	o-Xylene	0.41	1.03	ND	1.80	4.49	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.07	ND	5.68	14.20	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.48	ND	4.99	14.97	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.48	ND	4.23	12.70	ND	
103-65-1	n-Propylbenzene	0.83	2.89	ND	4.07	14.24	ND	
98-82-8	Isopropylbenzene	0.83	2.89	ND	4.07	14.24	ND	
622-96-8	4-Ethyltoluene	0.83	6.61	ND	4.07	32.56	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
124-18-5	Decane	0.83	2.48	ND	4.82	14.45	ND	
98-06-6	tert-butyl benzene	0.83	2.48	ND	4.54	13.63	ND	
95-63-6	1,2,4-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
538-93-2	i-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
135-98-8	sec-butylbenzene	0.83	2.89	ND	4.54	15.90	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.31	ND	4.98	19.91	ND	
99-87-6	Isopropyltoluene	0.83	2.48	ND	4.54	13.63	ND	
100-44-7	Benzyl chloride	0.83	2.07	ND	4.29	10.72	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.83	2.07	ND	4.98	12.44	ND	
104-51-8	n-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.89	ND	4.98	17.42	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.24	2.89	ND	12.00	28.00	ND	
120-82-1	1,2,4-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
91-20-3	Naphthalene	2.07	0.41	ND	10.85	2.17	ND	
87-61-6	1,2,3-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
87-68-3	Hexachlorobutadiene	1.03	1.24	ND	11.04	13.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 35

File Name: 224435
Descriptio T-603
Canister: 550
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 08:31
Date Analyzed: 12/13/24 **Time:** 16:00
Can Dilution Factor: 1.24
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.89	6.20	ND	11.85	25.39	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 36

File Name: 2443536A.D
Description: T-604
Canister: 738
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 08:18
Date Analyzed: 12/13/2024 **Time:** 16:39
Can Dilution Factor: 1.33
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.11	1.21	0.76	1.91	2.08	
75-71-8	Dichlorodifluoromethane	0.67	1.11	ND	3.29	5.49	ND	
67-56-1	Methanol	2.22	2.66	3.64	2.91	3.49	4.77	
74-87-3	Chloromethane	0.67	1.11	ND	1.38	2.29	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.11	ND	3.10	7.76	ND	
75-01-4	Vinyl chloride	0.22	1.11	ND	0.57	2.84	ND	
106-99-0	1,3-Butadiene	0.22	1.11	ND	0.49	2.46	ND	
74-83-9	Bromomethane	0.44	1.11	ND	1.72	4.31	ND	
75-00-3	Chloroethane	0.44	1.11	ND	1.17	2.93	ND	
64-17-5	Ethanol	2.22	14.23	ND	4.19	26.87	ND	
107-02-8	Acrolein	0.44	1.33	ND	1.02	3.06	ND	
75-69-4	Trichlorofluoromethane	0.44	1.11	ND	2.49	6.24	ND	
67-64-1	Acetone	2.22	2.66	4.36	5.27	6.33	10.37	
67-63-0	2-propanol (isopropylalcohol)	0.89	5.54	ND	2.18	13.64	ND	
75-65-0	t-Butyl alcohol	0.44	4.43	ND	1.35	13.45	ND	
4227-95-6	Methyl iodide	0.44	1.33	ND	2.59	7.78	ND	
75-35-4	1,1-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	
107-13-1	Acrylonitrile	0.89	1.33	ND	1.93	2.89	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.11	ND	1.70	8.51	ND	
107-05-1	Allyl chloride	0.22	4.43	ND	0.69	13.89	ND	
75-09-2	Methylene chloride	0.22	1.11	ND	0.77	3.85	ND	
75-15-0	Carbon disulfide	0.44	1.11	ND	1.38	3.45	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.89	ND	0.88	3.52	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.89	ND	1.60	3.20	ND	
107-12-0	Propionitrile	1.11	1.77	ND	2.50	4.00	ND	
75-34-3	1,1-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.11	ND	1.86	4.64	ND	
108-05-4	Vinyl acetate	0.22	4.43	ND	0.78	15.63	ND	
78-93-3	2-Butanone (MEK)	0.44	1.33	ND	1.31	3.93	ND	
108-20-3	Diisopropyl ether	0.44	2.66	ND	1.86	11.13	ND	
110-54-3	Hexane	0.44	1.11	ND	1.57	3.91	ND	
126-98-7	Methacrylonitrile	0.44	1.11	ND	1.22	3.05	ND	
141-78-6	Ethyl acetate	0.44	1.11	ND	1.60	4.00	ND	
74-97-5	Bromochloromethane	0.22	1.11	ND	1.17	5.87	ND	
96-33-3	Methyl acrylate	0.44	2.22	ND	1.56	7.82	ND	
109-99-9	Tetrahydrofuran	0.22	1.33	ND	0.66	3.93	ND	
78-83-1	Isobutyl alcohol	0.89	3.55	ND	2.69	10.76	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
67-66-3	Chloroform	0.22	1.11	ND	1.09	5.42	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
107-06-2	1,2-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
563-58-6	1,1-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
110-82-7	Cyclohexane	0.22	1.11	ND	0.76	3.82	ND	
71-43-2	Benzene	1.55	2.22	ND	4.96	7.09	ND	
56-23-5	Carbon tetrachloride	0.22	1.11	ND	1.40	6.98	ND	
994-05-8	t-Amyl methyl ether	0.44	2.22	ND	1.86	9.28	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.11	ND	1.04	5.18	ND	
142-82-5	n-Heptane	0.44	1.11	ND	1.82	4.55	ND	
78-87-5	1,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
123-91-1	1,4 Dioxane	0.44	2.22	ND	1.60	8.00	ND	
74-95-3	Dibromomethane	0.22	1.11	ND	1.58	7.89	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.11	ND	0.60	5.96	ND	
75-27-4	Bromodichloromethane	0.22	1.11	ND	1.49	7.44	ND	
80-62-6	Methyl methacrylate	0.44	1.11	ND	1.82	4.54	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.55	ND	1.82	14.55	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
108-88-3	Toluene	0.89	1.11	ND	3.34	4.18	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
97-63-2	Ethyl methacrylate	0.44	1.11	ND	2.07	5.18	ND	
591-78-6	2-Hexanone	0.44	3.55	ND	1.82	14.55	ND	
142-28-9	1,3-Dichloropropane	0.22	3.10	ND	1.03	14.36	ND	
111-65-9	Octane	0.44	1.11	ND	2.07	5.18	ND	
124-48-1	Dibromochloromethane	0.44	1.11	ND	3.78	9.46	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.11	ND	3.41	8.53	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.11	ND	0.75	7.53	ND	
108-90-7	Chlorobenzene	0.44	1.11	ND	2.04	5.11	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.11	ND	3.05	7.62	ND	
100-41-4	Ethylbenzene	0.44	1.11	ND	1.93	4.82	ND	
1330-20-7	m,p-Xylenes	0.44	1.11	ND	1.93	4.82	ND	
111-84-2	Nonane	0.44	1.11	ND	2.33	5.82	ND	
100-42-5	Styrene	0.67	1.11	ND	2.84	4.73	ND	
75-25-2	Bromoform	0.44	1.11	ND	4.59	11.47	ND	
95-47-6	o-Xylene	0.44	1.11	ND	1.93	4.82	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.89	2.22	ND	6.09	15.23	ND	
96-18-4	1,2,3-Trichloropropane	0.89	2.66	ND	5.35	16.06	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.89	2.66	ND	4.54	13.62	ND	
103-65-1	n-Propylbenzene	0.89	3.10	ND	4.36	15.28	ND	
98-82-8	Isopropylbenzene	0.89	3.10	ND	4.36	15.28	ND	
622-96-8	4-Ethyltoluene	0.89	7.09	ND	4.36	34.92	ND	
108-67-8	1,3,5-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
124-18-5	Decane	0.89	2.66	ND	5.17	15.50	ND	
98-06-6	tert-butyl benzene	0.89	2.66	ND	4.87	14.62	ND	
95-63-6	1,2,4-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
538-93-2	i-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
135-98-8	sec-butylbenzene	0.89	3.10	ND	4.87	17.06	ND	
541-73-1	1,3-Dichlorobenzene	0.89	3.55	ND	5.34	21.35	ND	
99-87-6	Isopropyltoluene	0.89	2.66	ND	4.87	14.62	ND	
100-44-7	Benzyl chloride	0.89	2.22	ND	4.60	11.49	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.89	2.22	ND	5.34	13.35	ND	
104-51-8	n-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
95-50-1	1,2-Dichlorobenzene	0.89	3.10	ND	5.34	18.68	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.33	3.10	ND	12.87	30.03	ND	
120-82-1	1,2,4-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
91-20-3	Naphthalene	2.22	0.44	ND	11.64	2.33	ND	
87-61-6	1,2,3-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
87-68-3	Hexachlorobutadiene	1.11	1.33	ND	11.84	14.21	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 36

File Name: 224435
Descriptio T-604
Canister: 738
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 08:18
Date Analyzed: 12/13/24 **Time:** 16:39
Can Dilution Factor: 1.33
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.10	6.65	ND	12.71	27.24	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 37

File Name: 2443537A.D
Description: T-605
Canister: 892
QC_Batch: 121624-MA1

Date Sampled: 11/21/2024 **Time:** 09:41
Date Analyzed: 12/16/2024 **Time:** 15:45
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	28.95	2.86	3.43	37.94	
74-87-3	Chloromethane	0.66	1.09	26.44	1.35	2.26	54.68	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	28.41	1.70	4.24	110.42	
75-00-3	Chloroethane	0.44	1.09	13.79	1.15	2.88	36.43	
107-02-8	Acrolein	0.44	1.31	3.52	1.00	3.01	8.09	
75-69-4	Trichlorofluoromethane	0.44	1.09	2.69	2.46	6.14	15.15	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	0.73	2.56	7.67	4.28	J
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	6.91	0.76	3.80	24.02	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	0.57	0.88	4.43	2.31	J
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	6.58	0.87	4.33	26.11	
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	1.27	1.07	5.34	6.19	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	76.52	0.89	4.43	310.26	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	78.41	0.75	3.76	270.40	
71-43-2	Benzene	1.53	2.18	44.20	4.89	6.98	141.37	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	21.70	1.02	5.11	101.49	
142-82-5	n-Heptane	0.44	1.09	141.13	1.79	4.48	579.17	
78-87-5	1,2-Dichloropropane	0.22	1.09	7.00	1.01	5.05	32.39	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	3.96	0.59	5.87	21.32	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	45.74	1.79	14.34	187.69	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	48.14	2.04	5.11	225.15	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	6.26	0.74	7.41	42.52	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	136.76	1.90	4.75	594.85	
111-84-2	Nonane	0.44	1.09	108.02	2.29	5.74	567.57	
100-42-5	Styrene	0.66	1.09	23.75	2.80	4.66	101.34	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	106.83	1.90	4.75	464.63	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	11.89	4.30	34.39	58.55	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	3.37	4.30	19.35	16.60	J
124-18-5	Decane	0.87	2.62	32.10	5.09	15.27	187.10	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	5.77	4.30	19.35	28.43	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	47.29	4.80	14.40	259.91	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	2.27	11.46	2.29	11.94	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
						QC	Limits	
	Surrogate Recovery				% Rec.	LCL	UCL	Flag
2037-26-5	Toluene-d8				97	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 37

File Name: 2443537B.D
Description: T-605
Canister: 892
QC_Batch: 121624-MA1

Date Sampled: 11/21/2024 **Time:** 09:41
Date Analyzed: 12/16/2024 **Time:** 16:58
Can Dilution Factor: 1.31
Air Volume: 5 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	26.20	65.50	963.74	45.15	112.88	1,660.90	
64-17-5	Ethanol	131.00	841.02	311.94	247.33	1,587.87	588.96	J
67-64-1	Acetone	131.00	157.20	5,090.20	311.71	374.06	12,112.05	
67-63-0	2-propanol (isopropylalcohol)	52.40	327.50	1,208.68	128.98	806.11	2,975.04	
75-15-0	Carbon disulfide	26.20	65.50	378.07	81.66	204.14	1,178.32	
78-93-3	2-Butanone (MEK)	26.20	78.60	5,258.46	77.36	232.09	15,527.46	
109-99-9	Tetrahydrofuran	13.18	78.60	208.13	38.92	232.09	614.58	
108-88-3	Toluene	52.40	65.50	722.35	197.65	247.06	2,724.67	
1330-20-7	m,p-Xylenes	26.20	65.50	365.32	113.95	284.89	1,588.95	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	111	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 37

File Name: 224435
Descriptio T-605
Canister: 892
QC_Batch: 121624-MA1

Date Sampled: 11/21/24 **Time:** 09:41
Date Analyzed: 12/16/24 **Time:** 15:45
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
Unknown Hydrocarbon	3.06	6.55	133.71	12.52	26.83	547.60
Butane	3.06	6.55	61.74	12.52	26.83	252.88
2-Methyl butane	3.06	6.55	83.67	12.52	26.83	342.65
Thiobis methane	3.06	6.55	78.08	12.52	26.83	319.76
Hexamethyl disiloxane	3.06	6.55	102.44	12.52	26.83	419.55
Methyl cyclohexane	3.06	6.55	67.25	12.52	26.83	275.41
Dimethyl disulfide	3.06	6.55	148.77	12.52	26.83	609.30
4-Methyl heptane	3.06	6.55	64.41	12.52	26.83	263.78
a-Pinene	3.06	6.55	103.80	12.52	26.83	425.10
Limonene	3.06	6.55	66.20	12.52	26.83	271.12

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 38

File Name: 2443538A.D
Description: T-606
Canister: 608
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 09:58
Date Analyzed: 12/13/2024 **Time:** 17:16
Can Dilution Factor: 1.38
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	2.59	0.79	1.98	4.47	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	6.21	3.01	3.62	8.14	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	3.81	4.34	27.88	7.18	J
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	9.82	5.47	6.57	23.37	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	0.50	1.43	3.58	1.55	J
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	1.55	1.13	5.62	7.56	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	2.03	0.79	3.97	6.99	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 38

File Name: 224435
Descriptio T-606
Canister: 608
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:58
Date Analyzed: 12/13/24 **Time:** 17:16
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 39

File Name: 2443539A.D
Description: T-607
Canister: 771
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 09:52
Date Analyzed: 12/13/2024 **Time:** 17:54
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	1.16	0.75	1.88	2.00	
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	4.80	2.86	3.43	6.29	
74-87-3	Chloromethane	0.66	1.09	1.54	1.35	2.26	3.19	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	14.50	4.12	26.46	27.37	
107-02-8	Acrolein	0.44	1.31	ND	1.00	3.01	ND	
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	25.56	5.20	6.23	60.82	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	ND	2.15	13.44	ND	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	4.01	1.29	3.87	11.85	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	
109-99-9	Tetrahydrofuran	0.22	1.31	1.74	0.65	3.87	5.14	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	129	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 39

File Name: 224435
Descriptio T-607
Canister: 771
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:52
Date Analyzed: 12/13/24 **Time:** 17:54
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 40

File Name: 2443540A.D
Description: T-608
Canister: 531
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 09:47
Date Analyzed: 12/13/2024 **Time:** 18:34
Can Dilution Factor: 1.35
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	1.34	0.78	1.94	2.32	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.34	5.57	ND	
67-56-1	Methanol	2.25	2.70	6.51	2.95	3.54	8.53	
74-87-3	Chloromethane	0.68	1.13	ND	1.40	2.33	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.15	7.87	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.88	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.50	2.49	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.75	4.37	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.19	2.97	ND	
64-17-5	Ethanol	2.25	14.45	ND	4.25	27.27	ND	
107-02-8	Acrolein	0.45	1.35	ND	1.03	3.10	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.53	6.33	ND	
67-64-1	Acetone	2.25	2.70	5.40	5.35	6.42	12.84	
67-63-0	2-propanol (isopropylalcohol)	0.90	5.63	ND	2.22	13.85	ND	
75-65-0	t-Butyl alcohol	0.45	4.50	ND	1.37	13.66	ND	
4227-95-6	Methyl iodide	0.45	1.35	ND	2.63	7.90	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
107-13-1	Acrylonitrile	0.90	1.35	ND	1.96	2.94	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.73	8.63	ND	
107-05-1	Allyl chloride	0.23	4.50	ND	0.70	14.10	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.78	3.91	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.40	3.51	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.90	ND	0.89	3.57	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.90	ND	1.62	3.25	ND	
107-12-0	Propionitrile	1.13	1.80	ND	2.54	4.06	ND	
75-34-3	1,1-Dichloroethane	0.22	1.13	ND	0.91	4.56	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.88	4.71	ND	
108-05-4	Vinyl acetate	0.23	4.50	ND	0.79	15.87	ND	
78-93-3	2-Butanone (MEK)	0.45	1.35	ND	1.33	3.99	ND	
108-20-3	Diisopropyl ether	0.45	2.70	ND	1.88	11.30	ND	
110-54-3	Hexane	0.45	1.13	ND	1.59	3.97	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.24	3.09	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.62	4.06	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.19	5.96	ND	
96-33-3	Methyl acrylate	0.45	2.25	ND	1.59	7.93	ND	
109-99-9	Tetrahydrofuran	0.23	1.35	ND	0.67	3.99	ND	
78-83-1	Isobutyl alcohol	0.90	3.60	ND	2.73	10.93	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.10	5.50	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.91	4.56	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.88	ND	
71-43-2	Benzene	1.58	2.25	ND	5.04	7.20	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.42	7.09	ND	
994-05-8	t-Amyl methyl ether	0.45	2.25	ND	1.88	9.42	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.05	5.26	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.85	4.62	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
123-91-1	1,4 Dioxane	0.45	2.25	ND	1.62	8.12	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.60	8.01	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.05	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.51	7.55	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.84	4.61	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.60	ND	1.85	14.77	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
108-88-3	Toluene	0.90	1.13	ND	3.39	4.24	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.10	5.26	ND	
591-78-6	2-Hexanone	0.45	3.60	ND	1.85	14.77	ND	
142-28-9	1,3-Dichloropropane	0.23	3.15	ND	1.04	14.58	ND	
111-65-9	Octane	0.45	1.13	ND	2.10	5.26	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.84	9.60	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.46	8.66	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.76	7.64	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.08	5.19	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.09	7.73	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.96	4.89	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.96	4.89	ND	
111-84-2	Nonane	0.45	1.13	ND	2.36	5.91	ND	
100-42-5	Styrene	0.68	1.13	ND	2.88	4.80	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.66	11.64	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.96	4.89	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.90	2.25	ND	6.19	15.46	ND	
96-18-4	1,2,3-Trichloropropane	0.90	2.70	ND	5.43	16.30	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.90	2.70	ND	4.61	13.82	ND	
103-65-1	n-Propylbenzene	0.90	3.15	ND	4.43	15.51	ND	
98-82-8	Isopropylbenzene	0.90	3.15	ND	4.43	15.51	ND	
622-96-8	4-Ethyltoluene	0.90	7.20	ND	4.43	35.44	ND	
108-67-8	1,3,5-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
124-18-5	Decane	0.90	2.70	ND	5.25	15.74	ND	
98-06-6	tert-butyl benzene	0.90	2.70	ND	4.95	14.84	ND	
95-63-6	1,2,4-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
538-93-2	i-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
135-98-8	sec-butylbenzene	0.90	3.15	ND	4.95	17.31	ND	
541-73-1	1,3-Dichlorobenzene	0.90	3.60	ND	5.42	21.67	ND	
99-87-6	Isopropyltoluene	0.90	2.70	ND	4.95	14.84	ND	
100-44-7	Benzyl chloride	0.90	2.25	ND	4.67	11.67	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.90	2.25	ND	5.42	13.55	ND	
104-51-8	n-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
95-50-1	1,2-Dichlorobenzene	0.90	3.15	ND	5.42	18.96	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.35	3.15	ND	13.06	30.48	ND	
120-82-1	1,2,4-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
91-20-3	Naphthalene	2.25	0.45	ND	11.81	2.36	ND	
87-61-6	1,2,3-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
87-68-3	Hexachlorobutadiene	1.13	1.35	ND	12.02	14.42	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 40

File Name: 224435
Descriptio T-608
Canister: 531
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:47
Date Analyzed: 12/13/24 **Time:** 18:34
Can Dilution Factor: 1.35
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.15	6.75	ND	12.90	27.64	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 41

File Name: 2443541A.D
Description: T-609
Canister: 668
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 11:38
Date Analyzed: 12/13/2024 **Time:** 19:16
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	1.31	0.75	1.88	2.26	
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	ND	2.86	3.43	ND	
74-87-3	Chloromethane	0.66	1.09	ND	1.35	2.26	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	ND	4.12	26.46	ND	
107-02-8	Acrolein	0.44	1.31	ND	1.00	3.01	ND	
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	7.23	5.20	6.23	17.21	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	ND	2.15	13.44	ND	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	ND	1.29	3.87	ND	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	
109-99-9	Tetrahydrofuran	0.22	1.31	ND	0.65	3.87	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 41

File Name: 224435
Descriptio T-609
Canister: 668
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/13/24 **Time:** 19:16
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 42

File Name: 2443542A.D
Description: T-610
Canister: 730
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 11:11
Date Analyzed: 12/13/2024 **Time:** 19:55
Can Dilution Factor: 1.37
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.14	2.66	0.79	1.97	4.59	
75-71-8	Dichlorodifluoromethane	0.69	1.14	ND	3.39	5.65	ND	
67-56-1	Methanol	2.28	2.74	7.31	2.99	3.59	9.58	
74-87-3	Chloromethane	0.69	1.14	1.30	1.42	2.36	2.70	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.14	ND	3.20	7.99	ND	
75-01-4	Vinyl chloride	0.23	1.14	ND	0.59	2.92	ND	
106-99-0	1,3-Butadiene	0.23	1.14	ND	0.51	2.53	ND	
74-83-9	Bromomethane	0.46	1.14	ND	1.77	4.44	ND	
75-00-3	Chloroethane	0.46	1.14	ND	1.21	3.02	ND	
64-17-5	Ethanol	2.28	14.66	ND	4.31	27.68	ND	
107-02-8	Acrolein	0.46	1.37	ND	1.05	3.15	ND	
75-69-4	Trichlorofluoromethane	0.46	1.14	ND	2.57	6.42	ND	
67-64-1	Acetone	2.28	2.74	7.91	5.43	6.52	18.81	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.71	ND	2.25	14.05	ND	
75-65-0	t-Butyl alcohol	0.46	4.57	ND	1.39	13.86	ND	
4227-95-6	Methyl iodide	0.46	1.37	ND	2.67	8.02	ND	
75-35-4	1,1-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	
107-13-1	Acrylonitrile	0.91	1.37	ND	1.99	2.98	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.14	ND	1.75	8.76	ND	
107-05-1	Allyl chloride	0.23	4.57	ND	0.72	14.31	ND	
75-09-2	Methylene chloride	0.23	1.14	ND	0.79	3.97	ND	
75-15-0	Carbon disulfide	0.46	1.14	ND	1.42	3.56	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.91	3.62	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.91	ND	1.65	3.30	ND	
107-12-0	Propionitrile	1.14	1.83	ND	2.58	4.12	ND	
75-34-3	1,1-Dichloroethane	0.23	1.14	ND	0.92	4.63	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.14	ND	1.91	4.78	ND	
108-05-4	Vinyl acetate	0.23	4.57	ND	0.81	16.10	ND	
78-93-3	2-Butanone (MEK)	0.46	1.37	2.58	1.35	4.05	7.62	
108-20-3	Diisopropyl ether	0.46	2.74	ND	1.91	11.47	ND	
110-54-3	Hexane	0.46	1.14	ND	1.61	4.03	ND	
126-98-7	Methacrylonitrile	0.46	1.14	ND	1.25	3.14	ND	
141-78-6	Ethyl acetate	0.46	1.14	ND	1.65	4.12	ND	
74-97-5	Bromochloromethane	0.23	1.14	ND	1.21	6.05	ND	
96-33-3	Methyl acrylate	0.46	2.28	ND	1.61	8.05	ND	
109-99-9	Tetrahydrofuran	0.23	1.37	ND	0.68	4.05	ND	
78-83-1	Isobutyl alcohol	0.91	3.65	ND	2.77	11.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
67-66-3	Chloroform	0.23	1.14	ND	1.12	5.58	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
107-06-2	1,2-Dichloroethane	0.23	1.14	ND	0.93	4.63	ND	
563-58-6	1,1-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
110-82-7	Cyclohexane	0.23	1.14	ND	0.79	3.94	ND	
71-43-2	Benzene	1.60	2.28	ND	5.11	7.30	ND	
56-23-5	Carbon tetrachloride	0.23	1.14	ND	1.44	7.19	ND	
994-05-8	t-Amyl methyl ether	0.46	2.28	ND	1.91	9.56	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.14	ND	1.07	5.34	ND	
142-82-5	n-Heptane	0.46	1.14	ND	1.87	4.69	ND	
78-87-5	1,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
123-91-1	1,4 Dioxane	0.46	2.28	ND	1.65	8.24	ND	
74-95-3	Dibromomethane	0.23	1.14	ND	1.63	8.13	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.14	ND	0.61	6.14	ND	
75-27-4	Bromodichloromethane	0.23	1.14	ND	1.53	7.66	ND	
80-62-6	Methyl methacrylate	0.46	1.14	ND	1.87	4.68	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.65	ND	1.87	14.99	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
108-88-3	Toluene	0.91	1.14	1.22	3.45	4.31	4.59	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
97-63-2	Ethyl methacrylate	0.46	1.14	ND	2.14	5.34	ND	
591-78-6	2-Hexanone	0.46	3.65	ND	1.87	14.99	ND	
142-28-9	1,3-Dichloropropane	0.23	3.20	ND	1.06	14.79	ND	
111-65-9	Octane	0.46	1.14	ND	2.14	5.34	ND	
124-48-1	Dibromochloromethane	0.46	1.14	ND	3.90	9.74	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.14	ND	3.51	8.79	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.14	ND	0.78	7.75	ND	
108-90-7	Chlorobenzene	0.46	1.14	ND	2.11	5.26	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.14	ND	3.14	7.85	ND	
100-41-4	Ethylbenzene	0.46	1.14	ND	1.99	4.97	ND	
1330-20-7	m,p-Xylenes	0.46	1.14	0.67	1.99	4.97	2.93	J
111-84-2	Nonane	0.46	1.14	ND	2.40	6.00	ND	
100-42-5	Styrene	0.69	1.14	ND	2.92	4.87	ND	
75-25-2	Bromoform	0.46	1.14	ND	4.73	11.82	ND	
95-47-6	o-Xylene	0.46	1.14	ND	1.99	4.97	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.28	ND	6.28	15.69	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.74	ND	5.51	16.54	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.74	ND	4.68	14.03	ND	
103-65-1	n-Propylbenzene	0.91	3.20	ND	4.50	15.74	ND	
98-82-8	Isopropylbenzene	0.91	3.20	ND	4.50	15.74	ND	
622-96-8	4-Ethyltoluene	0.91	7.31	ND	4.50	35.97	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
124-18-5	Decane	0.91	2.74	ND	5.32	15.97	ND	
98-06-6	tert-butyl benzene	0.91	2.74	ND	5.02	15.06	ND	
95-63-6	1,2,4-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
538-93-2	i-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
135-98-8	sec-butylbenzene	0.91	3.20	ND	5.02	17.57	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.65	ND	5.50	21.99	ND	
99-87-6	Isopropyltoluene	0.91	2.74	ND	5.02	15.06	ND	
100-44-7	Benzyl chloride	0.91	2.28	ND	4.74	11.84	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.91	2.28	ND	5.50	13.75	ND	
104-51-8	n-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.20	ND	5.50	19.25	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.37	3.20	ND	13.26	30.94	ND	
120-82-1	1,2,4-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
91-20-3	Naphthalene	2.28	0.46	ND	11.99	2.40	ND	
87-61-6	1,2,3-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
87-68-3	Hexachlorobutadiene	1.14	1.37	ND	12.19	14.63	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 42

File Name: 224435
Descriptio T-610
Canister: 730
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/13/24 **Time:** 19:55
Can Dilution Factor: 1.37
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.20	6.85	ND	13.09	28.05	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 43

File Name: 2443543A.D
Description: T-611
Canister: 701
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 11:28
Date Analyzed: 12/13/2024 **Time:** 20:34
Can Dilution Factor: 1.35
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	1.44	0.78	1.94	2.48	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.34	5.57	ND	
67-56-1	Methanol	2.25	2.70	3.27	2.95	3.54	4.28	
74-87-3	Chloromethane	0.68	1.13	ND	1.40	2.33	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.15	7.87	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.88	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.50	2.49	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.75	4.37	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.19	2.97	ND	
64-17-5	Ethanol	2.25	14.45	ND	4.25	27.27	ND	
107-02-8	Acrolein	0.45	1.35	ND	1.03	3.10	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.53	6.33	ND	
67-64-1	Acetone	2.25	2.70	6.62	5.35	6.42	15.75	
67-63-0	2-propanol (isopropylalcohol)	0.90	5.63	2.61	2.22	13.85	6.43	J
75-65-0	t-Butyl alcohol	0.45	4.50	ND	1.37	13.66	ND	
4227-95-6	Methyl iodide	0.45	1.35	ND	2.63	7.90	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
107-13-1	Acrylonitrile	0.90	1.35	ND	1.96	2.94	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.73	8.63	ND	
107-05-1	Allyl chloride	0.23	4.50	ND	0.70	14.10	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.78	3.91	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.40	3.51	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.90	ND	0.89	3.57	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.90	ND	1.62	3.25	ND	
107-12-0	Propionitrile	1.13	1.80	ND	2.54	4.06	ND	
75-34-3	1,1-Dichloroethane	0.22	1.13	ND	0.91	4.56	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.88	4.71	ND	
108-05-4	Vinyl acetate	0.23	4.50	ND	0.79	15.87	ND	
78-93-3	2-Butanone (MEK)	0.45	1.35	3.59	1.33	3.99	10.60	
108-20-3	Diisopropyl ether	0.45	2.70	ND	1.88	11.30	ND	
110-54-3	Hexane	0.45	1.13	ND	1.59	3.97	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.24	3.09	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.62	4.06	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.19	5.96	ND	
96-33-3	Methyl acrylate	0.45	2.25	ND	1.59	7.93	ND	
109-99-9	Tetrahydrofuran	0.23	1.35	ND	0.67	3.99	ND	
78-83-1	Isobutyl alcohol	0.90	3.60	ND	2.73	10.93	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.10	5.50	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.91	4.56	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.88	ND	
71-43-2	Benzene	1.58	2.25	ND	5.04	7.20	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.42	7.09	ND	
994-05-8	t-Amyl methyl ether	0.45	2.25	ND	1.88	9.42	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.05	5.26	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.85	4.62	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
123-91-1	1,4 Dioxane	0.45	2.25	ND	1.62	8.12	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.60	8.01	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.05	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.51	7.55	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.84	4.61	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.60	ND	1.85	14.77	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
108-88-3	Toluene	0.90	1.13	ND	3.39	4.24	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.10	5.26	ND	
591-78-6	2-Hexanone	0.45	3.60	ND	1.85	14.77	ND	
142-28-9	1,3-Dichloropropane	0.23	3.15	ND	1.04	14.58	ND	
111-65-9	Octane	0.45	1.13	ND	2.10	5.26	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.84	9.60	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.46	8.66	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.76	7.64	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.08	5.19	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.09	7.73	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.96	4.89	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.96	4.89	ND	
111-84-2	Nonane	0.45	1.13	ND	2.36	5.91	ND	
100-42-5	Styrene	0.68	1.13	ND	2.88	4.80	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.66	11.64	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.96	4.89	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.90	2.25	ND	6.19	15.46	ND	
96-18-4	1,2,3-Trichloropropane	0.90	2.70	ND	5.43	16.30	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.90	2.70	ND	4.61	13.82	ND	
103-65-1	n-Propylbenzene	0.90	3.15	ND	4.43	15.51	ND	
98-82-8	Isopropylbenzene	0.90	3.15	ND	4.43	15.51	ND	
622-96-8	4-Ethyltoluene	0.90	7.20	ND	4.43	35.44	ND	
108-67-8	1,3,5-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
124-18-5	Decane	0.90	2.70	ND	5.25	15.74	ND	
98-06-6	tert-butyl benzene	0.90	2.70	ND	4.95	14.84	ND	
95-63-6	1,2,4-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
538-93-2	i-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
135-98-8	sec-butylbenzene	0.90	3.15	ND	4.95	17.31	ND	
541-73-1	1,3-Dichlorobenzene	0.90	3.60	ND	5.42	21.67	ND	
99-87-6	Isopropyltoluene	0.90	2.70	ND	4.95	14.84	ND	
100-44-7	Benzyl chloride	0.90	2.25	ND	4.67	11.67	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.90	2.25	ND	5.42	13.55	ND	
104-51-8	n-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
95-50-1	1,2-Dichlorobenzene	0.90	3.15	ND	5.42	18.96	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.35	3.15	ND	13.06	30.48	ND	
120-82-1	1,2,4-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
91-20-3	Naphthalene	2.25	0.45	ND	11.81	2.36	ND	
87-61-6	1,2,3-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
87-68-3	Hexachlorobutadiene	1.13	1.35	ND	12.02	14.42	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 43

File Name: 224435
Descriptio T-611
Canister: 701
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/13/24 **Time:** 20:34
Can Dilution Factor: 1.35
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.15	6.75	ND	12.90	27.64	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 44

File Name: 2443544A.D
Description: T-612
Canister: 514
QC_Batch: 121324-MA1

Date Sampled: 11/21/2024 **Time:** 11:20
Date Analyzed: 12/13/2024 **Time:** 21:16
Can Dilution Factor: 1.39
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.16	ND	0.80	2.00	ND	
75-71-8	Dichlorodifluoromethane	0.70	1.16	ND	3.44	5.74	ND	
67-56-1	Methanol	2.32	2.78	4.04	3.04	3.64	5.30	
74-87-3	Chloromethane	0.70	1.16	ND	1.44	2.40	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.16	ND	3.24	8.11	ND	
75-01-4	Vinyl chloride	0.23	1.16	ND	0.60	2.96	ND	
106-99-0	1,3-Butadiene	0.23	1.16	ND	0.52	2.57	ND	
74-83-9	Bromomethane	0.46	1.16	ND	1.80	4.50	ND	
75-00-3	Chloroethane	0.46	1.16	ND	1.22	3.06	ND	
64-17-5	Ethanol	2.32	14.87	ND	4.37	28.08	ND	
107-02-8	Acrolein	0.46	1.39	ND	1.06	3.19	ND	
75-69-4	Trichlorofluoromethane	0.46	1.16	ND	2.61	6.52	ND	
67-64-1	Acetone	2.32	2.78	5.13	5.51	6.61	12.19	
67-63-0	2-propanol (isopropylalcohol)	0.93	5.79	ND	2.28	14.26	ND	
75-65-0	t-Butyl alcohol	0.46	4.63	ND	1.41	14.06	ND	
4227-95-6	Methyl iodide	0.46	1.39	ND	2.71	8.13	ND	
75-35-4	1,1-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	
107-13-1	Acrylonitrile	0.93	1.39	ND	2.02	3.02	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.16	ND	1.78	8.89	ND	
107-05-1	Allyl chloride	0.23	4.63	ND	0.73	14.52	ND	
75-09-2	Methylene chloride	0.23	1.16	ND	0.81	4.03	ND	
75-15-0	Carbon disulfide	0.46	1.16	ND	1.44	3.61	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.93	ND	0.92	3.68	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.93	ND	1.67	3.34	ND	
107-12-0	Propionitrile	1.16	1.85	ND	2.61	4.18	ND	
75-34-3	1,1-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.16	ND	1.94	4.85	ND	
108-05-4	Vinyl acetate	0.23	4.63	ND	0.82	16.34	ND	
78-93-3	2-Butanone (MEK)	0.46	1.39	ND	1.37	4.10	ND	
108-20-3	Diisopropyl ether	0.46	2.78	ND	1.94	11.64	ND	
110-54-3	Hexane	0.46	1.16	ND	1.64	4.09	ND	
126-98-7	Methacrylonitrile	0.46	1.16	ND	1.27	3.18	ND	
141-78-6	Ethyl acetate	0.46	1.16	ND	1.67	4.18	ND	
74-97-5	Bromochloromethane	0.23	1.16	ND	1.23	6.14	ND	
96-33-3	Methyl acrylate	0.46	2.32	ND	1.63	8.17	ND	
109-99-9	Tetrahydrofuran	0.23	1.39	ND	0.69	4.10	ND	
78-83-1	Isobutyl alcohol	0.93	3.71	ND	2.81	11.25	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
67-66-3	Chloroform	0.23	1.16	ND	1.14	5.66	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
107-06-2	1,2-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
563-58-6	1,1-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
110-82-7	Cyclohexane	0.23	1.16	ND	0.80	3.99	ND	
71-43-2	Benzene	1.62	2.32	ND	5.19	7.41	ND	
56-23-5	Carbon tetrachloride	0.23	1.16	ND	1.46	7.30	ND	
994-05-8	t-Amyl methyl ether	0.46	2.32	ND	1.94	9.70	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.16	ND	1.08	5.42	ND	
142-82-5	n-Heptane	0.46	1.16	ND	1.90	4.75	ND	
78-87-5	1,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
123-91-1	1,4 Dioxane	0.46	2.32	ND	1.67	8.36	ND	
74-95-3	Dibromomethane	0.23	1.16	ND	1.65	8.25	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.16	ND	0.62	6.23	ND	
75-27-4	Bromodichloromethane	0.23	1.16	ND	1.55	7.77	ND	
80-62-6	Methyl methacrylate	0.46	1.16	ND	1.90	4.75	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.71	ND	1.90	15.21	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
108-88-3	Toluene	0.93	1.16	ND	3.50	4.37	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
97-63-2	Ethyl methacrylate	0.46	1.16	ND	2.17	5.42	ND	
591-78-6	2-Hexanone	0.46	3.71	ND	1.90	15.21	ND	
142-28-9	1,3-Dichloropropane	0.23	3.24	ND	1.07	15.01	ND	
111-65-9	Octane	0.46	1.16	ND	2.17	5.42	ND	
124-48-1	Dibromochloromethane	0.46	1.16	ND	3.95	9.88	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.16	ND	3.57	8.91	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.16	ND	0.79	7.87	ND	
108-90-7	Chlorobenzene	0.46	1.16	ND	2.14	5.34	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.16	ND	3.18	7.96	ND	
100-41-4	Ethylbenzene	0.46	1.16	ND	2.02	5.04	ND	
1330-20-7	m,p-Xylenes	0.46	1.16	ND	2.02	5.04	ND	
111-84-2	Nonane	0.46	1.16	ND	2.43	6.09	ND	
100-42-5	Styrene	0.70	1.16	ND	2.97	4.94	ND	
75-25-2	Bromoform	0.46	1.16	ND	4.80	11.99	ND	
95-47-6	o-Xylene	0.46	1.16	ND	2.02	5.04	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.93	2.32	ND	6.37	15.92	ND	
96-18-4	1,2,3-Trichloropropane	0.93	2.78	ND	5.59	16.78	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.93	2.78	ND	4.74	14.23	ND	
103-65-1	n-Propylbenzene	0.93	3.24	ND	4.56	15.97	ND	
98-82-8	Isopropylbenzene	0.93	3.24	ND	4.56	15.97	ND	
622-96-8	4-Ethyltoluene	0.93	7.41	ND	4.56	36.49	ND	
108-67-8	1,3,5-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
124-18-5	Decane	0.93	2.78	ND	5.40	16.20	ND	
98-06-6	tert-butyl benzene	0.93	2.78	ND	5.09	15.28	ND	
95-63-6	1,2,4-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
538-93-2	i-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
135-98-8	sec-butylbenzene	0.93	3.24	ND	5.09	17.83	ND	
541-73-1	1,3-Dichlorobenzene	0.93	3.71	ND	5.58	22.32	ND	
99-87-6	Isopropyltoluene	0.93	2.78	ND	5.09	15.28	ND	
100-44-7	Benzyl chloride	0.93	2.32	ND	4.80	12.01	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.93	2.32	ND	5.58	13.95	ND	
104-51-8	n-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
95-50-1	1,2-Dichlorobenzene	0.93	3.24	ND	5.58	19.53	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.39	3.24	ND	13.45	31.39	ND	
120-82-1	1,2,4-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
91-20-3	Naphthalene	2.32	0.46	ND	12.16	2.43	ND	
87-61-6	1,2,3-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
87-68-3	Hexachlorobutadiene	1.16	1.39	ND	12.37	14.85	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	124	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 44

File Name: 224435
Descriptio T-612
Canister: 514
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/13/24 **Time:** 21:16
Can Dilution Factor: 1.39
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.24	6.95	ND	13.28	28.46	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 45**

File Name: 2443545A.D **Date Sampled:** 11/21/2024 **Time:** 11:25
Description: T-613 **Date Analyzed:** 12/13/2024 **Time:** 22:06
Canister: 694 **Can Dilution Factor:** 1.39
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.16	ND	0.80	2.00	ND	
75-71-8	Dichlorodifluoromethane	0.70	1.16	ND	3.44	5.74	ND	
67-56-1	Methanol	2.32	2.78	3.76	3.04	3.64	4.93	
74-87-3	Chloromethane	0.70	1.16	ND	1.44	2.40	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.16	ND	3.24	8.11	ND	
75-01-4	Vinyl chloride	0.23	1.16	ND	0.60	2.96	ND	
106-99-0	1,3-Butadiene	0.23	1.16	ND	0.52	2.57	ND	
74-83-9	Bromomethane	0.46	1.16	ND	1.80	4.50	ND	
75-00-3	Chloroethane	0.46	1.16	ND	1.22	3.06	ND	
64-17-5	Ethanol	2.32	14.87	ND	4.37	28.08	ND	
107-02-8	Acrolein	0.46	1.39	ND	1.06	3.19	ND	
75-69-4	Trichlorofluoromethane	0.46	1.16	ND	2.61	6.52	ND	
67-64-1	Acetone	2.32	2.78	3.66	5.51	6.61	8.72	
67-63-0	2-propanol (isopropylalcohol)	0.93	5.79	ND	2.28	14.26	ND	
75-65-0	t-Butyl alcohol	0.46	4.63	ND	1.41	14.06	ND	
4227-95-6	Methyl iodide	0.46	1.39	ND	2.71	8.13	ND	
75-35-4	1,1-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	
107-13-1	Acrylonitrile	0.93	1.39	ND	2.02	3.02	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.16	ND	1.78	8.89	ND	
107-05-1	Allyl chloride	0.23	4.63	ND	0.73	14.52	ND	
75-09-2	Methylene chloride	0.23	1.16	ND	0.81	4.03	ND	
75-15-0	Carbon disulfide	0.46	1.16	ND	1.44	3.61	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.93	ND	0.92	3.68	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.93	ND	1.67	3.34	ND	
107-12-0	Propionitrile	1.16	1.85	ND	2.61	4.18	ND	
75-34-3	1,1-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.16	ND	1.94	4.85	ND	
108-05-4	Vinyl acetate	0.23	4.63	ND	0.82	16.34	ND	
78-93-3	2-Butanone (MEK)	0.46	1.39	ND	1.37	4.10	ND	
108-20-3	Diisopropyl ether	0.46	2.78	ND	1.94	11.64	ND	
110-54-3	Hexane	0.46	1.16	ND	1.64	4.09	ND	
126-98-7	Methacrylonitrile	0.46	1.16	ND	1.27	3.18	ND	
141-78-6	Ethyl acetate	0.46	1.16	ND	1.67	4.18	ND	
74-97-5	Bromochloromethane	0.23	1.16	ND	1.23	6.14	ND	
96-33-3	Methyl acrylate	0.46	2.32	ND	1.63	8.17	ND	
109-99-9	Tetrahydrofuran	0.23	1.39	ND	0.69	4.10	ND	
78-83-1	Isobutyl alcohol	0.93	3.71	ND	2.81	11.25	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
67-66-3	Chloroform	0.23	1.16	ND	1.14	5.66	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
107-06-2	1,2-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
563-58-6	1,1-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
110-82-7	Cyclohexane	0.23	1.16	ND	0.80	3.99	ND	
71-43-2	Benzene	1.62	2.32	ND	5.19	7.41	ND	
56-23-5	Carbon tetrachloride	0.23	1.16	ND	1.46	7.30	ND	
994-05-8	t-Amyl methyl ether	0.46	2.32	ND	1.94	9.70	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.16	ND	1.08	5.42	ND	
142-82-5	n-Heptane	0.46	1.16	ND	1.90	4.75	ND	
78-87-5	1,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
123-91-1	1,4 Dioxane	0.46	2.32	ND	1.67	8.36	ND	
74-95-3	Dibromomethane	0.23	1.16	ND	1.65	8.25	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.16	ND	0.62	6.23	ND	
75-27-4	Bromodichloromethane	0.23	1.16	ND	1.55	7.77	ND	
80-62-6	Methyl methacrylate	0.46	1.16	ND	1.90	4.75	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.71	ND	1.90	15.21	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
108-88-3	Toluene	0.93	1.16	ND	3.50	4.37	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
97-63-2	Ethyl methacrylate	0.46	1.16	ND	2.17	5.42	ND	
591-78-6	2-Hexanone	0.46	3.71	ND	1.90	15.21	ND	
142-28-9	1,3-Dichloropropane	0.23	3.24	ND	1.07	15.01	ND	
111-65-9	Octane	0.46	1.16	ND	2.17	5.42	ND	
124-48-1	Dibromochloromethane	0.46	1.16	ND	3.95	9.88	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.16	ND	3.57	8.91	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.16	ND	0.79	7.87	ND	
108-90-7	Chlorobenzene	0.46	1.16	ND	2.14	5.34	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.16	ND	3.18	7.96	ND	
100-41-4	Ethylbenzene	0.46	1.16	ND	2.02	5.04	ND	
1330-20-7	m,p-Xylenes	0.46	1.16	ND	2.02	5.04	ND	
111-84-2	Nonane	0.46	1.16	ND	2.43	6.09	ND	
100-42-5	Styrene	0.70	1.16	ND	2.97	4.94	ND	
75-25-2	Bromoform	0.46	1.16	ND	4.80	11.99	ND	
95-47-6	o-Xylene	0.46	1.16	ND	2.02	5.04	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.93	2.32	ND	6.37	15.92	ND	
96-18-4	1,2,3-Trichloropropane	0.93	2.78	ND	5.59	16.78	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.93	2.78	ND	4.74	14.23	ND	
103-65-1	n-Propylbenzene	0.93	3.24	ND	4.56	15.97	ND	
98-82-8	Isopropylbenzene	0.93	3.24	ND	4.56	15.97	ND	
622-96-8	4-Ethyltoluene	0.93	7.41	ND	4.56	36.49	ND	
108-67-8	1,3,5-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
124-18-5	Decane	0.93	2.78	ND	5.40	16.20	ND	
98-06-6	tert-butyl benzene	0.93	2.78	ND	5.09	15.28	ND	
95-63-6	1,2,4-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
538-93-2	i-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
135-98-8	sec-butylbenzene	0.93	3.24	ND	5.09	17.83	ND	
541-73-1	1,3-Dichlorobenzene	0.93	3.71	ND	5.58	22.32	ND	
99-87-6	Isopropyltoluene	0.93	2.78	ND	5.09	15.28	ND	
100-44-7	Benzyl chloride	0.93	2.32	ND	4.80	12.01	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.93	2.32	ND	5.58	13.95	ND	
104-51-8	n-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
95-50-1	1,2-Dichlorobenzene	0.93	3.24	ND	5.58	19.53	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.39	3.24	ND	13.45	31.39	ND	
120-82-1	1,2,4-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
91-20-3	Naphthalene	2.32	0.46	ND	12.16	2.43	ND	
87-61-6	1,2,3-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
87-68-3	Hexachlorobutadiene	1.16	1.39	ND	12.37	14.85	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	127	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 45

File Name: 224435
Descriptio T-613
Canister: 694
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/13/24 **Time:** 22:06
Can Dilution Factor: 1.39
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.24	6.95	ND	13.28	28.46	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 46**

File Name: 2443546A.D **Date Sampled:** 11/21/2024 **Time:** 11:36
Description: T-614 **Date Analyzed:** 12/10/2024 **Time:** 16:32
Canister: 880 **Can Dilution Factor:** 1.38
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	ND	4.34	27.88	ND	
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	ND	5.47	6.57	ND	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	110	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 46

File Name: 2443546A.D
Descriptio T-614
Canister: 880
QC_Batch: 121024-MA1

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/10/24 **Time:** 16:32
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

224435 17807

TO- Day 1

CE Schmidt, Ph., Environmental Consultant

Chain of Custody Record

Form Serial Number **CES F1-02106**	For Information Regarding These Samples Please Contact:	Client Address and Phone Number ***3900 Kilroy Airport Way, Suite 100*** ***Long Beach, CA 90806 562-743-7895***	Laboratory Name ***EAS***
Client Name ***SCS*** ***Chiquita Canyon Landfill***	**Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 E-Mail: SCHMIDTCE@aol.com	Analysis Requested	Laboratory Address ***173 Cross Street*** ***San Luis Obispo, CA 93401***
Project Manager ***Pat Sullivan***			Laboratory Phone ***805-781-3585***
Requested Completion Date			Laboratory Contact ***Dr. Steve Hoyt*** *stevehoyt@easlab.com*

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container Vial	Sample Container Can	Sample Container Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (iList on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/19/2024	851		x	T - 401	636	1		x		x	x	x	x		-29	0	01
	11/19/2024	835		x	T - 402	703	1		x		x	x	x	x		-29	0	02
	11/19/2024	812		x	T - 403	547	1		x		x	x	x	x		-29	0	03
	11/19/2024	824		x	T - 404	749	1		x		x	x	x	x		-29	0	04
	11/19/2024	1020		x	T - 405	837	1		x		x	x	x	x		-29	0	05
	11/19/2024	1006		x	T - 406	626	1		x		x	x	x	x		-29	0	06
	11/19/2024	1005		x	T - 407	740	1		x		x	x	x	x		-29	0	07
	11/19/2024	1019		x	T - 408	805	1		x		x	x	x	x		-29	0	08
	11/19/2024	1145		x	T - 409	631	1		x		x	x	x	x		-29	0	09
	11/19/2024	1159		x	T - 410	714	1		x		x	x	x	x		-29	0	10
	11/19/2024	1151		x	T - 411	551	1		x		x	x	x	x		-29	0	11
	11/19/2024	1206		x	T - 412	881	1		x		x	x	x	x		-29	0	12
	11/19/2024	1337		x	T - 413	766	1		x		x	x	x	x		-29		13
	11/19/2024	1324		x	T - 414	725	1		x		x	x	x	x		-29		14
	11/19/2024	1338		x	T - 415	896	1		x		x	x	x	x		-29		15
	11/19/2024	1324		x	T - 416	659	1		x		x	x	x	x		-29		16
	11/19/2024	1329		x	T - 417	899	1		x		x	x	x	x		-29		17
	11/19/2024			x	T - 418	552	1		x		x	x	x	x		-29		18

Sampler CESchmidt	Date/Time 11/21/24 1204	Relinquished by CESchmidt	Date/Time 11/21/24 1204	HAZWRAP/NEESA Y N QC Level 1 2 3
Recieved by EAS	Date/Time	Relinquished by	Date/Time	COC Ana Req
Recieved by	Date/Time	Relinquished by	Date/Time	Cust Seal Sample Condition
Recieved by Laboratory [signature] 11/21/2024	Date/Time	Sample Shipped Via UPS FEDEX BUS Other		
Remarks 13:50	**Do Not Pressurize with Helium**			

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D1

2214435 17807 TO Day 2

CE Schmidt, Ph., Environmental Consultant

Chain of Custody Record

Form Serial Number CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name *SCS* *Chiquita Canyon Landfill*	**Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 E-Mail: SCHMIDTCE@aol.com
Project Manager *Pat Sullivan*	
Requested Completion Date	

Client Address and Phone Number
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806 562-743-7895

Laboratory Name
EAS

Laboratory Address
173 Cross Street
San Luis Obispo, CA 93401

Laboratory Phone
805-781-3585

Laboratory Contact
Dr. Steve Hoyt
stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/20/2024	0830		x	T - 501	604	1		x		x	x	x	x		-29	0	19
	11/20/2024	0837		x	T - 502	746	1		x		x	x	x	x		-29	0	20
	11/20/2024	0832		x	T - 503	751	1		x		x	x	x	x		-29	0	21
	11/20/2024	0841		x	T - 504	645	1		x		x	x	x	x		-29	0	22
	11/20/2024	1055		x	T - 505	883	1		x		x	x	x	x		-29	0	23
	11/20/2024	1041		x	T - 506	784	1		x		x	x	x	x		-29	0	24
	11/20/2024	1056		x	T - 507	712	1		x		x	x	x	x		-29	0	25
	11/20/2024	1040		x	T - 508	549	1		x		x	x	x	x		-29	0	26
	11/20/2024	1220		x	T - 509	882	1		x		x	x	x	x		-29	0	27
	11/20/2024	1218		x	T - 510	820	1		x		x	x	x	x		-29	0	28
	11/20/2024	1231		x	T - 511	627	1		x		x	x	x	x		-29	0	29
	11/20/2024	1241		x	T - 512	467	1		x		x	x	x	x		-29		30
	11/20/2024	1228		x	T - 513	821	1		x		x	x	x	x		-27		31
	11/20/2024	1245		x	T - 514	506	1		x		x	x	x	x		-29	0	32

Page 230 of 1012

Sampler CESchmidt	Date/Time 11/21/24 1204	Relinquished by CESchmidt	Date/Time 11/21/24 1204
Recieved by DHS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory	Date/Time 11/21/2024	Sample Shipped Via UPS FEDEX BUS Other	
Remarks 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D2

2264

CE Schmidt, PhD, Environmental Consultant
Chain of Custody Record

224435

17807

TO- Day 3

Form Serial Number	For Information Regarding These Samples Please Contact:	Client Address and Phone Number	Laboratory Name
CES F1-02106	**Dr. Charles E. Schmidt**	*3900 Kilroy Airport Way, Suite 100*	*EAS*
Client Name	19200 Live Oak Road, Red Bluff, CA 96080	*Long Beach, CA 90806 562-743-7895*	Laboratory Address
SCS	530-529-4256 Cell: 530-200-2473		*173 Cross Street*
Chiquita Canyon Landfill	E-Mail: SCHMIDTCE@aol.com		*San Luis Obispo, CA 93401*
Project Manager			Laboratory Phone
Pat Sullivan			*805-781-3585*
Requested Completion Date			Laboratory Contact
			Dr. Steve Hoyt
			stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)	Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/21/2024	0910		x	T - 601	700	1		x		x	x	x	x	-29	0	33
	11/21/2024	0929		x	T - 602	673	1		x		x	x	x	x	-29	0	34
	11/21/2024	0941		x	T - 603	550	1		x		x	x	x	x	-29	0	35
	11/21/2024	0918		x	T - 604	738	1		x		x	x	x	x	-29	0	36
	11/21/2024	0944		x	T - 605	592	1		x		x	x	x	x	-29	0	37
	11/21/2024	0958		x	T - 606	608	1		x		x	x	x	x	-29	0	38
	11/21/2024	0952		x	T - 607	771	1		x		x	x	x	x	-29	0	39
	11/21/2024	0947		x	T - 608	531	1		x		x	x	x	x	-29	0	40
	11/21/2024	1130		x	T - 609	668	1		x		x	x	x	x	-29		41
	11/21/2024	1114		x	T - 610	730	1		x		x	x	x	x	-29		42
1160	11/21/2024	1155		x	T - 611	701	1		x		x	x	x	x	-29		43
	11/21/2024	1120		x	T - 612	574	1		x		x	x	x	x	-29		44
	11/21/2024	1125		x	T - 613	674	1		x		x	x	x	x	-29		45
	11/21/2024	1134		x	T - 614	680	1		x		x	x	x	x	-29		46

Sampler: CE SCHMIDT	Date/Time: 11/24/24 1204	Relinquished by: CE SCHMIDT	Date/Time: 11/24/24 1204
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: 11/21/2024 13:30	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D3

Section 4 Data Package

This section contains the Data Packages for the samples, blanks, and calibration. Each package has the analytical report, quantitation report, calculation sheet, instrument quantation report, and chromatograms.

Items provided in Data Package:

DAB Run Logs and Preparation Logs

Sample Packages

Blank Package for each Daily Analytical Batch

Quality Control Reports, LCS,LCD for each Daily Analytical Batch

Continuing Calibration Package for Each Daily Analytical Batch

Initial Calibration Data

Tune Data (if required)

DAB Run Logs and Preparation Logs

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
This section contains the DAB Log Sheets and Preparation Logs.

Index

DAB Run Logs
Preparation Logs
Other Log Sheets

DAILY ANALYTICAL BATCH FORM

DAB 12 10 24 - MSA

ANALYST REPORT

Method A1563_L Chemist TR

	NA	Passed	Out
Instrument Tune	☒	☐	☐
GC/MS BFBTune	☐	☒	☐
Continuing Calibration	☐	☒	☐
Instrument Blank	☐	☒	☐
LCS	☐	☒	☐
LCD	☐	☒	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

300 mL runs

SDG 224435

Lab ID 16, 32, 46 1-8

	Processed
Continuing Calibration	☐
Method Blank	☒
Samples	☒
LCS/LCD	☐

Data Processing Chemist Certification

☒ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☒ Reviewed

121024-MSA	01	MSA	STD			C12104A		ST62126			10	TR		A1563_L		
121024-MSA	02	MSA	STD			C12104B		ST62126			10	TR		A1563_L		
121024-MSA	03	MSA	SPK			QC12104A		ST63255			5	TR		A1563_L		
121024-MSA	04	MSA	SPK			QC12104B		ST63255			5	TR		A1563_L		
121024-MSA	05	MSA	SPK			QC12104C		ST63255			5	TR		A1563_L		
121024-MSA	06	MSA	BLK			B12104A		HUMID BALNK			500	TR		A1563_L		
121024-MSA	07	MSA	BLK			B12104B		HUMID BALNK			500	TR		A1563_L		
121024-MSA	08	MSA	BLK			B12104C		METHOD BALNK			1000	TR		A1563_L		
121024-MSA	09	MSA	BLK			B12104D		METHOD BALNK			1000	TR		A1563_L		
121024-MSA	10	MSA	SA	224435 18		2443518A	522	T-418		SCHMIDT	300	TR		A1563_L		
121024-MSA	11	MSA	SA	224435 32		2443532A	506	T-514		SCHMIDT	300	TR		A1563_L		
121024-MSA	12	MSA	SA	224435 46		2443546A	880	T-614		SCHMIDT	300	DA		A1563_L		
121024-MSA	13	MSA	SA	224448 02		2444802A	653	20241117AQ2E		TRINITY	500	DA		A1563_L		
121024-MSA	14	MSA	SA	224435 01		2443501A	636	T-401		SCHMIDT	300	UG		A1563_L		
121024-MSA	15	MSA	SA	224435 02		2443502A	703	T-402		SCHMIDT	300	UG		A1563_L		
121024-MSA	16	MSA	SA	224435 03		2443503A	547	T-403		SCHMIDT	300	UG		A1563_L		
121024-MSA	17	MSA	SA	224435 04		2443504A	749	T-404		SCHMIDT	300	UG		A1563_L		
121024-MSA	18	MSA	SA	224435 05		2443505A	837	T-405		SCHMIDT	300	UG		A1563_L		
121024-MSA	19	MSA	SA	224435 06		2443506A	626	T-406		SCHMIDT	300	UG		A1563_L		

DLO $QDOWFDO%DWK

121024-MSA

MSA

' $% 581 ,167 7<3(6' * ,')LH,' &DQ HVFULSWRQ &QHQWRG &RP P HQ9RO 7HFK 4 XDO 0 HVKRG &RP P HQW 4 HGLW 3 URF

121024-MSA	20	MSA	SA	224435 07	2443507A	740	T-407	SCHMIDT	300	UG	A1563_L	
121024-MSA	21	MSA	SA	224435 08	2443508A	805	T-408	SCHMIDT	300	UG	A1563_L	

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Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 18

Client: C.E. Schmidt
Client ID: T-418
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 522
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:40
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 32

Client: C.E. Schmidt
Client ID: T-514
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 506
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:45
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 46

Client: C.E. Schmidt
Client ID: T-614
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 880
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:36
Received: 11/21/2024 Time: 13:00

	Date:			
Initial :				
Final:				
Factor:				

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 2

Client: C.E. Schmidt
Client ID: T-402
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 703
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:35
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 3

Client: C.E. Schmidt
Client ID: T-403
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 547
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:12
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 4

Client: C.E. Schmidt
Client ID: T-404
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 749
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:24
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 5

Client: C.E. Schmidt
Client ID: T-405
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 837
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 6

Client: C.E. Schmidt
Client ID: T-406
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 626
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:06
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 7

Client: C.E. Schmidt
Client ID: T-407
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 740
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:05
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 8

Client: C.E. Schmidt
Client ID: T-408
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 805
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:19
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

DAILY ANALYTICAL BATCH FORM

DAB 12 11 24 - MSA

ANALYST REPORT

Method A1563-L Chemist TR

	NA	Passed	Out
Instrument Tune	☐	☒	☐
GC/MS BFBTune	☐	☒	☐
Continuing Calibration	☐	☒	☐
Instrument Blank	☐	☒	☐
LCS	☐	☒	☐
LCD	☐	☒	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 9-24 300M

	Processed
Continuing Calibration	☐
Method Blank	☑
Samples	☑
LCS/LCD	☐

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 9

Client: C.E. Schmidt
Client ID: T-409
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 631
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:45
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 10

Client: C.E. Schmidt
Client ID: T-410
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 714
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:59
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 11

Client: C.E. Schmidt
Client ID: T-411
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 551
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:51
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 12

Client: C.E. Schmidt
Client ID: T-412
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 881
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 12:06
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 13

Client: C.E. Schmidt
Client ID: T-413
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 766
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 14

Client: C.E. Schmidt
Client ID: T-414
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 725
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 15

Client: C.E. Schmidt
Client ID: T-415
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 896
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:38
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 16

Client: C.E. Schmidt
Client ID: T-416
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 659
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:24
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 17

Client: C.E. Schmidt
Client ID: T-417
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 899
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:29
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 19

Client: C.E. Schmidt
Client ID: T-501
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 664
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:30
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 20

Client: C.E. Schmidt
Client ID: T-502
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 716
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 21

Client: C.E. Schmidt
Client ID: T-503
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 751
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:32
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

' D IO\ $ Q D O\ WLF D O % D WF K

'$% 121124-MSA

MSA

'$%	581	,167	7<3(	6'*	,'	)IOH,'	&DQ	'HVFUSWRQ	&OHQW	9RO	7HFK	4XDO	0HWKRG &RPPHQW	4 HGLW	3 URF
121124-MSA	01	MSA	STD			C12114AA		ST62126		10	TR		A1563_L		
121124-MSA	02	MSA	STD			C12114B		ST62126		10	TR		A1563_L		
121124-MSA	03	MSA	STD			C12114C		ST62125	SECONDARY ST	10	TR		A1563_L		
121124-MSA	04	MSA	SPK			QC12114A		ST63255		5	TR		A1563_L		
121124-MSA	05	MSA	SPK			QC12114B		ST63255		5	TR		A1563_L		
121124-MSA	06	MSA	BLK			B12114A		HUMID BLANK		500	TR		A1563_L		
121124-MSA	07	MSA	BLK			B12114B		HUMID BLANK		500	TR		A1563_L		
121124-MSA	08	MSA	BLK			B12114C		METHOD BLANK		1000	TR		A1563_L		
121124-MSA	09	MSA	BLK			B12114D		METHOD BLANK		1000	TR		A1563_L		
121124-MSA	10	MSA	SA	224435	09	2443509A	631	T-409	SCHMDIT	300	TR		A1563_L		
121124-MSA	11	MSA	SA	224435	10	2443510A	714	T-410	SCHMDIT	300	TR		A1563_L		
121124-MSA	12	MSA	SA	224435	11	2443511A	551	T-411	SCHMDIT	300	TR		A1563_L		
121124-MSA	13	MSA	SA	224435	12	2443512A	881	T-412	SCHMDIT	300	DA		A1563_L		
121124-MSA	14	MSA	SA	224435	13	2443513A	766	T-413	SCHMDIT	300	LR		A1563_L		
121124-MSA	15	MSA	SA	224435	14	2443514A	725	T-414	SCHMDIT	300	LR		A1563_L		
121124-MSA	16	MSA	SA	224435	15	2443515A	896	T-415	SCHMDIT	300	LR		A1563_L		
121124-MSA	17	MSA	SA	224435	16	2443516A	659	T-416	SCHMDIT	300	LR		A1563_L		
121124-MSA	18	MSA	SA	224435	17	2443517A	899	T-417	SCHMDIT	300	LR		A1563_L		
121124-MSA	19	MSA	SA	224435	19	2443519A	664	T-501	SCHMDIT	300	LR		A1563_L		

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' DLO $QDOWFDO%DWFK 121124-MSA ' $% 121124-MSA

MSA

' $%	581	,167	7<3(	6' *	,'	)LOH,'	&DQ	' HVFULSWLRQ	&QHQW	9RO	7HFK	4XDO	0 HVKRG	&RP P HQW	4 HGLW	3 LRF
121124-MSA	20	MSA	SA	224435	20	2443520A	716	T-502	SCHMDIT	300	LR	A1563_L				
121124-MSA	21	MSA	SA	224435	21	2443521A	751	T-503	SCHMDIT	300	LR	A1563_L				

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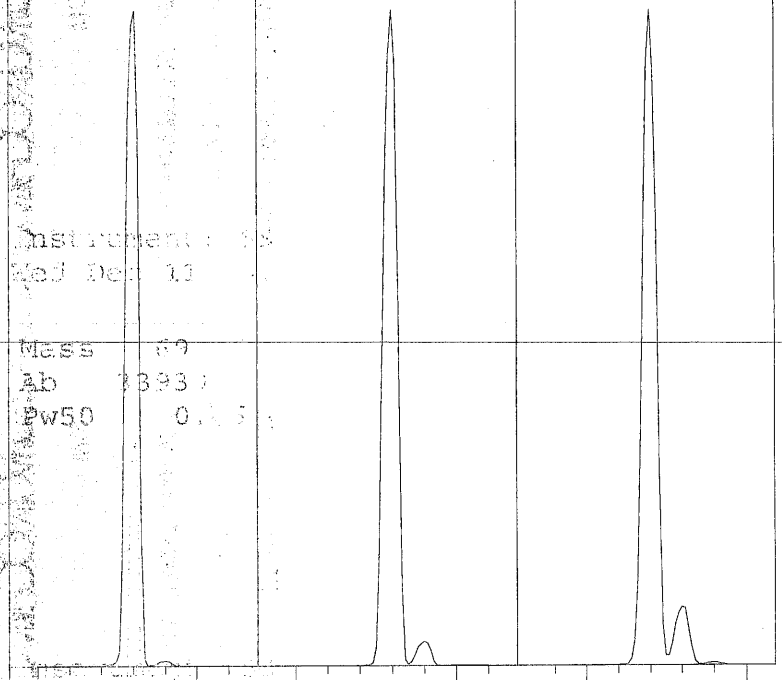
HP5970

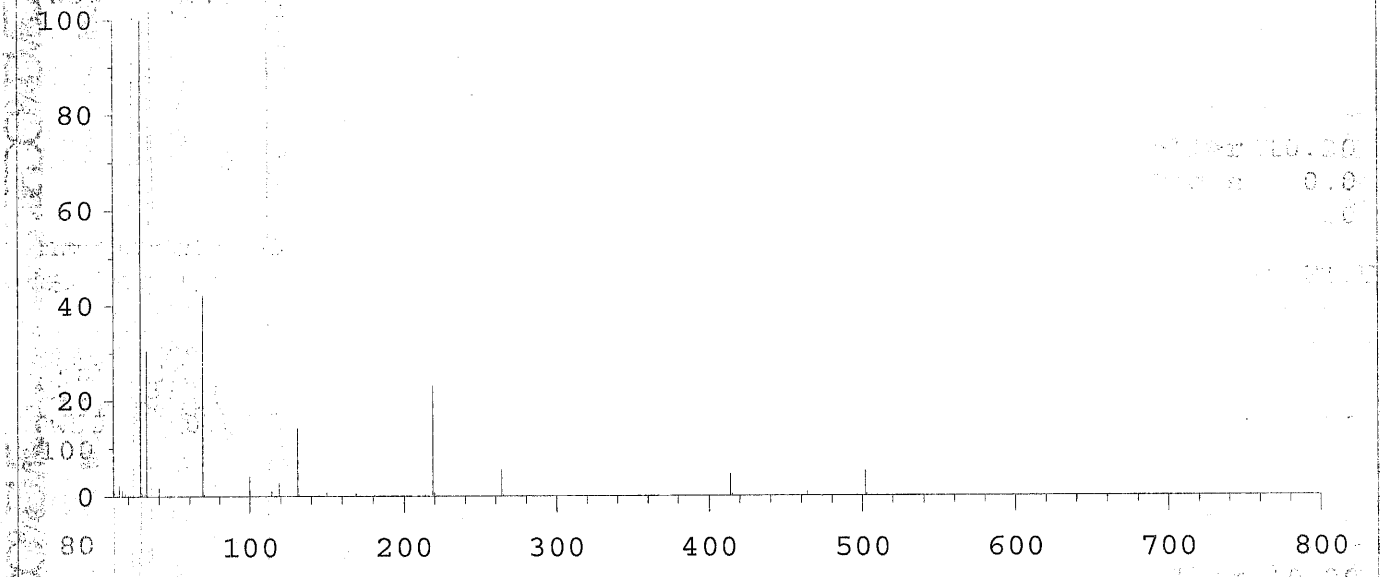
Instrument: 5970 - MSA
Wed Dec 11 08:18:09 2024 C:\MSCHEM\1\5970\11064DFT.U

Mass	69.05	Mass	219.00	Mass	502.00
Ab	3393962	%	76.90	%	11.43
Pw50	0.46	Pw50	0.50	Pw50	0.50



EMVolts	1800	AmuGain	159
Xray	0.0	AmuOffs	59
Emission	ON		
Samples	16	Repeller	10.20
Averages	1	IonFocus	0.0
StepSize	0.10	EntLens	50
MassGain	-72		
MassOffs	13		

Scan: 10.00 - 800.00 Samples: 16 Thresh: 500 Step: 0.10
118 peaks Base: 27.95 Abundance: 5234176



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
68.90	2218496	100.00	69.90	17104	0.77
218.95	1212416	54.65	219.95	43528	3.59
501.95	274816	12.39	502.95	25024	9.11

DAILY ANALYTICAL BATCH FORM

DAB 121224 - MSA

ANALYST REPORT

Method A1563-L Chemist TR

	NA	Passed	Out
Instrument Tune	☐	☑	☐
GC/MS BFBTune	☐	☑	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Ingrid Rhead
Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 22-27 29-34

	Processed
Continuing Calibration	☐
Method Blank	☑
Samples	☑
LCS/LCD	☐

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☑ Reviewed

D WDKIO\ $ Q D O\ WIF D O % D WF K

'$% 121224-MSA

MSA

'$% 581 ,167 7<3(6'* ,')IOH,' &DQ 'HVFUSWRQ &OLHQWRG &RPPHQWV 9RO 7HFK 4XDO 0HWKRG &RPPHQWV 4HGLW 3URF

121224-MSA	01	MSA	STD			C12124A		ST62126		10	TR	A1563_L	
121224-MSA	02	MSA	STD			C12124B		ST62126		10	TR	A1563_L	
121224-MSA	03	MSA	SPK			QC12124A		ST63255		5	TR	A1563_L	
121224-MSA	04	MSA	SPK			QC12124B		ST63255		5	TR	A1563_L	
121224-MSA	05	MSA	BLK			B12124A		HUMID BLANK		500	TR	A1563_L	
121224-MSA	06	MSA	BLK			B12124B		HUMID BLANK		500	TR	A1563_L	
121224-MSA	07	MSA	BLK			B12124C		METHOD BLANK		1000	TR	A1563_L	
121224-MSA	08	MSA	BLK			B12124D		METHOD BLANK		1000	TR	A1563_L	
121224-MSA	09	MSA	SA	224435	22	2443522A	644	T-504	SCHMIDT	300	TR	A1563_L	OK
121224-MSA	10	MSA	SA	224435	23	2443523A	883	T-505	SCHMIDT	300	TR	A1563_L	OK
121224-MSA	11	MSA	SA	224435	24	2443524A	784	T-506	SCHMIDT	300	TR	A1563_L	OK
121224-MSA	12	MSA	SA	224435	25	2443525A	712	T-507	SCHMIDT	300	TR	A1563_L	OK
121224-MSA	13	MSA	SA	224435	26	2443526A	549	T-508	SCHMIDT	300	DA	A1563_L	OK
121224-MSA	14	MSA	SA	224435	27	2443527A	882	T-509	SCHMIDT	300	UG	A1563_L	OK
121224-MSA	15	MSA	SA	224435	28	2443528A	860	T-510	SCHMIDT	300	UG	A1563_L	X see 121324
121224-MSA	16	MSA	SA	224435	29	2443529A	627	T-511	SCHMIDT	300	UG	A1563_L	OK
121224-MSA	17	MSA	SA	224435	30	2443530A	417	T-512	SCHMIDT	300	UG	A1563_L	OK
121224-MSA	18	MSA	SA	224435	31	2443531A	781	T-513	SCHMIDT	300	UG	A1563_L	OK
121224-MSA	19	MSA	SA	224435	33	2443533A	700	T-601	SCHMIDT	300	UG	A1563_L	OK

5(9,(: ('

' DLO $ QDOWLFDO%DWFK

$% 121224-MSA

MSA

' $% 581 ,167 7<3(6' * ,')LOH,' &DQ ' HVFULSWLRQ &QHQWRG &RP P 9RO 7HFK 4 XDO 0 HWKRG &RP P HQW 4 HGLW 3 LRF

121224-MSA 20 MSA SA 224435 34 2443534A 673 T-602 SCHMIDT 300 UG A1563_L OK

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 22

Client: C.E. Schmidt
Client ID: T-504
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 644
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:44
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 23

Client: C.E. Schmidt
Client ID: T-505
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 883
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:55
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 24

Client: C.E. Schmidt
Client ID: T-506
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 784
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:11
Received: 11/21/2024 Time: 13:00

	Date:			
Initial :				
Final:				
Factor:				

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 25

Client: C.E. Schmidt
Client ID: T-507
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 712
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:56
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 26

Client: C.E. Schmidt
Client ID: T-508
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 549
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:40
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 27

Client: C.E. Schmidt
Client ID: T-509
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 882
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 29

Client: C.E. Schmidt
Client ID: T-511
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 627
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:31
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 30

Client: C.E. Schmidt
Client ID: T-512
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 417
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 31

Client: C.E. Schmidt
Client ID: T-513
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 781
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:28
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 33

Client: C.E. Schmidt
Client ID: T-601
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 700
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 34

Client: C.E. Schmidt
Client ID: T-602
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 673
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:29
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:

DAILY ANALYTICAL BATCH FORM

DAB 121324 - MSA

ANALYST REPORT

Method D1563-L Chemist SS

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 2835-45

Processed	
Continuing Calibration	☐
Method Blank	☑
Samples	☑
LCS/LCD	☐

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☑ Reviewed

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 28

Client: C.E. Schmidt
Client ID: T-510
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 860
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:18
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 35

Client: C.E. Schmidt
Client ID: T-603
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 550
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:31
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 36

Client: C.E. Schmidt
Client ID: T-604
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 738
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 38

Client: C.E. Schmidt
Client ID: T-606
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 608
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:58
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 39

Client: C.E. Schmidt
Client ID: T-607
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 771
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:52
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 40

Client: C.E. Schmidt
Client ID: T-608
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 531
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:47
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions
EDD Type:

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 41

Client: C.E. Schmidt
Client ID: T-609
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 668
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:38
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 | 42

Client: C.E. Schmidt
Client ID: T-610
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 730
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:11
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 43

Client: C.E. Schmidt
Client ID: T-611
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 701
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:28
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:		Item Description:	Holding Time:
MSA	TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 44

Client: C.E. Schmidt
Client ID: T-612
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 514
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 45

Client: C.E. Schmidt
Client ID: T-613
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 694
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:25
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

' D IO\ $ Q D O\ WIF D O % D WF K 121324-MSA '$% 121324-MSA

MSA MSA MSA MSA

'$% 581 ,167 7<3(6'* ,')IOI,' &DQ 'HVFUSWRQ &OHQW 9RO 7HHK 4XDO 0HWKRG &RPPHQW 4HGLW 3URF

121324-MSA	01	MSA	STD		C12134A		ST62126		10	TR	A1563_L	
121324-MSA	02	MSA	STD		C12134B		ST62126		10	TR	A1563_L	
121324-MSA	03	MSA	SPK		QC12134A		ST63255		5	TR	A1563_L	
121324-MSA	04	MSA	SPK		QC12134B		ST63255		5	TR	A1563_L	
121324-MSA	05	MSA	SPK		QC12134C		ST63255		5	TR	A1563_L	
121324-MSA	06	MSA	BLK		B12134A		HUMID BLANK		500	TR	A1563_L	
121324-MSA	07	MSA	BLK		B12134B		HUMID BLANK		500	TR	A1563_L	
121324-MSA	08	MSA	BLK		B12134C		METHOD BLANK		1000	TR	A1563_L	
121324-MSA	09	MSA	BLK		B12134D		METHOD BLANK		1000	TR	A1563_L	
121324-MSA	10	MSA	SA	224435 28	2443528A	860	T-510	SCHMIDT	300	TR	A1563_L	OK
121324-MSA	11	MSA	SA	224435 35	2443535A	550	T-603	SCHMIDT	300	DA	A1563_L	OK
121324-MSA	12	MSA	SA	224435 36	2443536A	738	T-604	SCHMIDT	300	DA	A1563_L	OK
121324-MSA	13	MSA	SA	224435 38	2443538A	608	T-606	SCHMIDT	300	DA	A1563_L	OK
121324-MSA	14	MSA	SA	224435 39	2443539A	771	T-607	SCHMIDT	300	SS	A1563_L	OK
121324-MSA	15	MSA	SA	224435 40	2443540A	531	T-608	SCHMIDT	300	SS	A1563_L	OK
121324-MSA	16	MSA	SA	224435 41	2443541A	668	T-609	SCHMIDT	300	SS	A1563_L	OK
121324-MSA	17	MSA	SA	224435 42	2443542A	730	T-610	SCHMIDT	300	SS	A1563_L	OK
121324-MSA	18	MSA	SA	224435 43	2443543A	701	T-611	SCHMIDT	300	SS	A1563_L	OK
121324-MSA	19	MSA	SA	224435 44	2443544A	514	T-612	SCHMIDT	300	SS	A1563_L	OK

5(9,(: ('

' DLO $QDOWFDO%DWFK 121324-MSA ' $% 121324-MSA

MSA MSA MSA MSA MSA

' $% 581 ,167 7<3(6' * ,')LOH,' &DQ ' HVFULSWRQ &OHQW 9RO 7HFK 4 XDO 0 HVKRG &RP P HQW 4 HGLW 3 URF

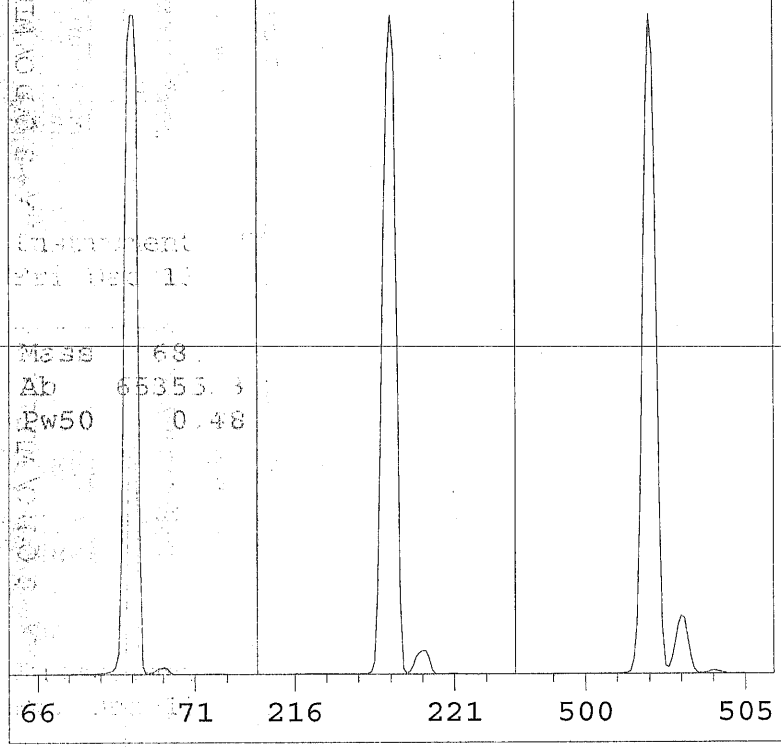
121324-MSA 20 MSA SA 224435 45 2443545A 694 T-612 SCHMIDT 300 SS A1563_L

5(9,(: ('

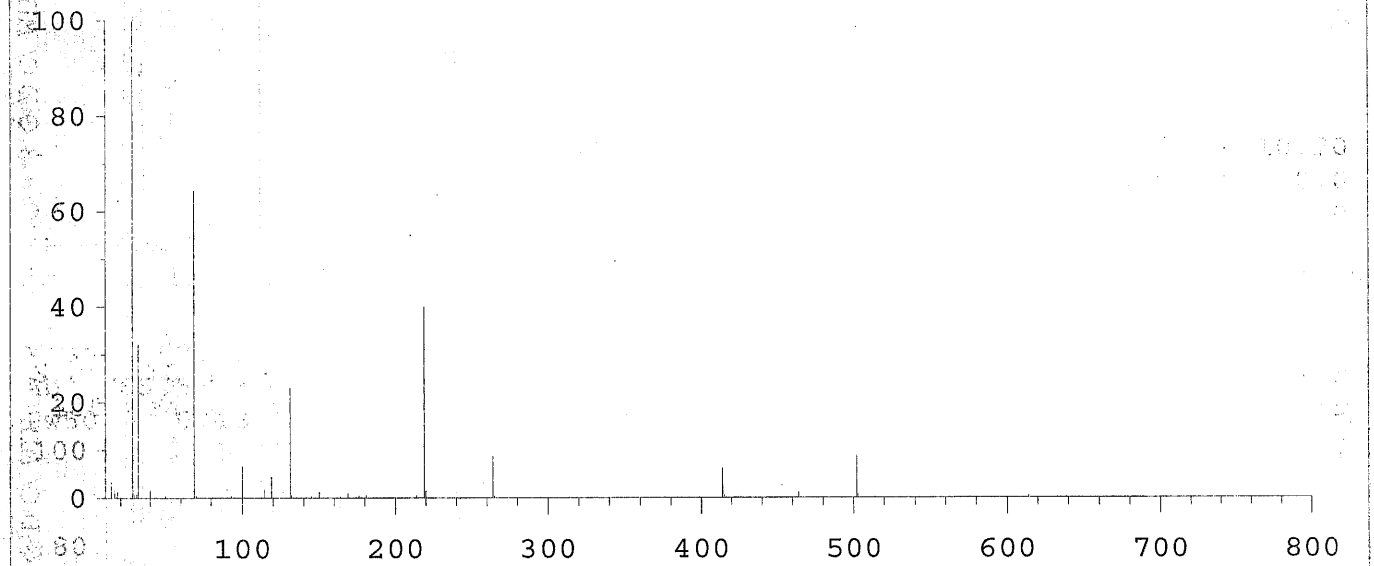
HP5970

Instrument: 5970 - MSA
Fri Dec 13 08:38:26 2024 C:\MSCHEM\1\5970\11064DFT.U

Mass	68.95	Mass	219.00	Mass	502.00		
Ab	6535553	%	63.11	%	13.05		
Pw50	0.48	Pw50	0.47	Pw50	0.47		
EMVolts	1800	AmuGain	159				
Xray	0.0	AmuOffs	59				
Emission	ON						
Samples	16	Repeller	10.20				
Averages	1	IonFocus	0.0				
StepSize	0.10	EntLens	50				
MassGain	-72						
MassOffs	13						



Scan: 10.00 - 800.00 Samples: 16 Thresh: 500 Step: 0.10
135 peaks Base: 27.95 Abundance: 5801472



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
68.90	3741184	100.00	70.00	30792	0.82
218.95	2316800	61.93	219.95	86344	3.73
501.95	507008	13.55	502.95	45592	8.99

DAILY ANALYTICAL BATCH FORM

DAB 121624 - MSA

ANALYST REPORT

Method A1563_L Chemist JR

	NA	Passed	Out
Instrument Tune	☐	☒	☐
GC/MS BFBTune	☐	☒	☐
Continuing Calibration	☐	☒	☐
Instrument Blank	☐	☒	☐
LCS	☐	☒	☐
LCD	☐	☒	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 224435

Lab ID 1, ~~37~~ 37 300 ds

Processed

Continuing Calibration	☐
Method Blank	☑
Samples	☑
LCS/LCD	☐

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☑ Reviewed

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 1

Client: C.E. Schmidt
Client ID: T-401
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

25mL

Media: CAN
Can Number: 636
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:51
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 37

Client: C.E. Schmidt
Client ID: T-605
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 892
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 37

Client: C.E. Schmidt
Client ID: T-605
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 892
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
MSA TO-15	EPA TO-15 Full List 95 + Acrolein + TIC 10	30

Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**

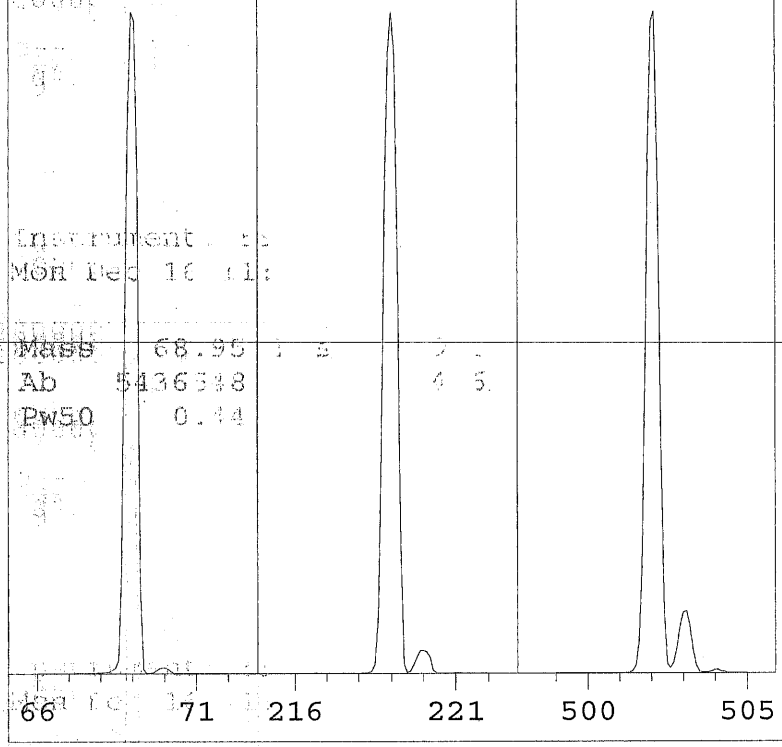
'$%	581	,167	7<3(	6'*	,'	)IDI,'	&DQ	'HVFUSWRQ	&LHQWRG &RPPHQW	9RO	7HHK 4XDO	0HWKRG &RPPHQW	4HGLW 3LRF
121624-MSA	01	MSA	STD			C12164A		ST62126		10	TR	A1563_L	
121624-MSA	02	MSA	STD			C12164B		ST62126		10	TR	A1563_L	
121624-MSA	03	MSA	SPK			QC12164A		ST63255		5	TR	A1563_L	
121624-MSA	04	MSA	SPK			QC12164B		ST63255		5	MM	A1563_L	
121624-MSA	05	MSA	SPK			QC12164C		ST63255		5	TR	A1563_L	
121624-MSA	06	MSA	BLK			B12164A		HUMID BLANK		500	TR	A1563_L	
121624-MSA	07	MSA	SPK			QC12164D		ST63255		5	TR	A1563_L	
121624-MSA	08	MSA	BLK			B12164B		HUMID BLANK		500	TR	A1563_L	
121624-MSA	09	MSA	BLK			B12164C		METHOD BLANK		1000	TR	A1563_L	
121624-MSA	10	MSA	BLK			B12164D		METHOD BLANK		1000	TR	A1563_L	
121624-MSA	11	MSA	SA	224435	37	2443537A	892	T-605	SCHMIDT	300	TR	A1563_L	
121624-MSA	12	MSA	SA	224435	01	2443501A	636	T-401	SCHMIDT	25	TR	A1563_L	
121624-MSA	13	MSA	SA	224435	37	2443537B	892	T-605	SCHMIDT	5	DA	A1563_L	
121624-MSA	14	MSA	SA	224462	01	2446201A	TB	V-INF-4A	ENVIRO	200	SS	A1563_L	
121624-MSA	15	MSA	SA	224440	01	2444001A	342	IM ULTRASOUND	TERRACON	500	SS	A1563_L	
121624-MSA	16	MSA	SA	224440	02	2444002A	934	MAIN ULTRASOUND	TERRACON	500	SS	A1563_L	
121624-MSA	17	MSA	SA	224440	03	2444003A	379	CCA ROOM	TERRACON	500	SS	A1563_L	
121624-MSA	18	MSA	SA	224440	03	2444003B	379	CCA ROOM	TERRACON	500	SS	A1563_L	
121624-MSA	19	MSA	SA	224459	01	2445901A	303	SG01-5-241202	EVREN	500	SS	A1563_L	

' $%	581	,167	7<3(	6' *	,'	) LOH ,'	&DQ	' HVFULSWRQ	&OHQW	9RO	7HFK	4 XDO	0 HWKRG	&RP P HQWV	4 HGLW	3 URF
121624-MSA	20	MSA	SA	224459	02	2445902A	320	SG02-5-241202	EVREN	500	SS	A1563_L				

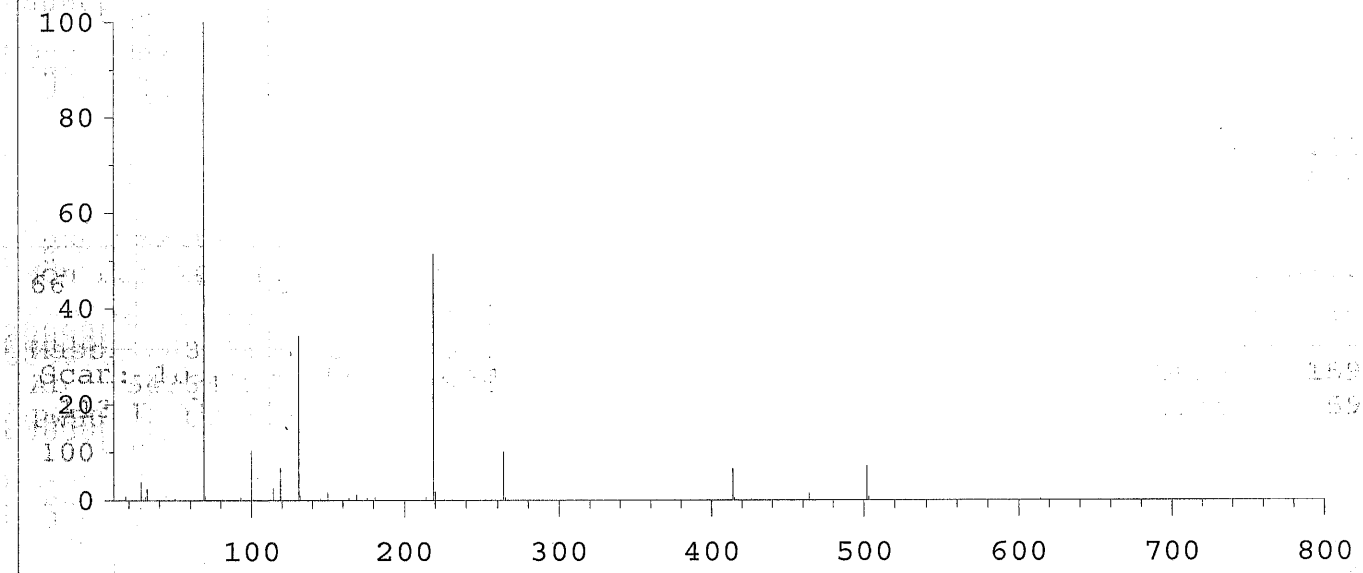
HP5970

Instrument: 5970 - MSA
Mon Dec 16 11:50:11 2024 C:\MSCHEM\1\5970\11064DFT.U

Mass	68.95	Mass	219.00	Mass	502.10		
Ab	5436548	%	64.66	%	7.15		
Pw50	0.44	Pw50	0.49	Pw50	0.45		
EMVolts	1800	AmuGain	159				
Xray	0.0	AmuOffs	59				
Emission	ON						
Samples	16	Repeller	10.20				
Averages	1	IonFocus	0.0				
StepSize	0.10	EntLens	50				
MassGain	-72						
MassOffs	13						



Scan: 10.00 - 800.00 Samples: 16 Thresh: 500 Step: 0.10
113 peaks Base: 69.00 Abundance: 3214848



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	3214848	100.00	70.00	27992	0.87
218.95	1651200	51.36	219.95	59032	3.58
501.95	230464	7.17	503.05	23120	10.03

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121624-MA1
Date: 12/16/24

		LCS Recovery		LCD Recovery		Spike Limit LCL	Spike Limit UCL	Duplicate	Duplicate Limit	
CAS#	Compound	%	Flag	%	Flag	%	%	%	%	Flag
75-01-4	Vinyl chloride	117		112		70	130	5	25	
75-35-4	1,1-Dichloroethene	73		93		70	130	24	25	
75-09-2	Dichloromethane	128		114		70	130	12	25	
75-34-3	1,1-Dichloroethane	87		103		70	130	17	25	
67-66-3	Chloroform	99		113		70	130	14	25	
71-55-6	1,1,1-Trichloroethane	78		95		70	130	19	25	
107-06-2	1,2-Dichloroethane	102		84		70	130	19	25	
71-43-2	Benzene	88		91		70	130	4	25	
56-23-5	Carbon tetrachloride	82		96		70	130	16	25	
79-01-6	Trichloroethene	102		100		70	130	2	25	
108-88-3	Toluene	112		113		70	130	0	25	
106-93-4	1,2-Dibromoethane	107		116		70	130	8	25	
127-18-4	Tetrachloroethene	91		98		70	130	7	25	
100-41-4	Ethylbenzene	98		93		70	130	5	25	
1330-20-7	m,p-Xylenes	97		89		70	130	8	25	
95-47-6	o-Xylene	97		89		70	130	8	25	
108-67-8	1,3,5-Trimethylbenzene	106		86		70	130	20	25	
95-63-6	1,2,4-Trimethylbenzene	103		100		70	130	3	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\QC12164A.D
Acq Time : 16 Dec 124 10:05 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 16 15:11 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.59	168	8186394	20.00 ppbV	-0.25
27) 1,4-Difluorobenzene	10.73	114	9794287	20.00 ppbV	-0.27
49) Chlorobenzene-d5	15.22	117	14971262	20.00 ppbV	-0.34
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.07	98	7140151	12.83 ppbV	128.31
67) Bromofluorobenzene	17.07	95	5248078	12.79 ppbV	63.97
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.45	85	1530103	4.07 ppbV #	97
3) Chloromethane	4.70	50	750340	5.07 ppbV	94
4) Freon 114	4.72	85	1671383	5.40 ppbV	95
5) Vinyl chloride	4.94	62	470669	3.30 ppbV m	98
6) 1,3-Butadiene	5.06	54	627591	6.31 ppbV #	22
7) Bromomethane	5.47	94	378155	3.09 ppbV	91
8) Chloroethane	5.63	64	231629	3.19 ppbV	98
9) Ethanol	5.64	46	80415	2.50 ppbV #	1
10) Trichlorofluoromethane	6.26	101	1195717	4.46 ppbV	97
11) Acetone	6.31	58	36900	0.41 ppbV #	74
12) 2-propanol	6.36	45	60511	0.22 ppbV #	62
13) 1,1-Dichloroethene	6.92	61	605723	2.11 ppbV #	78
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.20	84	426623	4.59 ppbV #	88
16) Carbon disulfide	7.44	76	57339	0.22 ppbV	96
17) trans-1,2-Dichloroethene	7.88	96	29282	0.25 ppbV #	69
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.21	63	820320	2.99 ppbV	98
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.94	61	581355	2.24 ppbV #	15
23) Bromochloromethane	9.20	49	47795	0.16 ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected	
25) cis-1,2-Dichloroethene	8.94	96	599834	4.58 ppbV #	75
26) Chloroform	9.20	83	881226	4.09 ppbV	98
28) 1,1,1-Trichloroethane	9.98	97	783010	2.96 ppbV #	89
29) 1,2-Dichloroethane	10.02	62	475296	1.74 ppbV m	95
30) Cyclohexane	10.73	56	70079	0.26 ppbV #	10
31) Benzene	10.43	78	1531190	2.61 ppbV #	74
32) Carbon tetrachloride	10.46	117	511172	3.53 ppbV	88
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.33	63	492303	2.45 ppbV	96
35) 1,4 Dioxane	11.52	88	68705	0.60 ppbV #	10
36) Trichloroethene	11.38	130	889174	4.02 ppbV #	81

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\QC12164A.D
Acq Time : 16 Dec 124 10:05 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 16 15:11 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Bromodichloromethane	0.00	83		Not Detected	
38)	Methyl methacrylate	0.00	69		Not Detected	
39)	4-Methyl-2-pentanone	0.00	58		Not Detected	
40)	cis-1,3-Dichloropropene	12.35	75	472130	2.10 ppbV #	87
42)	Toluene	13.19	91	2706738	4.47 ppbV	95
43)	trans-1,3-Dichloropropene	12.97	75	240948	1.02 ppbV #	70
44)	1,1,2-Trichloroethane	13.19	61	356796	2.31 ppbV #	1
45)	2-Hexanone	13.48	58	61096	0.27 ppbV #	80
46)	Dibromochloromethane	13.96	129	36098	0.14 ppbV	98
47)	1,2-Dibromoethane	14.27	107	749143	1.91 ppbV #	98
48)	Tetrachloroethene	14.35	166	776881	2.43 ppbV #	91
50)	Chlorobenzene	15.27	112	2534738	3.74 ppbV #	82
51)	Ethylbenzene	15.55	91	3928443	3.34 ppbV	97
52)	m,p-Xylenes	15.72	91	3020222	2.93 ppbV	88
53)	Styrene	16.26	104	2490161	3.68 ppbV #	85
54)	Bromoform	16.31	173	91411	0.21 ppbV	89
55)	o-Xylene	16.35	91	3086833	2.90 ppbV	89
56)	1,1,2,2-Tetrachloroethane	16.66	83	1805060	2.03 ppbV #	97
57)	4-Ethyltoluene	17.87	105	4643174	3.11 ppbV #	95
58)	1,3,5-Trimethylbenzene	17.87	105	4643174	3.38 ppbV #	74
59)	1,2,4-Trimethylbenzene	18.57	105	4437160	3.35 ppbV m	92
60)	1,3-Dichlorobenzene	18.99	146	2094173	2.26 ppbV	94
61)	Benzyl chloride	19.08	91	954259	1.66 ppbV #	95
62)	1,4-Dichlorobenzene	19.11	146	2120719	2.31 ppbV	92
63)	1,2-Dichlorobenzene	19.68	146	2275304	1.83 ppbV	94
64)	1,2,4-Trichlorobenzene	22.54	180	581914	1.89 ppbV #	1
65)	Naphthalene	22.83	128	407437	5.32 ppbV #	96
66)	Hexachlorobutadiene	23.14	225	978178	0.68 ppbV #	39
68)	1,1-Difluoroethane	0.00	51		Not Detected	

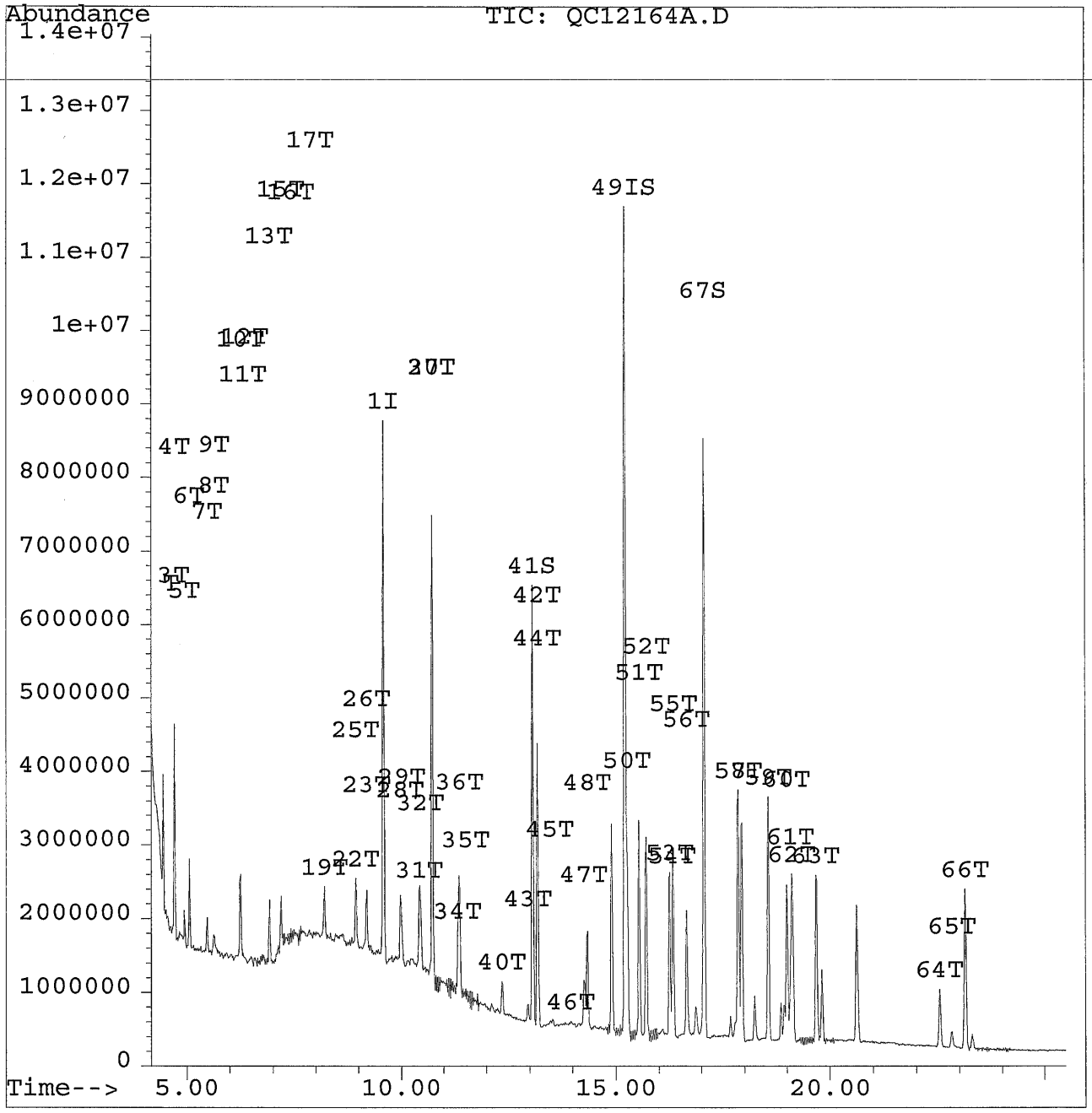
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\QC12164A.D
Acq Time : 16 Dec 124 10:05 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 16 15:11 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\QC12164B.D
Acq Time : 16 Dec 124 10:40 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 16 15:07 19124

Operator: MM
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.59	168	9000998	20.00 ppbV	-0.25
27) 1,4-Difluorobenzene	10.74	114	10373819	20.00 ppbV	-0.27
49) Chlorobenzene-d5	15.23	117	16167357	20.00 ppbV	-0.33
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.07	98	7311431	12.40 ppbV	124.04
67) Bromofluorobenzene	17.07	95	6238725	14.08 ppbV	70.42
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.45	85	1475319	3.57 ppbV #	95
3) Chloromethane	4.70	50	798019	4.90 ppbV	98
4) Freon 114	4.70	85	1648282	4.84 ppbV #	85
5) Vinyl chloride	4.94	62	543074	3.46 ppbV m	100
6) 1,3-Butadiene	5.06	54	680189	6.22 ppbV #	22
7) Bromomethane	5.46	94	433385	3.22 ppbV	85
8) Chloroethane	5.63	64	246674	3.09 ppbV	99
9) Ethanol	5.80	46	27641	0.78 ppbV #	1
10) Trichlorofluoromethane	6.24	101	1030492	3.50 ppbV	97
11) Acetone	6.33	58	21754	0.22 ppbV #	81
12) 2-propanol	0.00	45		Not Detected	
13) 1,1-Dichloroethene	6.91	61	523471	1.66 ppbV #	61
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.18	84	528882	5.17 ppbV #	88
16) Carbon disulfide	7.44	76	35823	0.12 ppbV #	90
17) trans-1,2-Dichloroethene	7.88	96	24746	0.19 ppbV #	66
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.21	63	761523	2.53 ppbV #	97
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.94	61	519510	1.82 ppbV #	15
23) Bromochloromethane	9.18	49	29791	0.09 ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected	
25) cis-1,2-Dichloroethene	8.94	96	651839	4.52 ppbV #	61
26) Chloroform	9.20	83	843255	3.56 ppbV	98
28) 1,1,1-Trichloroethane	9.98	97	682906	2.44 ppbV #	86
29) 1,2-Dichloroethane	10.02	62	610936	2.11 ppbV m	99
30) Cyclohexane	10.74	56	65337	0.23 ppbV #	10
31) Benzene	10.43	78	1557072	2.51 ppbV #	70
32) Carbon tetrachloride	10.46	117	463432	3.02 ppbV	98
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.33	63	450226	2.11 ppbV	96
35) 1,4 Dioxane	11.52	88	20381	0.17 ppbV #	10
36) Trichloroethene	11.37	130	956446	4.08 ppbV #	84

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\QC12164B.D
Acq Time : 16 Dec 124 10:40 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 16 15:07 19124

Operator: MM
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Bromodichloromethane	0.00	83		Not Detected	
38) Methyl methacrylate	0.00	69		Not Detected	
39) 4-Methyl-2-pentanone	0.00	58		Not Detected	
40) cis-1,3-Dichloropropene	12.36	75	426575	1.79 ppbV #	86
42) Toluene	13.19	91	2857487	4.45 ppbV	95
43) trans-1,3-Dichloropropene	12.95	75	203007	0.81 ppbV #	81
44) 1,1,2-Trichloroethane	13.19	61	348412	2.13 ppbV #	1
45) 2-Hexanone	13.52	58	20290	0.08 ppbV #	68
46) Dibromochloromethane	0.00	129		Not Detected	
47) 1,2-Dibromoethane	14.27	107	732538	1.76 ppbV #	97
48) Tetrachloroethene	14.34	166	769010	2.27 ppbV #	93
50) Chlorobenzene	15.28	112	2757097	3.76 ppbV #	83
51) Ethylbenzene	15.55	91	4463051	3.52 ppbV	97
52) m,p-Xylenes	15.70	91	3536135	3.17 ppbV	90
53) Styrene	16.25	104	3038233	4.16 ppbV #	88
54) Bromoform	16.32	173	35040	0.07 ppbV #	83
55) o-Xylene	16.34	91	3629306	3.16 ppbV	90
56) 1,1,2,2-Tetrachloroethane	16.66	83	2194140	2.29 ppbV #	95
57) 4-Ethyltoluene	17.85	105	6152066	3.82 ppbV #	96
58) 1,3,5-Trimethylbenzene	17.85	105	6152066	4.14 ppbV #	70
59) 1,2,4-Trimethylbenzene	18.57	105	4951163	3.46 ppbV m	92
60) 1,3-Dichlorobenzene	19.00	146	2774065	2.77 ppbV	95
61) Benzyl chloride	19.08	91	221726	0.36 ppbV #	88
62) 1,4-Dichlorobenzene	19.12	146	2713300	2.74 ppbV #	94
63) 1,2-Dichlorobenzene	19.68	146	2979956	2.22 ppbV	92
64) 1,2,4-Trichlorobenzene	22.55	180	247333	0.75 ppbV #	1
65) Naphthalene	22.84	128	125396	1.52 ppbV #	92
66) Hexachlorobutadiene	23.15	225	710484	0.46 ppbV #	39
68) 1,1-Difluoroethane	0.00	51		Not Detected	

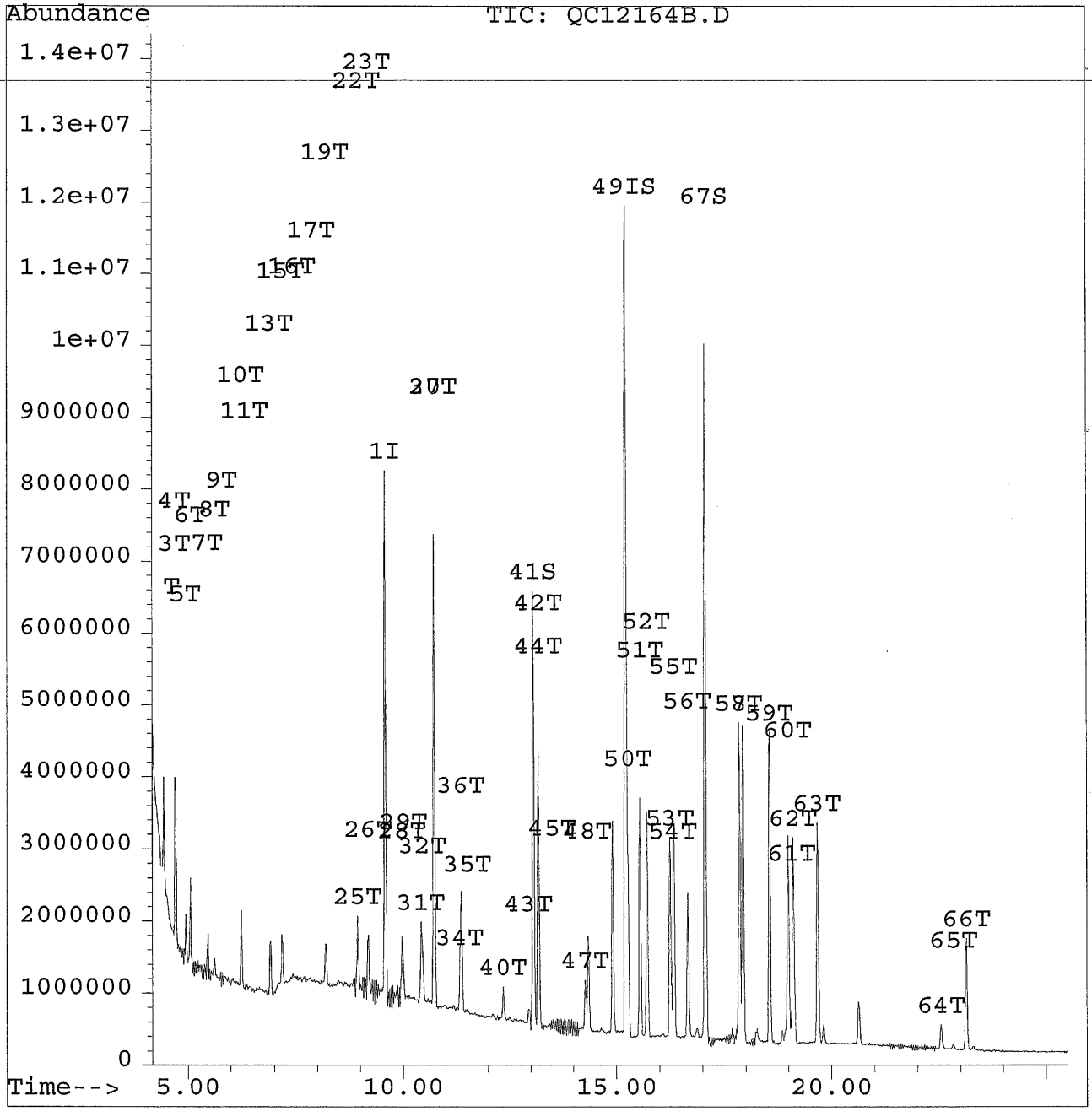
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\QC12164B.D
Acq Time : 16 Dec 124 10:40 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 16 15:07 19124

Operator: MM
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



Sample Data Packages

SDG Number 224435

Lab Id Number 1

Client ID T-401

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 01**

File Name: 2443501A.D
Description: T-401
Canister: 636
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 08:51
Date Analyzed: 12/10/24 **Time:** 18:22
Can Dilution Factor: 1.25
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.63	1.04	ND	3.09	5.16	ND	
67-56-1	Methanol	2.08	2.50	6.71	2.73	3.28	8.79	
74-87-3	Chloromethane	0.63	1.04	3.86	1.29	2.15	7.99	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.04	ND	2.92	7.29	ND	
75-01-4	Vinyl chloride	0.21	1.04	ND	0.54	2.67	ND	
106-99-0	1,3-Butadiene	0.21	1.04	ND	0.46	2.31	ND	
74-83-9	Bromomethane	0.42	1.04	5.61	1.62	4.05	21.79	
75-00-3	Chloroethane	0.42	1.04	1.78	1.10	2.75	4.70	
64-17-5	Ethanol	2.08	13.38	2.12	3.93	25.25	4.00	J
107-02-8	Acrolein	0.42	1.25	2.16	0.96	2.87	4.96	
75-69-4	Trichlorofluoromethane	0.42	1.04	ND	2.34	5.86	ND	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.21	27.28	2.05	12.82	67.15	
75-65-0	t-Butyl alcohol	0.42	4.17	ND	1.26	12.64	ND	
4227-95-6	Methyl iodide	0.42	1.25	ND	2.44	7.32	ND	
75-35-4	1,1-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
107-13-1	Acrylonitrile	0.83	1.25	ND	1.81	2.72	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.04	ND	1.60	7.99	ND	
107-05-1	Allyl chloride	0.21	4.17	ND	0.65	13.05	ND	
75-09-2	Methylene chloride	0.21	1.04	1.21	0.72	3.62	4.20	
75-15-0	Carbon disulfide	0.42	1.04	51.56	1.30	3.25	160.70	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.83	3.31	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.83	ND	1.50	3.01	ND	
107-12-0	Propionitrile	1.04	1.67	ND	2.35	3.76	ND	
75-34-3	1,1-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.04	ND	1.74	4.36	ND	
108-05-4	Vinyl acetate	0.21	4.17	ND	0.73	14.69	ND	
108-20-3	Diisopropyl ether	0.42	2.50	ND	1.74	10.46	ND	
110-54-3	Hexane	0.42	1.04	11.36	1.47	3.68	40.12	
126-98-7	Methacrylonitrile	0.42	1.04	ND	1.15	2.86	ND	
141-78-6	Ethyl acetate	0.42	1.04	ND	1.50	3.76	ND	
74-97-5	Bromochloromethane	0.21	1.04	ND	1.10	5.52	ND	
96-33-3	Methyl acrylate	0.42	2.08	ND	1.47	7.35	ND	
109-99-9	Tetrahydrofuran	0.21	1.25	21.58	0.62	3.69	63.71	
78-83-1	Isobutyl alcohol	0.83	3.33	ND	2.53	10.12	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
594-20-7	2,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
67-66-3	Chloroform	0.21	1.04	0.32	1.02	5.09	1.58	J
71-55-6	1,1,1-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
107-06-2	1,2-Dichloroethane	0.21	1.04	12.20	0.84	4.22	49.45	
563-58-6	1,1-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
110-82-7	Cyclohexane	0.21	1.04	10.43	0.72	3.59	35.98	
71-43-2	Benzene	1.46	2.08	8.58	4.66	6.66	27.44	
56-23-5	Carbon tetrachloride	0.21	1.04	ND	1.31	6.56	ND	
994-05-8	t-Amyl methyl ether	0.42	2.08	ND	1.74	8.72	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.04	ND	0.97	4.87	ND	
142-82-5	n-Heptane	0.42	1.04	22.48	1.71	4.27	92.27	
78-87-5	1,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
123-91-1	1,4 Dioxane	0.42	2.08	ND	1.50	7.52	ND	
74-95-3	Dibromomethane	0.21	1.04	ND	1.48	7.42	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.04	ND	0.56	5.61	ND	
75-27-4	Bromodichloromethane	0.21	1.04	ND	1.40	6.99	ND	
80-62-6	Methyl methacrylate	0.42	1.04	ND	1.71	4.27	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.33	4.81	1.71	13.68	19.72	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
108-88-3	Toluene	0.83	1.04	72.89	3.14	3.93	274.95	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
97-63-2	Ethyl methacrylate	0.42	1.04	ND	1.95	4.87	ND	
591-78-6	2-Hexanone	0.42	3.33	1.79	1.71	13.68	7.34	J
142-28-9	1,3-Dichloropropane	0.21	2.92	ND	0.96	13.50	ND	
111-65-9	Octane	0.42	1.04	10.65	1.95	4.87	49.81	
124-48-1	Dibromochloromethane	0.42	1.04	ND	3.55	8.89	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.04	ND	3.21	8.02	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.04	2.51	0.71	7.07	17.07	
108-90-7	Chlorobenzene	0.42	1.04	ND	1.92	4.80	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.04	ND	2.86	7.16	ND	
100-41-4	Ethylbenzene	0.42	1.04	33.77	1.81	4.53	146.88	
1330-20-7	m,p-Xylenes	0.42	1.04	59.67	1.81	4.53	259.51	
111-84-2	Nonane	0.42	1.04	16.17	2.19	5.47	84.97	
100-42-5	Styrene	0.63	1.04	5.74	2.67	4.45	24.48	
75-25-2	Bromoform	0.42	1.04	ND	4.31	10.78	ND	
95-47-6	o-Xylene	0.42	1.04	24.38	1.81	4.53	106.02	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.08	ND	5.73	14.32	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.50	ND	5.03	15.09	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.50	ND	4.27	12.80	ND	
103-65-1	n-Propylbenzene	0.83	2.92	ND	4.10	14.36	ND	
98-82-8	Isopropylbenzene	0.83	2.92	1.35	4.10	14.36	6.66	J
622-96-8	4-Ethyltoluene	0.83	6.67	2.52	4.10	32.82	12.39	J
108-67-8	1,3,5-Trimethylbenzene	0.83	3.75	1.91	4.10	18.46	9.39	J
124-18-5	Decane	0.83	2.50	7.40	4.86	14.57	43.15	
98-06-6	tert-butyl benzene	0.83	2.50	ND	4.58	13.74	ND	
95-63-6	1,2,4-Trimethylbenzene	0.83	3.75	3.28	4.10	18.46	16.12	J
538-93-2	i-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
135-98-8	sec-butylbenzene	0.83	2.92	ND	4.58	16.03	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
541-73-1	1,3-Dichlorobenzene	0.83	3.33	ND	5.02	20.07	ND	
99-87-6	Isopropyltoluene	0.83	2.50	11.17	4.58	13.74	61.42	
100-44-7	Benzyl chloride	0.83	2.08	ND	4.32	10.80	ND	
106-46-7	1,4-Dichlorobenzene	0.83	2.08	ND	5.02	12.54	ND	
104-51-8	n-Butylbenzene	0.83	2.50	1.17	4.58	13.74	6.42	J
95-50-1	1,2-Dichlorobenzene	0.83	2.92	ND	5.02	17.56	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.25	2.92	ND	12.10	28.23	ND	
120-82-1	1,2,4-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
91-20-3	Naphthalene	2.08	0.42	ND	10.94	2.19	ND	
87-61-6	1,2,3-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
87-68-3	Hexachlorobutadiene	1.04	1.25	ND	11.13	13.35	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	128	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 01**

File Name:	2443501A.D	**Date Sampled:**	11/19/24	**Time:**	08:51
Description:	T-401	**Date Analyzed:**	12/16/24	**Time:**	16:20
Canister:	636	**Can Dilution Factor:**	1.25		
QC_Batch:	121624-MA1	**Air Volume:**	25 ml		

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	5.00	12.50	418.33	8.62	21.54	720.95	
67-64-1	Acetone	25.00	30.00	1,410.81	59.49	71.38	3,357.01	
78-93-3	2-Butanone (MEK)	5.00	15.00	2,687.69	14.76	44.29	7,936.36	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	113	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 01

File Name: 224435
Descriptio T-401
Canister: 636
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 08:51
Date Analyzed: 12/10/24 **Time:** 18:22
Can Dilution Factor: 1.25
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
2-Methyl propane	2.92	6.25	20.46	11.95	25.60	83.79
Silane	2.92	6.25	18.29	11.95	25.60	74.91
Dimethyl disulfide	2.92	6.25	17.42	11.95	25.60	71.33
Trimethyl 2-hexene	2.92	6.25	11.46	11.95	25.60	46.93
a-Pinene	2.92	6.25	95.17	11.95	25.60	389.75
Octamethylcyclotetrasilo	2.92	6.25	23.92	11.95	25.60	97.95
3-Carene	2.92	6.25	19.21	11.95	25.60	78.67
D-limonene	2.92	6.25	70.58	11.95	25.60	289.07

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**01**		
File Name:	2443501A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**8:51**
Sample ID:	T-401	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**18:22**
Anal Date:	10 Dec 124 6:22 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15FL_K.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**636**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.25**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	28.498	4.41	42.00	6281061
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.610	4.86	31.00	390768
74-87-3	Chloromethane	5	TRG	0.927	4.77	50.00	243391
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	1.345	5.56	94.00	368351
75-00-3	Chloroethane	10	TRG	0.427	5.72	64.00	61718
64-17-5	Ethanol	11	TRG	0.508	5.72	46.00	35283
107-02-8	Acrolein	12	TRG	0.518	6.32	56.00	49736
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	38.792	6.42	58.00	8837714
67-63-0	2-propanol (isopropylalcoh	15	TRG	6.548	6.45	45.00	2888600
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.290	7.35	84.00	72419
75-15-0	Carbon disulfide	23	TRG	12.375	7.61	76.00	9112060
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	65.705	8.75	72.00	9778591
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	2.727	8.86	57.00	1169148
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	5.178	9.72	72.00	798242
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.078	9.42	83.00	**39344**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	2.927	10.27	61.95	1011913
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	2.504	10.74	56.00	971984
71-43-2	Benzene	47	TRG	2.059	10.70	78.00	1905603
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	5.396	11.48	71.00	1595983
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	1.153	12.55	58.00	318683
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	17.494	13.50	91.00	22762779
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.429	13.79	58.00	175070
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	2.556	14.04	85.00	1293584
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.603	14.69	166.00	589641
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	8.105	15.90	106	14374547
1330-20-7	m,p-Xylenes	75	TRG	14.320	16.06	91.00	20706415
111-84-2	Nonane	76	TRG	3.881	16.43	57.00	3282733
100-42-5	Styrene	77	TRG	1.377	16.61	104.00	1601279
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	5.850	16.33	91.00	9209652
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.325	18.23	105.00	1713973
622-96-8	4-Ethyltoluene	85	TRG	0.604	18.23	105.00	1334964
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.458	18.31	105.00	1046264
124-18-5	Decane	87	TRG	1.777	18.60	57.00	2641938
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.786	18.95	105.00	1425205
538-93-2	i-Butylbenzene	90	TRG	0.160	19.24	91.00	417193
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	2.682	19.53	119.00	7497248
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.280	20.20	91.00	746681
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.29	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**22425131**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**23311182**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**23780486**
2037-26-5	Toluene-d8	60	SURR	12.840	13.40	98.00	**17770567**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 01
File Name: 2443501A.D
Run Method: A1563_L.M
Can Factor: 1.25
Air Volume: 300.0 ml
Can/Tube Number: 636
Dilution Factor: 0.3750
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3750
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	28.50	118.74	204.63	118.74	204.63	204.63	204.63	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.61	6.71	8.79	6.71	8.79	8.79	8.79	**0.500**	**0.600**
Chloromethane	50.5	0.93	3.86	7.99	3.86	7.99	7.99	7.99	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	1.35	5.61	21.79	5.61	21.79	21.79	21.79	**0.100**	**0.250**
Chloroethane	64.5	0.43	1.78	4.70	1.78	4.70	4.70	4.70	**0.100**	**0.250**
Ethanol	46.1	0.51	2.12	4.00	2.12	4.00	4.00	4.00	**0.500**	**3.210**
Acrolein	56.1	0.52	2.16	4.96	2.16	4.96	4.96	4.96	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	38.79	161.63	384.60	161.63	384.60	384.60	384.60	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	6.55	27.28	67.15	27.28	67.15	67.15	67.15	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.29	1.21	4.20	1.21	4.20	4.20	4.20	**0.050**	**0.250**
Carbon disulfide	76.1	12.37	51.56	160.70	51.56	160.70	160.70	160.70	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	65.71	273.77	808.41	273.77	808.41	808.41	808.41	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	2.73	11.36	40.12	11.36	40.12	40.12	40.12	**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	5.18	21.58	63.71	21.58	63.71	63.71	63.71	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.08	0.32	1.58	0.32	1.58	1.58	1.58	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	2.93	12.20	49.45	12.20	49.45	49.45	49.45	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	2.50	10.43	35.98	10.43	35.98	35.98	35.98	**0.050**	**0.250**
Benzene	78.1	2.06	8.58	27.44	8.58	27.44	27.44	27.44	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	5.40	22.48	92.27	22.48	92.27	92.27	92.27	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	1.15	4.81	19.72	4.81	19.72	19.72	19.72	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	17.49	72.89	274.95	72.89	274.95	274.95	274.95	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.43	1.79	7.34	1.79	7.34	7.34	7.34	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	2.56	10.65	49.81	10.65	49.81	49.81	49.81	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.60	2.51	17.07	2.51	17.07	17.07	17.07	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	8.10	33.77	146.88	33.77	146.88	146.88	146.88	**0.100**	**0.250**
m,p-Xylenes	106.2	14.32	59.67	259.51	59.67	259.51	259.51	259.51	**0.100**	**0.250**
Nonane	128.3	3.88	16.17	84.97	16.17	84.97	84.97	84.97	**0.100**	**0.250**
Styrene	104.2	1.38	5.74	24.48	5.74	24.48	24.48	24.48	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	5.85	24.38	106.02	24.38	106.02	106.02	106.02	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.32	1.35	6.66	1.35	6.66	6.66	6.66	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.60	2.52	12.39	2.52	12.39	12.39	12.39	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.46	1.91	9.39	1.91	9.39	9.39	9.39	**0.200**	**0.900**
Decane	142.3	1.78	7.40	43.15	7.40	43.15	43.15	43.15	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.79	3.28	16.12	3.28	16.12	16.12	16.12	**0.200**	**0.900**
i-Butylbenzene	134.2	0.16	0.67	3.67	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	2.68	11.17	61.42	11.17	61.42	61.42	61.42	**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.28	1.17	6.42	1.17	6.42	6.42	6.42	**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.84	128	128	128	128	128	128	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.42	0.72	1.04	1.80				=	E	Y	118.74	204.63
0.63	3.09	1.04	5.16	U	ND		ND		Y	0.00	0.00
2.08	2.73	2.50	3.28				=		Y	6.71	8.79
0.63	1.29	1.04	2.15				=		Y	3.86	7.99
0.42	2.92	1.04	7.29	U	ND		ND		Y	0.00	0.00
0.21	0.54	1.04	2.67	U	ND		ND		Y	0.00	0.00
0.21	0.46	1.04	2.31	U	ND		ND		Y	0.00	0.00
0.42	1.62	1.04	4.05				=		Y	5.61	21.79
0.42	1.10	1.04	2.75				=		Y	1.78	4.70
2.08	3.93	13.38	25.25	J	J		=		Y	2.12	4.00
0.42	0.96	1.25	2.87				=		Y	2.16	4.96
0.42	2.34	1.04	5.86	U	ND		ND		Y	0.00	0.00
2.08	4.96	2.50	5.95				=	E	Y	161.63	384.60
0.83	2.05	5.21	12.82				=		Y	27.28	67.15
0.42	1.26	4.17	12.64	U	ND		ND		Y	0.00	0.00
0.42	2.44	1.25	7.32	U	ND		ND		Y	0.00	0.00
0.21	0.83	1.04	4.13	U	ND		ND		Y	0.00	0.00
0.83	1.81	1.25	2.72	U	ND		ND		Y	0.00	0.00
0.21	1.60	1.04	7.99	U	ND		ND		Y	0.00	0.00
0.21	0.65	4.17	13.05	U	ND		ND		Y	0.00	0.00
0.21	0.72	1.04	3.62				=		Y	1.21	4.20
0.42	1.30	1.04	3.25				=		Y	51.56	160.70
0.21	0.83	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.42	1.50	0.83	3.01	U	ND		ND		Y	0.00	0.00
1.04	2.35	1.67	3.76	U	ND		ND		Y	0.00	0.00
0.21	0.84	1.04	4.22	U	ND		ND		Y	0.00	0.00
0.42	1.74	1.04	4.36	U	ND		ND		Y	0.00	0.00
0.21	0.73	4.17	14.69	U	ND		ND		Y	0.00	0.00
0.42	1.23	1.25	3.69				=	E	Y	273.77	808.41
0.42	1.74	2.50	10.46	U	ND		ND		Y	0.00	0.00
0.42	1.47	1.04	3.68				=		Y	11.36	40.12
0.42	1.15	1.04	2.86	U	ND		ND		Y	0.00	0.00
0.42	1.50	1.04	3.76	U	ND		ND		Y	0.00	0.00
0.21	1.10	1.04	5.52	U	ND		ND		Y	0.00	0.00

0.42	1.47	2.08	7.35	U	ND	ND	Y	0.00	0.00
0.21	0.62	1.25	3.69			=	Y	21.58	63.71
0.83	2.53	3.33	10.12	U	ND	ND	Y	0.00	0.00
0.21	0.83	1.04	4.13	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.04	4.82	U	ND	ND	Y	0.00	0.00
0.21	1.02	1.04	5.09	J	J	=	Y	0.32	1.58
0.21	1.14	1.04	5.69	U	ND	ND	Y	0.00	0.00
0.21	0.84	1.04	4.22			=	Y	12.20	49.45
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.21	0.72	1.04	3.59			=	Y	10.43	35.98
1.46	4.66	2.08	6.66			=	Y	8.58	27.44
0.21	1.31	1.04	6.56	U	ND	ND	Y	0.00	0.00
0.42	1.74	2.08	8.72	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	1.71	1.04	4.27			=	Y	22.48	92.27
0.21	0.96	1.04	4.82	U	ND	ND	Y	0.00	0.00
0.42	1.50	2.08	7.52	U	ND	ND	Y	0.00	0.00
0.21	1.48	1.04	7.42	U	ND	ND	Y	0.00	0.00
0.10	0.56	1.04	5.61	U	ND	ND	Y	0.00	0.00
0.21	1.40	1.04	6.99	U	ND	ND	Y	0.00	0.00
0.42	1.71	1.04	4.27	U	ND	ND	Y	0.00	0.00
0.42	1.71	3.33	13.68			=	Y	4.81	19.72
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.83	3.14	1.04	3.93			=	Y	72.89	274.95
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.21	1.14	1.04	5.69	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	1.71	3.33	13.68	J	J	=	Y	1.79	7.34
0.21	0.96	2.92	13.50	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.04	4.87			=	Y	10.65	49.81
0.42	3.55	1.04	8.89	U	ND	ND	Y	0.00	0.00
0.42	3.21	1.04	8.02	U	ND	ND	Y	0.00	0.00
0.10	0.71	1.04	7.07			=	Y	2.51	17.07
0.42	1.92	1.04	4.80	U	ND	ND	Y	0.00	0.00
0.42	2.86	1.04	7.16	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53			=	Y	33.77	146.88
0.42	1.81	1.04	4.53			=	Y	59.67	259.51
0.42	2.19	1.04	5.47			=	Y	16.17	84.97
0.63	2.67	1.04	4.45			=	Y	5.74	24.48
0.42	4.31	1.04	10.78	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53			=	Y	24.38	106.02
0.83	5.73	2.08	14.32	U	ND	ND	Y	0.00	0.00
0.83	5.03	2.50	15.09	U	ND	ND	Y	0.00	0.00
0.83	4.27	2.50	12.80	U	ND	ND	Y	0.00	0.00
0.83	4.10	2.92	14.36	U	ND	ND	Y	0.00	0.00
0.83	4.10	2.92	14.36	J	J	=	Y	1.35	6.66
0.83	4.10	6.67	32.82	J	J	=	Y	2.52	12.39
0.83	4.10	3.75	18.46	J	J	=	Y	1.91	9.39
0.83	4.86	2.50	14.57			=	Y	7.40	43.15
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	4.10	3.75	18.46	J	J	=	Y	3.28	16.12
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00

0.83	4.58	2.92	16.03	U	ND	ND	Y	0.00	0.00
0.83	5.02	3.33	20.07	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74			=	Y	11.17	61.42
0.83	4.32	2.08	10.80	U	ND	ND	Y	0.00	0.00
0.83	5.02	2.08	12.54	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	J	J	=	Y	1.17	6.42
0.83	5.02	2.92	17.56	U	ND	ND	Y	0.00	0.00
1.25	12.10	2.92	28.23	U	ND	ND	Y	0.00	0.00
1.25	9.29	2.08	15.48	U	ND	ND	Y	0.00	0.00
2.08	10.94	0.42	2.19	U	ND	ND	Y	0.00	0.00
1.25	9.29	2.08	15.48	U	ND	ND	Y	0.00	0.00
1.04	11.13	1.25	13.35	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 01
Sample ID: T-401

Can Factor: 1.25
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	2-Methyl	**4.62**	**47**	**4.91**	**100**	TIC	20.5	83.8	20.46
	Silane	10.55	38	**4.39**	**100**	TIC	18.3	74.9	18.29
	Dimethyl d	12.61	91	**4.18**	**100**	TIC	17.4	71.3	17.42
	Trimethyl	16.67	49	**2.75**	**100**	TIC	11.5	46.9	11.46
	a-Pinene	17.35	96	**22.84**	**100**	TIC	95.2	389.8	95.17
	Octameth	17.68	37	**5.74**	**100**	TIC	23.9	98.0	23.92
	3-Carene	18.64	93	**4.61**	**100**	TIC	19.2	78.7	19.21
	D-limonen	19.28	90	**16.94**	**100**	TIC	70.6	289.1	70.58
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 276.5 1132.4

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
83.79	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
74.91	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
71.33	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
46.93	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
389.75	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
97.95	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
78.67	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
289.07	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**01**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.25
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	6281061	20.0	22425131	32.887	137.03	236.15
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	22425131	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	390768	20.0	22425131	1.610	6.71	8.79
5	Chloromethane	PFB	TRG	50.5	0.234	243391	20.0	22425131	0.927	3.86	7.99
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	22425131	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	22425131	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	22425131	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	368351	20.0	22425131	1.345	5.61	21.79
10	Chloroethane	PFB	TRG	64.5	0.129	61718	20.0	22425131	0.427	1.78	4.70
11	Ethanol	PFB	TRG	46.1	0.062	35283	20.0	22425131	0.508	2.12	4.00
12	Acrolein	PFB	TRG	56.1	0.086	49736	20.0	22425131	0.518	2.16	4.96
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	22425131	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	8837714	20.0	22425131	38.792	161.63	384.60
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	2888600	20.0	22425131	6.548	27.28	67.15
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	22425131	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	22425131	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	22425131	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	22425131	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	22425131	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	22425131	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	72419	20.0	22425131	0.290	1.21	4.20
23	Carbon disulfide	PFB	TRG	76.1	0.657	9112060	20.0	22425131	12.375	51.56	160.70
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	22425131	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	22425131	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	22425131	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	22425131	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	22425131	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	22425131	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	9778591	20.0	22425131	65.705	273.77	808.41
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	22425131	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	1169148	20.0	22425131	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	22425131	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	22425131	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	22425131	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	22425131	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	798242	20.0	22425131	5.178	21.58	63.71
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	22425131	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	22425131	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	22425131	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	39344	20.0	22425131	0.078	0.32	1.58
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	23311182	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	1011913	20.0	23311182	2.927	12.20	49.45
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	23311182	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	971984	20.0	23311182	2.504	10.43	35.98
47	Benzene	14DF	TRG	78.1	0.794	1905603	20.0	23311182	2.059	8.58	27.44
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	23311182	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	23311182	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	23311182	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	1595983	20.0	23311182	5.364	22.35	91.72
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	23311182	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	23311182	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	23311182	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	23311182	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	23311182	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	23311182	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	318683	20.0	23311182	1.153	4.81	19.72
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	23311182	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	22762779	20.0	23311182	17.494	72.89	274.95
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	23311182	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	23311182	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	23311182	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	175070	20.0	23311182	0.429	1.79	7.34
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	23311182	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	1293584	20.0	23311182	2.556	10.65	49.81
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	23311182	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	23311182	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	589641	20.0	23311182	0.603	2.51	17.07
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	23780486	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	23780486	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	14374547	20.0	23780486	8.105	33.77	146.88
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	20706415	20.0	23780486	14.320	59.67	259.51
76	Nonane	d5CB	TRG	128.3	0.711	3282733	20.0	23780486	3.881	16.17	84.97
77	Styrene	d5CB	TRG	104.2	0.978	1601279	20.0	23780486	1.467	6.11	26.09
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	23780486	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	9209652	20.0	23780486	5.850	24.38	106.02
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	23780486	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	23780486	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	23780486	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	23780486	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	1713973	20.0	23780486	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	1334964	20.0	23780486	0.604	2.52	12.39
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	1046264	20.0	23780486	0.458	1.91	9.39
87	Decane	d5CB	TRG	142.3	1.250	2641938	20.0	23780486	1.777	7.40	43.15
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	23780486	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	1425205	20.0	23780486	0.786	3.28	16.12
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	417193	20.0	23780486	0.160	0.67	3.67
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	23780486	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	23780486	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	7497248	20.0	23780486	2.682	11.17	61.42
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	23780486	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	23780486	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	746681	20.0	23780486	0.280	1.17	6.42
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	23780486	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	23780486	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	23780486	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	23780486	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	23780486	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	23780486	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	22425131	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	23311182	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	23780486	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	17770567	10.0		12.840	128.40	128

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML
Quant Time: Dec 30 14:24 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_K.M
Title : EPA TO-15
Last Update : Mon Mar 18 14:03:26 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.54	168	22425131	20.00	ppbV		-0.28
42) 1,4-Difluorobenzene	10.70	114	23311182	20.00	ppbV		-0.30
71) Chlorobenzene-d5	15.22	117	23780486	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.06	98	17770567	12.84	ppbV		128.40
Target Compounds							Qvalue
2) Propylene	4.23	42	6281061	28.50	ppbV	m	48
4) Methanol	4.70	31	390768	1.61	ppbV	#	96
5) Chloromethane	4.57	50	243391	0.93	ppbV	m	91
9) Bromomethane	5.32	94	368351	1.35	ppbV	m	86
10) Chloroethane	5.49	64	61718	0.43	ppbV		98
11) Ethanol	5.54	46	35283	0.51	ppbV		88
12) Acrolein	6.09	56	49736	0.52	ppbV	m	65
14) Acetone	6.19	58	8837714	38.79	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.24	45	2888600	6.55	ppbV	#	90
22) Methylene chloride	7.08	84	72419	0.29	ppbV	#	81
23) Carbon disulfide	7.34	76	9112060	12.37	ppbV	#	82
30) 2-Butanone (MEK)	8.52	72	9778591	65.71	ppbV	#	67
32) Hexane	8.52	57	1169148	2.73	ppbV	m	1
37) Tetrahydrofuran	9.42	72	798242	5.18	ppbV		97
41) Chloroform	9.13	83	39344	0.08	ppbV		85
44) 1,2-Dichloroethane	9.97	62	1011913	2.93	ppbV		96
46) Cyclohexane	10.41	56	971984	2.50	ppbV	#	94
47) Benzene	10.38	78	1905603	2.06	ppbV	m	77
51) n-Heptane	11.16	71	1595983	5.40	ppbV	m	74
58) 4-Methyl-2-pentanone (MIBK	12.22	58	318683	1.15	ppbV	#	83
61) Toluene	13.18	91	22762779	17.49	ppbV	#	76
65) 2-Hexanone	13.47	58	175070	0.43	ppbV	#	94
67) Octane	13.70	85	1293584	2.56	ppbV	#	92
70) Tetrachloroethene (PCE)	14.34	166	589641	0.60	ppbV	#	85
74) Ethylbenzene	15.55	91	14374547	8.10	ppbV	#	87
75) m,p-Xylenes	15.72	91	20706415	14.32	ppbV	#	64
76) Nonane	16.08	57	3282733	3.88	ppbV	#	73
77) Styrene	16.25	104	1601279	1.38	ppbV	m	78
79) o-Xylene	16.33	91	9209652	5.85	ppbV	#	87
84) Isopropylbenzene	17.80	105	1713973	0.32	ppbV	m	79
85) 4-Ethyltoluene	17.80	105	1334964	0.60	ppbV	m	85
86) 1,3,5-Trimethylbenzene	17.93	105	1046264	0.46	ppbV	#	79
87) Decane	18.24	57	2641938	1.78	ppbV	#	67
89) 1,2,4-Trimethylbenzene	18.57	105	1425205	0.79	ppbV	#	82
90) i-Butylbenzene	18.86	91	417193	0.16	ppbV		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML
Quant Time: Dec 30 14:24 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_K.M
Title : EPA T0-15
Last Update : Mon Mar 18 14:03:26 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
93) Isopropyltoluene	19.15	119	7497248	2.68	ppbV	#	91
96) n-Butylbenzene	19.81	91	746681	0.28	ppbV	#	97

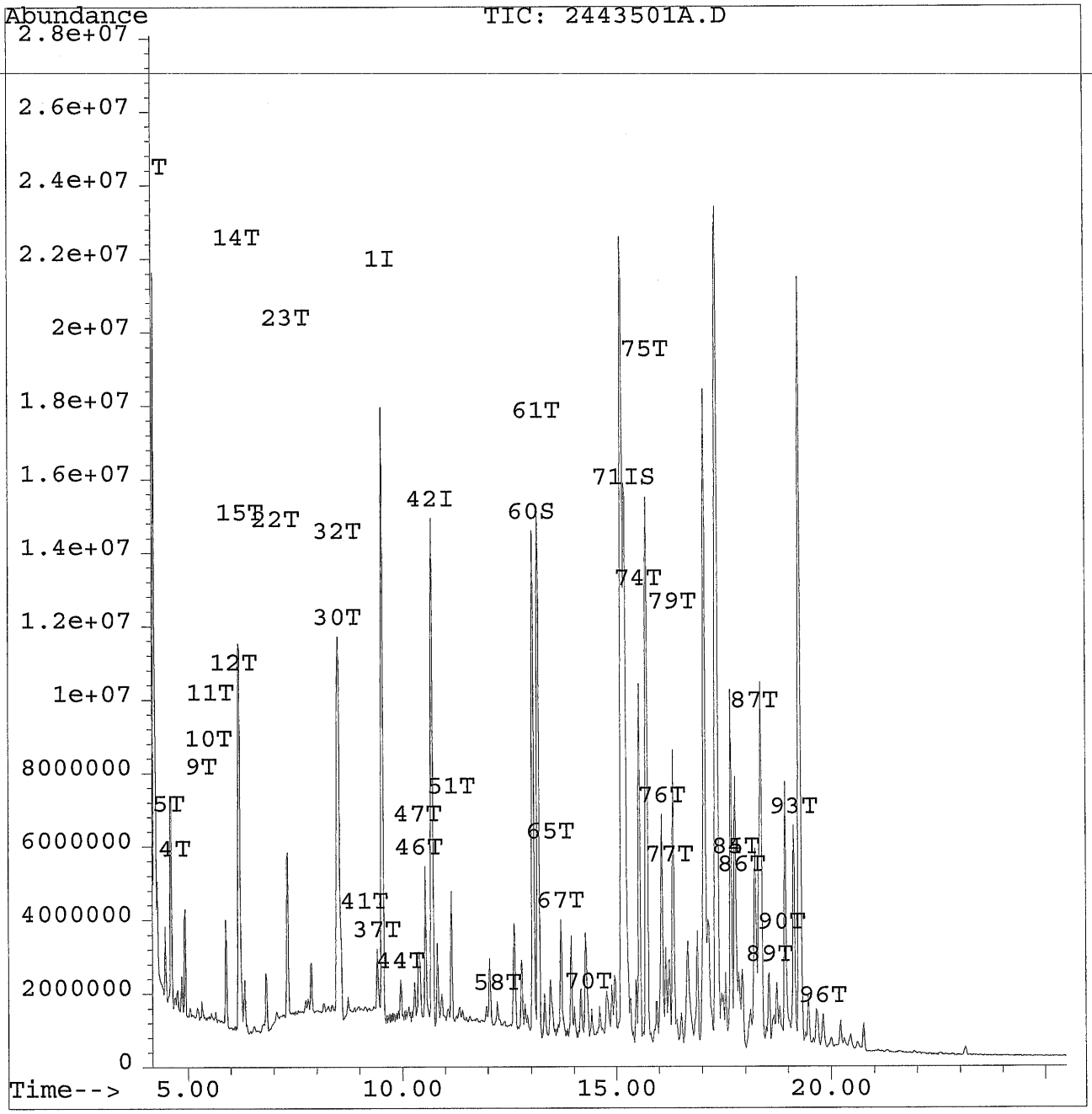
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML
Quant Time: Dec 30 14:24 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_K.M
Title : EPA T0-15
Last Update : Mon Mar 18 14:03:26 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
4.62	4.91 ppbV	12956303	Pentafluorobenzene	9

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Propane, 2-methyl-	97	000075-28-5	47

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Peak Number 2 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
10.55	4.39 ppbV	10000622	1,4-Difluorobenzene	10

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Silane, 1,4-phenylenebis[trimethyl-	23816	013183-70-5	38

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Peak Number 3 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
12.61	4.18 ppbV	9509230	1,4-Difluorobenzene	10

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Disulfide, dimethyl	913	000624-92-0	91

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 4 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
15.14	20.00 ppbV	90565945	Chlorobenzene-d5	15

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-chloro-4-(trifluoromethy	14995	000098-56-6	97
2	2-Piperidinecarboxylic acid, 1-(tri	33592	054965-28-5	12

****

Peak Number 5 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
16.67	2.75 ppbV	12439428	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (1-methylbutyl)-	6552	004737-43-3	53
2	2-Hexene, 3,4,4-trimethyl-	4110	053941-19-8	49
3	4-Hepten-3-one, 5-methyl-	4027	001447-26-3	43
4	Furan, 2,3-dihydro-4-(1-methylpropy	4008	034379-54-9	43
5	Cyclohexane, 1-methyl-2-propyl-	6571	004291-79-6	43

****

Peak Number 6 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
17.06	15.71 ppbV	71132054	Chlorobenzene-d5	15

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
3	4(1H)-Pyrimidinone, 5-bromo-	13697	019808-30-1	40
4	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	32
5	2-Furancarbonyl chloride	4649	000527-69-5	8

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 7 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.35	22.84 ppbV	103427012	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	.alpha.-Pinene	5805	000080-56-8	96
2	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	91
3	Cyclohexene, 4-methylene-1-(1-methy	5732	000099-84-3	87
4	Bicyclo[3.1.0]hexane, 4-methyl-1-(1	5777	058037-87-9	72
5	4-Carene, (1S,3S,6R)-(-)-	5807	005208-50-4	72

****

Peak Number 8 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
17.68	5.74 ppbV	25983007	Chlorobenzene-d5	15

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	35637	000556-67-2	37

****

Peak Number 9 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
18.94	4.61 ppbV	20864695	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Carene	5792	013466-78-9	93
2	Bicyclo[3.1.0]hexane, 4-methylene-1	5745	003387-41-5	76
3	Cyclohexene, 4-methylene-1-(1-methy	5732	000099-84-3	74
4	1,6-Octadien-3-ol, 3,7-dimethyl-, p	21529	000144-39-8	64
5	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	64

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A\2443501A.D
Acq Time : 10 Dec 124 6:22 pm
Sample : T-401
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 10 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
19.28	16.94 ppbV	76690636	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	D-Limonene	5790	005989-27-5	90
2	Bicyclo[2.2.1]hept-2-ene, 1,7,7-tri	5755	000464-17-5	89
3	Cyclohexene, 1-methyl-4-(1-methylet	5760	007705-14-8	81
4	Cyclohexene, 1-methyl-4-(1-methylet	5798	005989-54-8	81
5	Limonene	5774	000138-86-3	72

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**01**		
File Name:	2443501A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**8:51**
Sample ID:	T-401	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 25 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/16/24**	**Time:**	**16:20**
Anal Date:	16 Dec 124 4:20 pm	**SF:**	**2**	**QCbatch:**	**121624-MA1**		
Quant Method:	A15FL_K.M	**MDLSF:**	**2**	**Volume:**	**25.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**636**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.25**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**3.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	8.367	4.41	42.00	997645
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.083	4.86	31.00	142182
74-87-3	Chloromethane	5	TRG	0.684	4.77	50.00	97116
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.650	5.56	94.00	96347
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	2.303	5.72	46.00	86532
107-02-8	Acrolein	12	TRG	1.878	6.32	56.00	97616
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	28.216	6.42	58.00	3477741
67-63-0	2-propanol (isopropylalcoh	15	TRG	6.682	6.45	45.00	1594667
75-65-0	t-Butyl alcohol	16	TRG	0.542	7.03	59.00	146018
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.488	7.07	61.00	140808
107-13-1	Acrylonitrile	19	TRG	0.197	7.07	53.00	24284
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	38.694	7.37	76.00	1894821
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	4.757	7.61	76.00	1894821
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.293	8.39	43.00	18376
78-93-3	2-Butanone (MEK)	30	TRG	53.754	8.75	72.00	4327968
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	6.268	8.86	57.00	1453529
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.110	9.17	61.00	26900
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	2.660	9.72	72.00	221796
78-83-1	Isobutyl alcohol	38	TRG	19.548	9.51	74.00	352963
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.095	9.16	96.00	16886
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	1.221	10.27	61.95	301118
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	1.329	10.74	56.00	367809
71-43-2	Benzene	47	TRG	0.807	10.70	78.00	532452
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.253	10.95	73.00	151489
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.340	11.25	57.00	320358
142-82-5	n-Heptane	51	TRG	2.306	11.48	71.00	486364
78-87-5	1,2-Dichloropropane	52	TRG	0.119	11.64	63.00	29208
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.081	10.70	130.00	32920
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.588	12.55	58.00	115931
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	9.646	13.50	91.00	8951301
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.172	13.28	75.00	45063
79-00-5	1,1,2-Trichloroethane	63	TRG	0.732	13.52	61.00	116679
97-63-2	Ethyl methacrylate	64	TRG	0.077	13.63	69.00	17580
591-78-6	2-Hexanone	65	TRG	0.174	13.79	58.00	50675
142-28-9	1,3-Dichloropropane	66	TRG	0.035	13.86	76.00	19914
111-65-9	Octane	67	TRG	0.687	14.04	85.00	248127
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.032	14.62	107.00	22023
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.101	14.69	166.00	70323
108-90-7	Chlorobenzene	72	TRG	0.139	15.62	112.00	116169
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.296	15.64	131.00	84489
100-41-4	Ethylbenzene	74	TRG	2.252	15.90	106	2991950
1330-20-7	m,p-Xylenes	75	TRG	5.221	16.06	91.00	5654041
111-84-2	Nonane	76	TRG	1.753	16.43	57.00	1110280
100-42-5	Styrene	77	TRG	0.446	16.61	104.00	388653
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	1.525	16.34	91.00	1798007
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.098	17.02	83.00	106025
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.288	17.24	53.00	18388
103-65-1	n-Propylbenzene	83	TRG	0.152	18.04	91.00	321593
98-82-8	Isopropylbenzene	84	TRG	0.221	18.23	105.00	874119
622-96-8	4-Ethyltoluene	85	TRG	0.528	18.23	105.00	874119
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.511	18.31	105.00	874119
124-18-5	Decane	87	TRG	0.676	18.60	57.00	752360
98-06-6	tert-butyl benzene	88	TRG	0.064	18.93	119.00	109149

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.307	18.95	105.00	417366
538-93-2	i-Butylbenzene	90	TRG	0.073	19.24	91.00	142635
135-98-8	sec-butylbenzene	91	TRG	0.122	19.32	105.00	277242
541-73-1	1,3-Dichlorobenzene	92	TRG	0.172	19.39	146.00	188378
99-87-6	Isopropyltoluene	93	TRG	0.757	19.53	119.00	1583953
100-44-7	Benzyl chloride	94	TRG	0.665	19.46	91.00	374189
106-46-7	1,4-Dichlorobenzene	95	TRG	0.166	19.39	146.00	188378
104-51-8	n-Butylbenzene	96	TRG	0.136	20.20	91.00	271836
95-50-1	1,2-Dichlorobenzene	97	TRG	0.166	20.07	146.00	193357
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.187	21.02	75.00	33285
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.206	22.95	180.00	16639
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.044	23.15	225.00	42319
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**12132067**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**16624970**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17810236**
2037-26-5	Toluene-d8	60	SURR	11.293	13.40	98.00	**11146762**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 01
File Name: 2443501A.D
Run Method: A1563_L.M
Can Factor: 1.25
Air Volume: 25.0 ml
Can/Tube Number: 636
Dilution Factor: 0.0313
Base Volume: 1000 ml

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.0313
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	3.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

		PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)
Unit Factor (ppbv):	1000									
	M.W.	Raw	ResultV	Result	ResultV	Result	ResultQ	ResultG	MDL	RL
Compound		Amount	PPBV	UG/M3	PPBV	UG/M3	UG/M3	UG/M3		PPBV
Propylene	42.08	8.37	418.33	720.95	418.33	720.95	720.95	720.95	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.08	54.14	70.96	54.14	70.96	70.96	70.96	**0.500**	**0.600**
Chloromethane	50.5	0.68	34.20	70.73	34.20	70.73	70.73	70.73	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.65	32.52	126.41	32.52	126.41	126.41	126.41	**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	2.30	115.14	217.39	115.14	217.39	217.39	217.39	**0.500**	**3.210**
Acrolein	56.1	1.88	93.89	215.72	93.89	215.72	215.72	215.72	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	28.22	1410.81	3357.01	,410.81	3,357.01	3357.01	3,357.01	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	6.68	334.08	822.30	334.08	822.30	822.30	822.30	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.54	27.11	82.27	27.11	82.27	82.27	82.27	**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.49	24.41	96.87	24.41	96.87	96.87	96.87	**0.050**	**0.250**
Acrylonitrile	53.1	0.20	9.86	21.44	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	38.69	1934.72	6061.57	,934.72	6,061.57	6061.57	6,061.57	**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	4.76	237.83	741.24	237.83	741.24	741.24	741.24	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.29	14.66	51.69	14.66	51.69	51.69	51.69	**0.050**	**1.000**
2-Butanone (MEK)	72.1	53.75	2687.69	7936.36	,687.69	7,936.36	7936.36	7,936.36	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	6.27	313.39	1106.36	313.39	1,106.36	1106.36	1,106.36	**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.11	5.48	19.78	5.48	19.78	19.78	19.78	**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	2.66	132.98	392.66	132.98	392.66	392.66	392.66	**0.050**	**0.300**
Isobutyl alcohol	74.1	19.55	977.40	2966.17	977.40	2,966.17	2966.17	2,966.17	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.10	4.77	18.95	4.77	18.95	18.95	18.95	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	1.22	61.06	247.58	61.06	247.58	247.58	247.58	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	1.33	66.43	229.08	66.43	229.08	229.08	229.08	**0.050**	**0.250**
Benzene	78.1	0.81	40.33	129.00	40.33	129.00	129.00	129.00	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.25	12.67	53.03	12.67	53.03	53.03	53.03	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.34	17.01	79.56	17.01	79.56	79.56	79.56	**0.050**	**0.250**
n-Heptane	100.2	2.31	115.29	473.10	115.29	473.10	473.10	473.10	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.12	5.94	27.48	5.94	27.48	27.48	27.48	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.08	4.06	21.86	4.06	21.86	21.86	21.86	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.59	29.41	120.70	29.41	120.70	120.70	120.70	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	9.65	482.32	1819.27	482.32	1,819.27	1819.27	1,819.27	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.17	8.61	39.15	8.61	39.15	39.15	39.15	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.73	36.58	199.83	36.58	199.83	199.83	199.83	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.08	3.87	18.10	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.17	8.71	35.73	8.71	35.73	35.73	35.73	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.03	1.73	7.99	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.69	34.37	160.75	34.37	160.75	160.75	160.75	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.03	1.62	12.46	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.10	5.04	34.25	5.04	34.25	34.25	34.25	**0.025**	**0.250**
Chlorobenzene	112.6	0.14	6.93	31.94	6.93	31.94	31.94	31.94	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.30	14.81	101.77	14.81	101.77	101.77	101.77	**0.100**	**0.250**
Ethylbenzene	106.2	2.25	112.62	489.83	112.62	489.83	489.83	489.83	**0.100**	**0.250**
m,p-Xylenes	106.2	5.22	261.04	1135.38	261.04	1,135.38	1135.38	1,135.38	**0.100**	**0.250**
Nonane	128.3	1.75	87.63	460.46	87.63	460.46	460.46	460.46	**0.100**	**0.250**
Styrene	104.2	0.45	22.31	95.20	22.31	95.20	95.20	95.20	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	1.53	76.25	331.66	76.25	331.66	331.66	331.66	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.10	4.88	33.53	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.29	14.41	73.76	14.41	73.76	73.76	73.76	**0.200**	**0.600**
n-Propylbenzene	120.2	0.15	7.62	37.52	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.22	11.06	54.42	11.06	54.42	54.42	54.42	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.53	26.40	129.98	26.40	129.98	129.98	129.98	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.51	25.53	125.70	25.53	125.70	125.70	125.70	**0.200**	**0.900**
Decane	142.3	0.68	33.78	196.90	33.78	196.90	196.90	196.90	**0.200**	**0.600**
tert-butyl benzene	134.2	0.06	3.20	17.60	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.31	15.37	75.66	15.37	75.66	75.66	75.66	**0.200**	**0.900**
i-Butylbenzene	134.2	0.07	3.66	20.11	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.12	6.08	33.42	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.17	8.62	51.90	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.76	37.83	207.91	37.83	207.91	207.91	207.91	**0.200**	**0.600**
Benzyl chloride	126.6	0.67	33.27	172.49	33.27	172.49	172.49	172.49	**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.17	8.28	49.84	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.14	6.82	37.46	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.17	8.28	49.86	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.19	9.35	90.53	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.21	10.29	76.41	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.04	2.19	23.35	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.29	113	113	113	113	113	113	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
5.00	8.62	12.50	21.54				=		Y	418.33	720.95
7.50	37.14	12.50	61.89	U	ND		ND		Y	0.00	0.00
25.00	32.76	30.00	39.32				=		Y	54.14	70.96
7.50	15.51	12.50	25.85				=		Y	34.20	70.73
5.00	35.00	12.50	87.49	U	ND		ND		Y	0.00	0.00
2.52	6.44	12.50	32.00	U	ND		ND		Y	0.00	0.00
2.52	5.57	12.50	27.70	U	ND		ND		Y	0.00	0.00
5.00	19.43	12.50	48.58				=		Y	32.52	126.41
5.00	13.21	12.50	33.02	U	ND		ND		Y	0.00	0.00
25.00	47.20	160.50	303.03	J	J		=		Y	115.14	217.39
5.00	11.49	15.00	34.46				=		Y	93.89	215.72
5.00	28.14	12.50	70.34	U	ND		ND		Y	0.00	0.00
25.00	59.49	30.00	71.38				=		Y	1410.81	3357.01
10.00	24.61	62.50	153.84				=		Y	334.08	822.30
5.00	15.17	50.00	151.74	J	J		=		Y	27.11	82.27
5.00	29.26	15.00	87.79	U	ND		ND		Y	0.00	0.00
2.50	9.92	12.50	49.61				=		Y	24.41	96.87
10.00	21.75	15.00	32.62	U	ND		ND		Y	0.00	0.00
2.50	19.19	12.50	95.94	U	ND		ND		Y	0.00	0.00
2.50	7.83	50.00	156.65				=		Y	1934.72	6061.57
2.50	8.69	12.50	43.46	U	ND		ND		Y	0.00	0.00
5.00	15.58	12.50	38.96				=		Y	237.83	741.24
2.50	9.92	10.00	39.69	U	ND		ND		Y	0.00	0.00
5.00	18.04	10.00	36.08	U	ND		ND		Y	0.00	0.00
12.50	28.21	20.00	45.13	U	ND		ND		Y	0.00	0.00
2.49	10.11	12.50	50.68	U	ND		ND		Y	0.00	0.00
5.00	20.93	12.50	52.32	U	ND		ND		Y	0.00	0.00
2.50	8.82	50.00	176.31	J	J		=		Y	14.66	51.69
5.00	14.76	15.00	44.29				=		Y	2687.69	7936.36
5.00	20.93	30.00	125.57	U	ND		ND		Y	0.00	0.00
5.00	17.65	12.50	44.13				=		Y	313.39	1106.36
5.00	13.74	12.50	34.35	U	ND		ND		Y	0.00	0.00
5.00	18.04	12.50	45.10	J	J		=		Y	5.48	19.78
2.50	13.25	12.50	66.24	U	ND		ND		Y	0.00	0.00

5.00	17.63	25.00	88.16	U	ND	ND	Y	0.00	0.00
2.52	7.43	15.00	44.29			=	Y	132.98	392.66
10.00	30.35	40.00	121.39			=	Y	977.40	2966.17
2.50	9.92	12.50	49.61	J	J	=	Y	4.77	18.95
2.50	11.57	12.50	57.85	U	ND	ND	Y	0.00	0.00
2.51	12.26	12.50	61.13	U	ND	ND	Y	0.00	0.00
2.50	13.66	12.50	68.29	U	ND	ND	Y	0.00	0.00
2.50	10.14	12.50	50.68			=	Y	61.06	247.58
2.50	11.37	12.50	56.83	U	ND	ND	Y	0.00	0.00
2.50	8.62	12.50	43.11			=	Y	66.43	229.08
17.50	55.98	25.00	79.96			=	Y	40.33	129.00
2.50	15.75	12.50	78.74	U	ND	ND	Y	0.00	0.00
5.00	20.93	25.00	104.64	J	J	=	Y	12.67	53.03
2.50	11.69	12.50	58.46			=	Y	17.01	79.56
5.00	20.52	12.50	51.30			=	Y	115.29	473.10
2.50	11.57	12.50	57.85	J	J	=	Y	5.94	27.48
5.00	18.04	25.00	90.20	U	ND	ND	Y	0.00	0.00
2.50	17.80	12.50	88.99	U	ND	ND	Y	0.00	0.00
1.25	6.73	12.50	67.27	J	J	=	Y	4.06	21.86
2.50	16.77	12.50	83.86	U	ND	ND	Y	0.00	0.00
5.00	20.50	12.50	51.24	U	ND	ND	Y	0.00	0.00
5.00	20.52	40.00	164.15	J	J	=	Y	29.41	120.70
2.50	11.37	12.50	56.83	U	ND	ND	Y	0.00	0.00
10.00	37.72	12.50	47.15			=	Y	482.32	1819.27
2.50	11.37	12.50	56.83	J	J	=	Y	8.61	39.15
2.50	13.66	12.50	68.29			=	Y	36.58	199.83
5.00	23.39	12.50	58.46	U	ND	ND	Y	0.00	0.00
5.00	20.52	40.00	164.15	J	J	=	Y	8.71	35.73
2.50	11.57	35.00	161.98	U	ND	ND	Y	0.00	0.00
5.00	23.39	12.50	58.46			=	Y	34.37	160.75
5.00	42.65	12.50	106.64	U	ND	ND	Y	0.00	0.00
5.00	38.48	12.50	96.19	U	ND	ND	Y	0.00	0.00
1.25	8.49	12.50	84.88	J	J	=	Y	5.04	34.25
5.00	23.06	12.50	57.64	J	J	=	Y	6.93	31.94
5.00	34.36	12.50	85.90			=	Y	14.81	101.77
5.00	21.75	12.50	54.37			=	Y	112.62	489.83
5.00	21.75	12.50	54.37			=	Y	261.04	1135.38
5.00	26.27	12.50	65.68			=	Y	87.63	460.46
7.50	32.01	12.50	53.34			=	Y	22.31	95.20
5.00	51.75	12.50	129.37	U	ND	ND	Y	0.00	0.00
5.00	21.75	12.50	54.37			=	Y	76.25	331.66
10.00	68.72	25.00	171.81	U	ND	ND	Y	0.00	0.00
10.00	60.37	30.00	181.10	U	ND	ND	Y	0.00	0.00
10.00	51.19	30.00	153.58	J	J	=	Y	14.41	73.76
10.00	49.23	35.00	172.30	U	ND	ND	Y	0.00	0.00
10.00	49.23	35.00	172.30	J	J	=	Y	11.06	54.42
10.00	49.23	80.00	393.82	J	J	=	Y	26.40	129.98
10.00	49.23	45.00	221.53	J	J	=	Y	25.53	125.70
10.00	58.28	30.00	174.84			=	Y	33.78	196.90
10.00	54.96	30.00	164.88	U	ND	ND	Y	0.00	0.00
10.00	49.23	45.00	221.53	J	J	=	Y	15.37	75.66
10.00	54.96	30.00	164.88	U	ND	ND	Y	0.00	0.00

10.00	54.96	35.00	192.37	U	ND	ND	Y	0.00	0.00
10.00	60.20	40.00	240.82	U	ND	ND	Y	0.00	0.00
10.00	54.96	30.00	164.88			=	Y	37.83	207.91
10.00	51.85	25.00	129.62			=	Y	33.27	172.49
10.00	60.20	25.00	150.51	U	ND	ND	Y	0.00	0.00
10.00	54.96	30.00	164.88	U	ND	ND	Y	0.00	0.00
10.00	60.20	35.00	210.71	U	ND	ND	Y	0.00	0.00
15.00	145.16	35.00	338.72	U	ND	ND	Y	0.00	0.00
15.00	111.44	25.00	185.73	U	ND	ND	Y	0.00	0.00
25.00	131.26	5.00	26.25	U	ND	ND	Y	0.00	0.00
15.00	111.44	25.00	185.73	U	ND	ND	Y	0.00	0.00
12.50	133.51	15.00	160.22	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**01**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	25	ml
Can Dilution Factor	CDF	1.25	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ Note: 1 i

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ **= Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	997645	20.0	12132067	8.367	418.33	720.95
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	12132067	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	142182	20.0	12132067	1.083	54.14	70.96
5	Chloromethane	PFB	TRG	50.5	0.234	97116	20.0	12132067	0.684	34.20	70.73
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	12132067	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	12132067	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	12132067	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	96347	20.0	12132067	0.650	32.52	126.41
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	12132067	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	86532	20.0	12132067	2.303	115.14	217.39
12	Acrolein	PFB	TRG	56.1	0.086	97616	20.0	12132067	1.878	93.89	215.72
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	12132067	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	3477741	20.0	12132067	28.216	1410.81	3357.01
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	1594667	20.0	12132067	6.682	334.08	822.30
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	146018	20.0	12132067	0.542	27.11	82.27
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	12132067	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	140808	20.0	12132067	0.488	24.41	96.87
19	Acrylonitrile	PFB	TRG	53.1	0.203	24284	20.0	12132067	0.197	9.86	21.44
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	12132067	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	1894821	20.0	12132067	38.694	1934.72	6061.57
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	12132067	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	1894821	20.0	12132067	4.757	237.83	741.24
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	12132067	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	12132067	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	12132067	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	12132067	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	12132067	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	18376	20.0	12132067	0.293	14.66	51.69
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	4327968	20.0	12132067	53.754	2687.69	7936.36
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	12132067	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	1453529	20.0	12132067	6.268	313.39	1106.36

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	12132067	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	26900	20.0	12132067	0.110	5.48	19.78
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	12132067	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	12132067	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	221796	20.0	12132067	2.660	132.98	392.66
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	352963	20.0	12132067	19.548	977.40	2966.17
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	16886	20.0	12132067	0.095	4.77	18.95
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	12132067	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	12132067	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	16624970	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	301118	20.0	16624970	1.221	61.06	247.58
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	16624970	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	367809	20.0	16624970	1.329	66.43	229.08
47	Benzene	14DF	TRG	78.1	0.794	532452	20.0	16624970	0.807	40.33	129.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	16624970	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	151489	20.0	16624970	0.253	12.67	53.03
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	320358	20.0	16624970	0.340	17.01	79.56
51	n-Heptane	14DF	TRG	100.2	0.254	486364	20.0	16624970	2.306	115.29	473.10
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	29208	20.0	16624970	0.119	5.94	27.48
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	16624970	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	16624970	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	32920	20.0	16624970	0.081	4.06	21.86
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	16624970	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	16624970	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	115931	20.0	16624970	0.588	29.41	120.70
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	16624970	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	8951301	20.0	16624970	9.646	482.32	1819.27
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	45063	20.0	16624970	0.172	8.61	39.15
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	116679	20.0	16624970	0.732	36.58	199.83
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	17580	20.0	16624970	0.077	3.87	18.10
65	2-Hexanone	14DF	TRG	100.2	0.350	50675	20.0	16624970	0.174	8.71	35.73
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	19914	20.0	16624970	0.035	1.73	7.99
67	Octane	14DF	TRG	114.2	0.434	248127	20.0	16624970	0.687	34.37	160.75
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	16624970	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	22023	20.0	16624970	0.032	1.62	12.46
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	70323	20.0	16624970	0.101	5.04	34.25
72	Chlorobenzene	d5CB	TRG	112.6	0.942	116169	20.0	17810236	0.139	6.93	31.94
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	84489	20.0	17810236	0.296	14.81	101.77
74	Ethylbenzene	d5CB	TRG	106.2	1.492	2991950	20.0	17810236	2.252	112.62	489.83
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	5654041	20.0	17810236	5.221	261.04	1135.38
76	Nonane	d5CB	TRG	128.3	0.711	1110280	20.0	17810236	1.753	87.63	460.46
77	Styrene	d5CB	TRG	104.2	0.978	388653	20.0	17810236	0.446	22.31	95.20
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	17810236	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	1798007	20.0	17810236	1.525	76.25	331.66
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	106025	20.0	17810236	0.098	4.88	33.53
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	17810236	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	18388	20.0	17810236	0.288	14.41	73.76
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	321593	20.0	17810236	0.152	7.62	37.52
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	874119	20.0	17810236	0.221	11.06	54.42

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	874119	20.0	17810236	0.528	26.40	129.98
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	874119	20.0	17810236	0.511	25.53	125.70
87	Decane	d5CB	TRG	142.3	1.250	752360	20.0	17810236	0.676	33.78	196.90
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	109149	20.0	17810236	0.064	3.20	17.60
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	417366	20.0	17810236	0.307	15.37	75.66
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	142635	20.0	17810236	0.073	3.66	20.11
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	277242	20.0	17810236	0.122	6.08	33.42
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	188378	20.0	17810236	0.172	8.62	51.90
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	1583953	20.0	17810236	0.757	37.83	207.91
94	Benzyl chloride	d5CB	TRG	126.6	0.632	374189	20.0	17810236	0.665	33.27	172.49
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	188378	20.0	17810236	0.166	8.28	49.84
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	271836	20.0	17810236	0.136	6.82	37.46
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	193357	20.0	17810236	0.166	8.28	49.86
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	33285	20.0	17810236	0.187	9.35	90.53
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	16639	20.0	17810236	0.206	10.29	76.41
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	17810236	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	17810236	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	42319	20.0	17810236	0.044	2.19	23.35
1	Pentafluorobenzene	0	IS	0.0	0.000	12132067	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	16624970	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17810236	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	11146762	10.0		11.293	112.93	113

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443501A.D
Acq Time : 16 Dec 124 4:20 pm
Sample : T-401
Misc : SCHMIDT, 25 ML
Quant Time: Dec 30 15:20 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_K.M
Title : EPA T0-15
Last Update : Mon Mar 18 14:03:26 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	12132067	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.73	114	16624970	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.22	117	17810236	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	11146762	11.29	ppbV		112.93
Target Compounds							Qvalue
2) Propylene	4.35	42	997645	8.37	ppbV	m	92
4) Methanol	4.81	31	142182	1.08	ppbV	#	90
5) Chloromethane	4.69	50	97116	0.68	ppbV	#	77
9) Bromomethane	5.46	94	96347	0.65	ppbV		92
11) Ethanol	5.63	46	86532	2.30	ppbV		97
12) Acrolein	6.00	56	97616	1.88	ppbV	#	41
14) Acetone	6.29	58	3477741	28.22	ppbV	m	20
15) 2-propanol (isopropylalcoh	6.33	45	1594667	6.68	ppbV	#	90
16) t-Butyl alcohol	6.91	59	146018	0.54	ppbV	#	88
18) 1,1-Dichloroethene	6.94	61	140808	0.49	ppbV	#	40
19) Acrylonitrile	6.93	53	24284	0.20	ppbV		91
21) Allyl chloride	7.42	76	1894821	38.69	ppbV	#	64
23) Carbon disulfide	7.42	76	1894821	4.76	ppbV	#	91
29) Vinyl acetate	8.24	43	18376	0.29	ppbV	#	65
30) 2-Butanone (MEK)	8.55	72	4327968	53.75	ppbV	m	62
32) Hexane	8.55	57	1453529	6.27	ppbV	#	1
34) Ethyl acetate	8.94	61	26900	0.11	ppbV	#	68
37) Tetrahydrofuran	9.49	72	221796	2.66	ppbV		93
38) Isobutyl alcohol	9.57	74	352963	19.55	ppbV	#	71
39) cis-1,2-Dichloroethene	8.94	96	16886	0.10	ppbV	#	75
44) 1,2-Dichloroethane	10.02	62	301118	1.22	ppbV	#	89
46) Cyclohexane	10.48	56	367809	1.33	ppbV	#	70
47) Benzene	10.44	78	532452	0.81	ppbV	#	88
49) t-Amyl methyl ether	10.73	73	151489	0.25	ppbV	#	28
50) 2,2,4-Trimethylpentane	10.97	57	320358	0.34	ppbV	#	56
51) n-Heptane	11.19	71	486364	2.31	ppbV		91
52) 1,2-Dichloropropane	11.35	63	29208	0.12	ppbV	#	82
55) Trichloroethene (TCE)	11.38	130	32920	0.08	ppbV	#	89
58) 4-Methyl-2-pentanone (MIBK	12.25	58	115931	0.59	ppbV		87
61) Toluene	13.19	91	8951301	9.65	ppbV		100
62) trans-1,3-Dichloropropene	13.19	75	45063	0.17	ppbV	#	57
63) 1,1,2-Trichloroethane	13.19	61	116679	0.73	ppbV	#	1
64) Ethyl methacrylate	13.34	69	17580	0.08	ppbV	#	80
65) 2-Hexanone	13.51	58	50675	0.17	ppbV	#	81
66) 1,3-Dichloropropane	13.19	76	19914	0.03	ppbV	#	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443501A.D
Acq Time : 16 Dec 124 4:20 pm
Sample : T-401
Misc : SCHMIDT, 25 ML
Quant Time: Dec 30 15:20 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_K.M
Title : EPA T0-15
Last Update : Mon Mar 18 14:03:26 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
67)	Octane	13.74	85	248127	0.69	ppbV	#	80
69)	1,2-Dibromoethane (EDB)	14.28	107	22023	0.03	ppbV	#	90
70)	Tetrachloroethene (PCE)	14.35	166	70323	0.10	ppbV		87
72)	Chlorobenzene	15.29	112	116169	0.14	ppbV	#	69
73)	1,1,1,2-Tetrachloroethane	15.15	131	84489	0.30	ppbV	#	1
74)	Ethylbenzene	15.56	91	2991950	2.25	ppbV		93
75)	m,p-Xylenes	15.73	91	5654041	5.22	ppbV	#	81
76)	Nonane	16.09	57	1110280	1.75	ppbV	#	93
77)	Styrene	16.26	104	388653	0.45	ppbV	#	81
79)	o-Xylene	16.34	91	1798007	1.53	ppbV	#	87
80)	1,1,2,2-Tetrachloroethane	16.67	83	106025	0.10	ppbV	#	89
82)	t-1,4-Dichloro-2-butene	16.89	53	18388	0.29	ppbV	#	64
83)	n-Propylbenzene	17.69	91	321593	0.15	ppbV		97
84)	Isopropylbenzene	17.86	105	874119	0.22	ppbV	#	89
85)	4-Ethyltoluene	17.86	105	874119	0.53	ppbV	#	94
86)	1,3,5-Trimethylbenzene	17.86	105	874119	0.51	ppbV	#	74
87)	Decane	18.24	57	752360	0.68	ppbV	#	51
88)	tert-butyl benzene	18.56	119	109149	0.06	ppbV	#	84
89)	1,2,4-Trimethylbenzene	18.58	105	417366	0.31	ppbV	#	88
90)	i-Butylbenzene	18.87	91	142635	0.07	ppbV		97
91)	sec-butylbenzene	18.93	105	277242	0.12	ppbV	#	1
92)	1,3-Dichlorobenzene	19.02	146	188378	0.17	ppbV		95
93)	Isopropyltoluene	19.16	119	1583953	0.76	ppbV		98
94)	Benzyl chloride	18.95	91	374189	0.67	ppbV	#	74
95)	1,4-Dichlorobenzene	19.02	146	188378	0.17	ppbV		95
96)	n-Butylbenzene	19.82	91	271836	0.14	ppbV		99
97)	1,2-Dichlorobenzene	19.70	146	193357	0.17	ppbV		96
98)	1,2-Dibromo-3-chloropropan	20.64	75	33285	0.19	ppbV	#	60
99)	1,2,4-Trichlorobenzene	22.57	180	16639	0.21	ppbV		92
102)	Hexachlorobutadiene	23.15	225	42319	0.04	ppbV		93

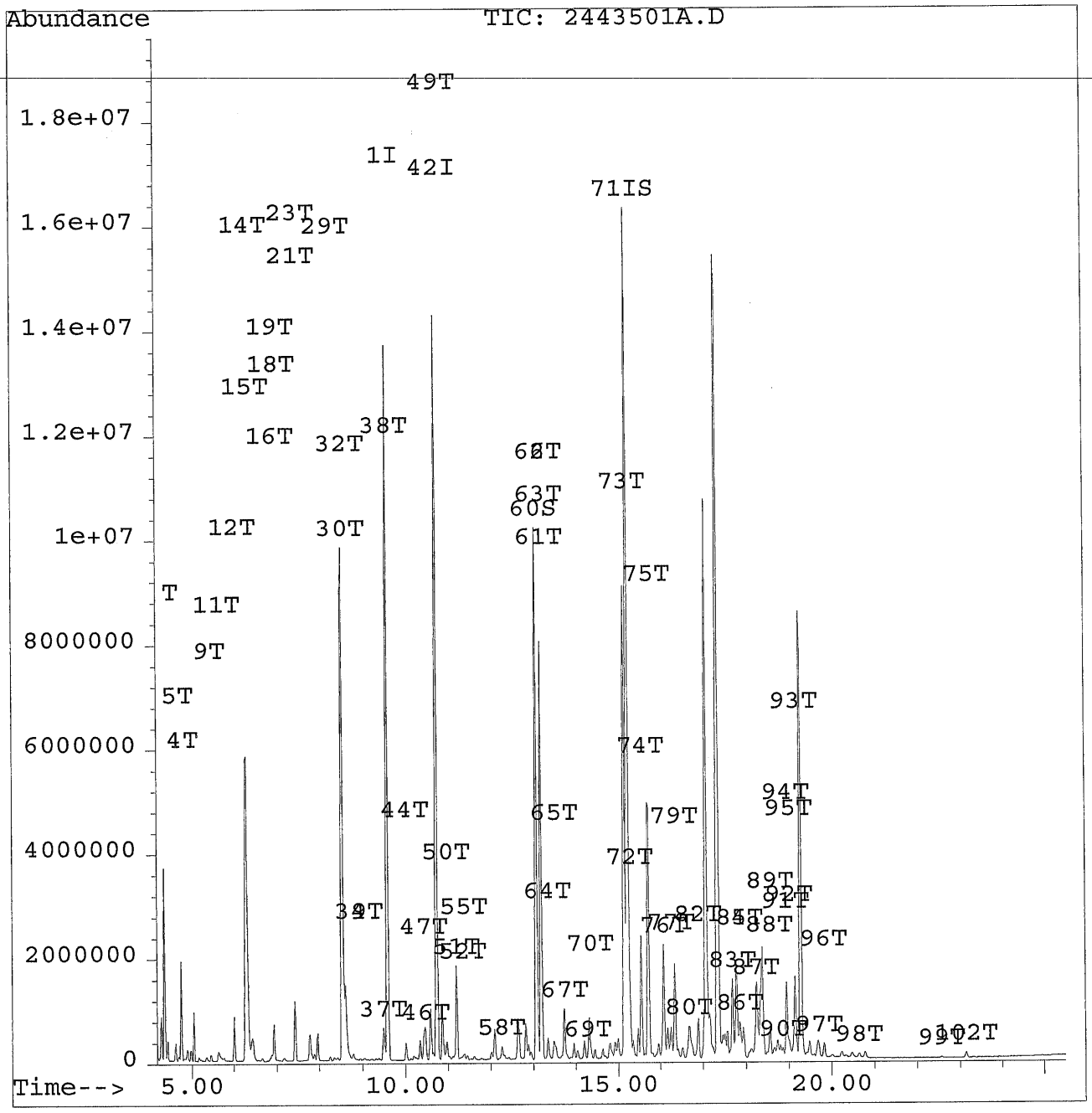
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443501A.D
Acq Time : 16 Dec 124 4:20 pm
Sample : T-401
Misc : SCHMIDT, 25 ML
Quant Time: Dec 30 15:20 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_K.M
Title : EPA T0-15
Last Update : Mon Mar 18 14:03:26 2024
Response via : Multiple Level Calibration



Sample Data Packages

SDG Number 224435

Lab Id Number 2

Client ID T-402

Analytical Method TO-15

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Analytical Report
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Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 02**

File Name: 2443502A.D **Date Sampled:** 11/19/24 **Time:** 08:35
Description: T-402 **Date Analyzed:** 12/10/24 **Time:** 18:59
Canister: 703 **Can Dilution Factor:** 1.25
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.04	1.32	0.72	1.80	2.28	
75-71-8	Dichlorodifluoromethane	0.63	1.04	ND	3.09	5.16	ND	
67-56-1	Methanol	2.08	2.50	5.41	2.73	3.28	7.09	
74-87-3	Chloromethane	0.63	1.04	1.00	1.29	2.15	2.08	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.04	ND	2.92	7.29	ND	
75-01-4	Vinyl chloride	0.21	1.04	ND	0.54	2.67	ND	
106-99-0	1,3-Butadiene	0.21	1.04	ND	0.46	2.31	ND	
74-83-9	Bromomethane	0.42	1.04	ND	1.62	4.05	ND	
75-00-3	Chloroethane	0.42	1.04	ND	1.10	2.75	ND	
64-17-5	Ethanol	2.08	13.38	ND	3.93	25.25	ND	
107-02-8	Acrolein	0.42	1.25	1.27	0.96	2.87	2.91	
75-69-4	Trichlorofluoromethane	0.42	1.04	ND	2.34	5.86	ND	
67-64-1	Acetone	2.08	2.50	7.07	4.96	5.95	16.82	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.21	2.38	2.05	12.82	5.85	J
75-65-0	t-Butyl alcohol	0.42	4.17	ND	1.26	12.64	ND	
4227-95-6	Methyl iodide	0.42	1.25	ND	2.44	7.32	ND	
75-35-4	1,1-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
107-13-1	Acrylonitrile	0.83	1.25	ND	1.81	2.72	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.04	ND	1.60	7.99	ND	
107-05-1	Allyl chloride	0.21	4.17	ND	0.65	13.05	ND	
75-09-2	Methylene chloride	0.21	1.04	ND	0.72	3.62	ND	
75-15-0	Carbon disulfide	0.42	1.04	ND	1.30	3.25	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.83	3.31	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.83	ND	1.50	3.01	ND	
107-12-0	Propionitrile	1.04	1.67	ND	2.35	3.76	ND	
75-34-3	1,1-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.04	ND	1.74	4.36	ND	
108-05-4	Vinyl acetate	0.21	4.17	ND	0.73	14.69	ND	
78-93-3	2-Butanone (MEK)	0.42	1.25	3.04	1.23	3.69	8.98	
108-20-3	Diisopropyl ether	0.42	2.50	ND	1.74	10.46	ND	
110-54-3	Hexane	0.42	1.04	ND	1.47	3.68	ND	
126-98-7	Methacrylonitrile	0.42	1.04	ND	1.15	2.86	ND	
141-78-6	Ethyl acetate	0.42	1.04	ND	1.50	3.76	ND	
74-97-5	Bromochloromethane	0.21	1.04	ND	1.10	5.52	ND	
96-33-3	Methyl acrylate	0.42	2.08	ND	1.47	7.35	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.25	ND	0.62	3.69	ND	
78-83-1	Isobutyl alcohol	0.83	3.33	ND	2.53	10.12	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
594-20-7	2,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
67-66-3	Chloroform	0.21	1.04	ND	1.02	5.09	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
107-06-2	1,2-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
563-58-6	1,1-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
110-82-7	Cyclohexane	0.21	1.04	0.36	0.72	3.59	1.25	J
71-43-2	Benzene	1.46	2.08	ND	4.66	6.66	ND	
56-23-5	Carbon tetrachloride	0.21	1.04	ND	1.31	6.56	ND	
994-05-8	t-Amyl methyl ether	0.42	2.08	ND	1.74	8.72	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.04	ND	0.97	4.87	ND	
142-82-5	n-Heptane	0.42	1.04	ND	1.71	4.27	ND	
78-87-5	1,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
123-91-1	1,4 Dioxane	0.42	2.08	ND	1.50	7.52	ND	
74-95-3	Dibromomethane	0.21	1.04	ND	1.48	7.42	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.04	ND	0.56	5.61	ND	
75-27-4	Bromodichloromethane	0.21	1.04	ND	1.40	6.99	ND	
80-62-6	Methyl methacrylate	0.42	1.04	ND	1.71	4.27	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.33	ND	1.71	13.68	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
108-88-3	Toluene	0.83	1.04	1.03	3.14	3.93	3.89	J
10061-02-6	trans-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
97-63-2	Ethyl methacrylate	0.42	1.04	ND	1.95	4.87	ND	
591-78-6	2-Hexanone	0.42	3.33	ND	1.71	13.68	ND	
142-28-9	1,3-Dichloropropane	0.21	2.92	ND	0.96	13.50	ND	
111-65-9	Octane	0.42	1.04	ND	1.95	4.87	ND	
124-48-1	Dibromochloromethane	0.42	1.04	ND	3.55	8.89	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.04	ND	3.21	8.02	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.04	ND	0.71	7.07	ND	
108-90-7	Chlorobenzene	0.42	1.04	ND	1.92	4.80	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.04	ND	2.86	7.16	ND	
100-41-4	Ethylbenzene	0.42	1.04	ND	1.81	4.53	ND	
1330-20-7	m,p-Xylenes	0.42	1.04	0.60	1.81	4.53	2.61	J
111-84-2	Nonane	0.42	1.04	ND	2.19	5.47	ND	
100-42-5	Styrene	0.63	1.04	ND	2.67	4.45	ND	
75-25-2	Bromoform	0.42	1.04	ND	4.31	10.78	ND	
95-47-6	o-Xylene	0.42	1.04	ND	1.81	4.53	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.08	ND	5.73	14.32	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.50	ND	5.03	15.09	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.50	ND	4.27	12.80	ND	
103-65-1	n-Propylbenzene	0.83	2.92	ND	4.10	14.36	ND	
98-82-8	Isopropylbenzene	0.83	2.92	ND	4.10	14.36	ND	
622-96-8	4-Ethyltoluene	0.83	6.67	ND	4.10	32.82	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
124-18-5	Decane	0.83	2.50	ND	4.86	14.57	ND	
98-06-6	tert-butyl benzene	0.83	2.50	ND	4.58	13.74	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
538-93-2	i-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
135-98-8	sec-butylbenzene	0.83	2.92	ND	4.58	16.03	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.33	ND	5.02	20.07	ND	
99-87-6	Isopropyltoluene	0.83	2.50	ND	4.58	13.74	ND	
100-44-7	Benzyl chloride	0.83	2.08	ND	4.32	10.80	ND	
106-46-7	1,4-Dichlorobenzene	0.83	2.08	ND	5.02	12.54	ND	
104-51-8	n-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.92	ND	5.02	17.56	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.25	2.92	ND	12.10	28.23	ND	
120-82-1	1,2,4-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
91-20-3	Naphthalene	2.08	0.42	ND	10.94	2.19	ND	
87-61-6	1,2,3-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
87-68-3	Hexachlorobutadiene	1.04	1.25	ND	11.13	13.35	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	127	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 02

File Name: 224435
Descriptio 02
Canister: 703
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 08:35
Date Analyzed: 12/10/24 **Time:** 18:59
Can Dilution Factor: 1.25
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
D-Limonene	2.92	6.25	ND	11.95	25.60	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**02**		
File Name:	2443502A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**8:35**
Sample ID:	T-402	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**18:59**
Anal Date:	10 Dec 124 6:59 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**703**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.25**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.317	4.41	42.00	72913
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.299	4.86	31.00	328790
74-87-3	Chloromethane	5	TRG	0.241	4.77	50.00	65969
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.349	5.72	46.00	25248
107-02-8	Acrolein	12	TRG	0.304	6.32	56.00	30476
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.696	6.42	58.00	403031
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.571	6.45	45.00	262551
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.064	7.61	76.00	49456
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.730	8.75	72.00	113303
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.097	8.86	57.00	43409
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	0
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.087	10.74	56.00	36653
71-43-2	Benzene	47	TRG	0.178	10.70	78.00	179223
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	0
108-88-3	Toluene	61	TRG	0.248	13.50	91.00	349667
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.036	13.79	58.00	15900
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.032	14.04	85.00	17322
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.025	14.69	166.00	26057
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.089	15.90	106	209961
1330-20-7	m,p-Xylenes	75	TRG	0.144	16.06	91.00	278144
111-84-2	Nonane	76	TRG	0.040	16.43	57.00	45180
100-42-5	Styrene	77	TRG	0.105	16.61	104.00	162933
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.086	16.33	91.00	179865
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.133	18.23	105.00	392495
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.076	18.31	105.00	233134
124-18-5	Decane	87	TRG	0.000	18.60	57.00	561
98-06-6	tert-butyl benzene	88	TRG	0.037	18.93	119.00	111493

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.144	18.95	105.00	349766
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.094	19.53	119.00	352163
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.33	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**23384331**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**25303867**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**31768259**
2037-26-5	Toluene-d8	60	SURR	12.713	13.40	98.00	**19099216**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**
Laboratory Number:	**02**
File Name:	2443502A.D
Run Method:	A1563_L.M
Can Factor:	1.25
Air Volume:	300.0 ml
Can/Tube Number:	703
Dilution Factor:	0.3750
Base Volume:	1000 ml

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3750
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)
Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.32	1.32	2.28	1.32	2.28	2.28	2.28	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.30	5.41	7.09	5.41	7.09	7.09	7.09	**0.500**	**0.600**
Chloromethane	50.5	0.24	1.00	2.08	1.00	2.08	2.08	2.08	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.35	1.45	2.74	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.30	1.27	2.91	1.27	2.91	2.91	2.91	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.70	7.07	16.82	7.07	16.82	16.82	16.82	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.57	2.38	5.85	2.38	5.85	5.85	5.85	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.06	0.27	0.84	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.73	3.04	8.98	3.04	8.98	8.98	8.98	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.10	0.40	1.43	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.09	0.36	1.25	0.36	1.25	1.25	1.25	**0.050**	**0.250**
Benzene	78.1	0.18	0.74	2.38	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.25	1.03	3.89	1.03	3.89	3.89	3.89	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.04	0.15	0.61	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.03	0.13	0.61	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.02	0.10	0.69	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.09	0.37	1.61	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.14	0.60	2.61	0.60	2.61	2.61	2.61	**0.100**	**0.250**
Nonane	128.3	0.04	0.17	0.88	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.10	0.44	1.86	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.09	0.36	1.55	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.13	0.55	2.73	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.08	0.32	1.57	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.01	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.04	0.15	0.84	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.14	0.60	2.96	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.09	0.39	2.16	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.71	127	127	127	127	127	127	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.42	0.72	1.04	1.80				=		Y	1.32	2.28
0.63	3.09	1.04	5.16	U	ND		ND		Y	0.00	0.00
2.08	2.73	2.50	3.28				=		Y	5.41	7.09
0.63	1.29	1.04	2.15	J	J		=		Y	1.00	2.08
0.42	2.92	1.04	7.29	U	ND		ND		Y	0.00	0.00
0.21	0.54	1.04	2.67	U	ND		ND		Y	0.00	0.00
0.21	0.46	1.04	2.31	U	ND		ND		Y	0.00	0.00
0.42	1.62	1.04	4.05	U	ND		ND		Y	0.00	0.00
0.42	1.10	1.04	2.75	U	ND		ND		Y	0.00	0.00
2.08	3.93	13.38	25.25	U	ND		ND		Y	0.00	0.00
0.42	0.96	1.25	2.87				=		Y	1.27	2.91
0.42	2.34	1.04	5.86	U	ND		ND		Y	0.00	0.00
2.08	4.96	2.50	5.95				=		Y	7.07	16.82
0.83	2.05	5.21	12.82	J	J		=		Y	2.38	5.85
0.42	1.26	4.17	12.64	U	ND		ND		Y	0.00	0.00
0.42	2.44	1.25	7.32	U	ND		ND		Y	0.00	0.00
0.21	0.83	1.04	4.13	U	ND		ND		Y	0.00	0.00
0.83	1.81	1.25	2.72	U	ND		ND		Y	0.00	0.00
0.21	1.60	1.04	7.99	U	ND		ND		Y	0.00	0.00
0.21	0.65	4.17	13.05	U	ND		ND		Y	0.00	0.00
0.21	0.72	1.04	3.62	U	ND		ND		Y	0.00	0.00
0.42	1.30	1.04	3.25	U	ND		ND		Y	0.00	0.00
0.21	0.83	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.42	1.50	0.83	3.01	U	ND		ND		Y	0.00	0.00
1.04	2.35	1.67	3.76	U	ND		ND		Y	0.00	0.00
0.21	0.84	1.04	4.22	U	ND		ND		Y	0.00	0.00
0.42	1.74	1.04	4.36	U	ND		ND		Y	0.00	0.00
0.21	0.73	4.17	14.69	U	ND		ND		Y	0.00	0.00
0.42	1.23	1.25	3.69				=		Y	3.04	8.98
0.42	1.74	2.50	10.46	U	ND		ND		Y	0.00	0.00
0.42	1.47	1.04	3.68	U	ND		ND		Y	0.00	0.00
0.42	1.15	1.04	2.86	U	ND		ND		Y	0.00	0.00
0.42	1.50	1.04	3.76	U	ND		ND		Y	0.00	0.00
0.21	1.10	1.04	5.52	U	ND		ND		Y	0.00	0.00

0.42	1.47	2.08	7.35	U	ND	ND	Y	0.00	0.00
0.21	0.62	1.25	3.69	U	ND	ND	Y	0.00	0.00
0.83	2.53	3.33	10.12	U	ND	ND	Y	0.00	0.00
0.21	0.83	1.04	4.13	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.04	4.82	U	ND	ND	Y	0.00	0.00
0.21	1.02	1.04	5.09	U	ND	ND	Y	0.00	0.00
0.21	1.14	1.04	5.69	U	ND	ND	Y	0.00	0.00
0.21	0.84	1.04	4.22	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.21	0.72	1.04	3.59	J	J	=	Y	0.36	1.25
1.46	4.66	2.08	6.66	U	ND	ND	Y	0.00	0.00
0.21	1.31	1.04	6.56	U	ND	ND	Y	0.00	0.00
0.42	1.74	2.08	8.72	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	1.71	1.04	4.27	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.04	4.82	U	ND	ND	Y	0.00	0.00
0.42	1.50	2.08	7.52	U	ND	ND	Y	0.00	0.00
0.21	1.48	1.04	7.42	U	ND	ND	Y	0.00	0.00
0.10	0.56	1.04	5.61	U	ND	ND	Y	0.00	0.00
0.21	1.40	1.04	6.99	U	ND	ND	Y	0.00	0.00
0.42	1.71	1.04	4.27	U	ND	ND	Y	0.00	0.00
0.42	1.71	3.33	13.68	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.83	3.14	1.04	3.93	J	J	=	Y	1.03	3.89
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.21	1.14	1.04	5.69	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	1.71	3.33	13.68	U	ND	ND	Y	0.00	0.00
0.21	0.96	2.92	13.50	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	3.55	1.04	8.89	U	ND	ND	Y	0.00	0.00
0.42	3.21	1.04	8.02	U	ND	ND	Y	0.00	0.00
0.10	0.71	1.04	7.07	U	ND	ND	Y	0.00	0.00
0.42	1.92	1.04	4.80	U	ND	ND	Y	0.00	0.00
0.42	2.86	1.04	7.16	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53	J	J	=	Y	0.60	2.61
0.42	2.19	1.04	5.47	U	ND	ND	Y	0.00	0.00
0.63	2.67	1.04	4.45	U	ND	ND	Y	0.00	0.00
0.42	4.31	1.04	10.78	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53	U	ND	ND	Y	0.00	0.00
0.83	5.73	2.08	14.32	U	ND	ND	Y	0.00	0.00
0.83	5.03	2.50	15.09	U	ND	ND	Y	0.00	0.00
0.83	4.27	2.50	12.80	U	ND	ND	Y	0.00	0.00
0.83	4.10	2.92	14.36	U	ND	ND	Y	0.00	0.00
0.83	4.10	2.92	14.36	U	ND	ND	Y	0.00	0.00
0.83	4.10	6.67	32.82	U	ND	ND	Y	0.00	0.00
0.83	4.10	3.75	18.46	U	ND	ND	Y	0.00	0.00
0.83	4.86	2.50	14.57	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	4.10	3.75	18.46	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00

0.83	4.58	2.92	16.03	U	ND	ND	Y	0.00	0.00
0.83	5.02	3.33	20.07	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	4.32	2.08	10.80	U	ND	ND	Y	0.00	0.00
0.83	5.02	2.08	12.54	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	5.02	2.92	17.56	U	ND	ND	Y	0.00	0.00
1.25	12.10	2.92	28.23	U	ND	ND	Y	0.00	0.00
1.25	9.29	2.08	15.48	U	ND	ND	Y	0.00	0.00
2.08	10.94	0.42	2.19	U	ND	ND	Y	0.00	0.00
1.25	9.29	2.08	15.48	U	ND	ND	Y	0.00	0.00
1.04	11.13	1.25	13.35	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 02
Sample ID: T-402

Can Factor: 1.25
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	D-Limone	19.27	97	0.43	100	TIC	1.8	7.3	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 1.8 7.3

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	
ND	0.7	1.5	2.9	6.25	2.92	11.95	6.25	25.60	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**02**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.25	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ Note: 1 i

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ **= Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	72913	20.0	23384331	0.317	1.32	2.28
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	23384331	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	328790	20.0	23384331	1.299	5.41	7.09
5	Chloromethane	PFB	TRG	50.5	0.234	65969	20.0	23384331	0.241	1.00	2.08
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	23384331	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	23384331	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	23384331	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	23384331	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	23384331	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	25248	20.0	23384331	0.349	1.45	2.74
12	Acrolein	PFB	TRG	56.1	0.086	30476	20.0	23384331	0.304	1.27	2.91
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	23384331	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	403031	20.0	23384331	1.696	7.07	16.82
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	262551	20.0	23384331	0.571	2.38	5.85
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	23384331	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	23384331	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	23384331	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	23384331	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	23384331	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	23384331	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	23384331	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	49456	20.0	23384331	0.064	0.27	0.84
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	23384331	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	23384331	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	23384331	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	23384331	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	23384331	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	23384331	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	113303	20.0	23384331	0.730	3.04	8.98
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	23384331	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	43409	20.0	23384331	0.097	0.40	1.43

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	23384331	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	23384331	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	23384331	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	23384331	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	23384331	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	23384331	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	23384331	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	23384331	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	23384331	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	25303867	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	25303867	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	25303867	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	36653	20.0	25303867	0.087	0.36	1.25
47	Benzene	14DF	TRG	78.1	0.794	179223	20.0	25303867	0.178	0.74	2.38
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	25303867	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	25303867	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	25303867	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	25303867	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	25303867	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	25303867	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	25303867	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	25303867	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	25303867	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	25303867	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	25303867	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	25303867	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	349667	20.0	25303867	0.248	1.03	3.89
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	25303867	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	25303867	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	25303867	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	15900	20.0	25303867	0.036	0.15	0.61
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	25303867	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	17322	20.0	25303867	0.032	0.13	0.61
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	25303867	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	25303867	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	26057	20.0	25303867	0.025	0.10	0.69
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	31768259	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	31768259	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	209961	20.0	31768259	0.089	0.37	1.61
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	278144	20.0	31768259	0.144	0.60	2.61
76	Nonane	d5CB	TRG	128.3	0.711	45180	20.0	31768259	0.040	0.17	0.88
77	Styrene	d5CB	TRG	104.2	0.978	162933	20.0	31768259	0.105	0.44	1.86
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	31768259	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	179865	20.0	31768259	0.086	0.36	1.55
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	31768259	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	31768259	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	31768259	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	31768259	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	31768259	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	392495	20.0	31768259	0.133	0.55	2.73
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	233134	20.0	31768259	0.076	0.32	1.57
87	Decane	d5CB	TRG	142.3	1.250	561	20.0	31768259	0.000	0.00	0.01
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	111493	20.0	31768259	0.037	0.15	0.84
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	349766	20.0	31768259	0.144	0.60	2.96
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	31768259	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	31768259	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	31768259	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	352163	20.0	31768259	0.094	0.39	2.16
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	31768259	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	31768259	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	31768259	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	31768259	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	31768259	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	31768259	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	31768259	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	31768259	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	31768259	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	23384331	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	25303867	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	31768259	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	19099216	10.0		12.713	127.13	127

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443502A.D
Acq Time : 10 Dec 124 6:59 pm
Sample : T-402
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 9:11 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.54	168	23384331	20.00	ppbV		-0.28
42) 1,4-Difluorobenzene	10.70	114	25303867	20.00	ppbV		-0.30
71) Chlorobenzene-d5	15.21	117	31768259	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.06	98	19099216	12.71	ppbV		127.13
Target Compounds							Qvalue
2) Propylene	4.24	42	72913	0.32	ppbV	m	55
4) Methanol	4.71	31	328790	1.30	ppbV	#	95
5) Chloromethane	4.57	50	65969	0.24	ppbV	#	89
11) Ethanol	5.54	46	25248	0.35	ppbV		89
12) Acrolein	6.11	56	30476	0.30	ppbV		93
14) Acetone	6.19	58	403031	1.70	ppbV	#	39
15) 2-propanol (isopropylalcoh	6.24	45	262551	0.57	ppbV	#	96
23) Carbon disulfide	7.34	76	49456	0.06	ppbV	#	80
30) 2-Butanone (MEK)	8.50	72	113303	0.73	ppbV	#	57
32) Hexane	8.56	57	43409	0.10	ppbV	#	13
46) Cyclohexane	10.43	56	36653	0.09	ppbV		97
47) Benzene	10.39	78	179223	0.18	ppbV	m	92
61) Toluene	13.18	91	349667	0.25	ppbV	m	99
65) 2-Hexanone	13.50	58	15900	0.04	ppbV		96
67) Octane	13.72	85	17322	0.03	ppbV		89
70) Tetrachloroethene (PCE)	14.34	166	26057	0.02	ppbV	#	94
74) Ethylbenzene	15.55	91	209961	0.09	ppbV	#	84
75) m,p-Xylenes	15.70	91	278144	0.14	ppbV	#	81
76) Nonane	16.08	57	45180	0.04	ppbV	#	64
77) Styrene	16.25	104	162933	0.10	ppbV	#	82
79) o-Xylene	16.33	91	179865	0.09	ppbV	#	84
85) 4-Ethyltoluene	17.85	105	392495	0.13	ppbV	m	94
86) 1,3,5-Trimethylbenzene	17.94	105	233134	0.08	ppbV	m	75
87) Decane	18.47	57	561	0.00	ppbV	m	94
88) tert-butyl benzene	18.55	119	111493	0.04	ppbV		84
89) 1,2,4-Trimethylbenzene	18.55	105	349766	0.14	ppbV	#	88
93) Isopropyltoluene	19.15	119	352163	0.09	ppbV		95

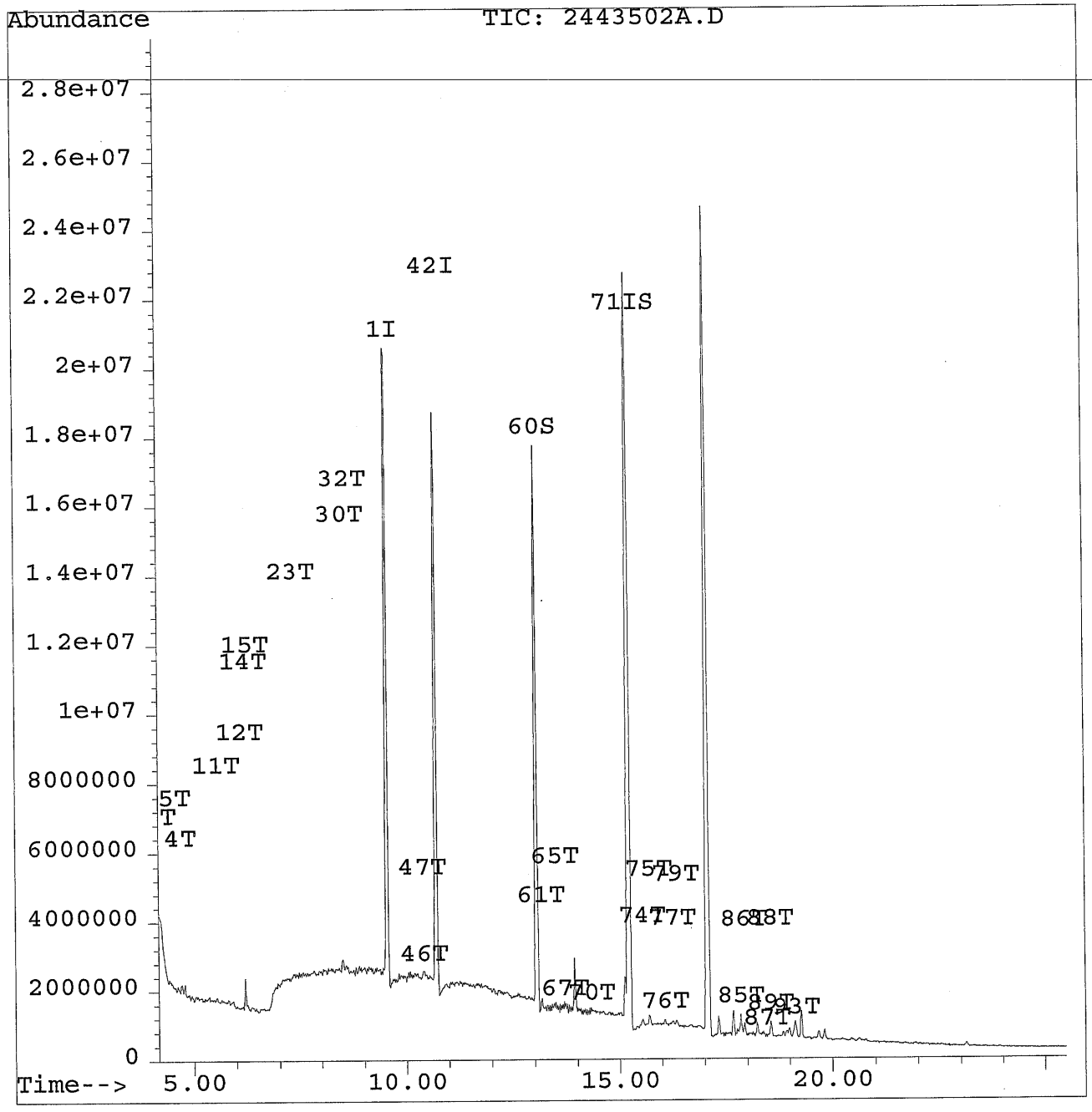
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443502A.D
Acq Time : 10 Dec 124 6:59 pm
Sample : T-402
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 9:11 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443502A.D
Acq Time : 10 Dec 124 6:59 pm Operator: UG
Sample : T-402 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	21.01 ppbV	101933014	Chlorobenzene-d5	15

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	90
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	87
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	87
4	3-Pyridinol	964	000109-00-2	11
5	Pyridine, 1-oxide	962	000694-59-7	9

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
19.27	0.43 ppbV	2074366	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	D-Limonene	5790	005989-27-5	97
2	Bicyclo[2.2.1]hept-2-ene, 1,7,7-tri	5755	000464-17-5	95
3	Cyclohexene, 1-methyl-4-(1-methylet	5760	007705-14-8	87
4	Cyclohexene, 1-methyl-4-(1-methylet	5798	005989-54-8	81
5	Cyclohexanol, 1-methyl-4-(1-methyle	18624	010198-23-9	78

Sample Data Packages

SDG Number 224435

Lab Id Number 3

Client ID T-403

Analytical Method TO-15

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Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 03**

File Name: 2443503A.D **Date Sampled:** 11/19/24 **Time:** 08:12
Description: T-403 **Date Analyzed:** 12/10/24 **Time:** 19:38
Canister: 547 **Can Dilution Factor:** 1.27
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.06	1.10	0.73	1.82	1.89	
75-71-8	Dichlorodifluoromethane	0.64	1.06	ND	3.14	5.24	ND	
67-56-1	Methanol	2.12	2.54	ND	2.77	3.33	ND	
74-87-3	Chloromethane	0.64	1.06	ND	1.31	2.19	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.06	ND	2.96	7.41	ND	
75-01-4	Vinyl chloride	0.21	1.06	ND	0.55	2.71	ND	
106-99-0	1,3-Butadiene	0.21	1.06	ND	0.47	2.34	ND	
74-83-9	Bromomethane	0.42	1.06	ND	1.65	4.11	ND	
75-00-3	Chloroethane	0.42	1.06	ND	1.12	2.80	ND	
64-17-5	Ethanol	2.12	13.59	ND	4.00	25.66	ND	
107-02-8	Acrolein	0.42	1.27	0.74	0.97	2.92	1.70	J
75-69-4	Trichlorofluoromethane	0.42	1.06	ND	2.38	5.96	ND	
67-64-1	Acetone	2.12	2.54	4.88	5.04	6.04	11.62	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.29	ND	2.08	13.02	ND	
75-65-0	t-Butyl alcohol	0.42	4.23	ND	1.28	12.85	ND	
4227-95-6	Methyl iodide	0.42	1.27	ND	2.48	7.43	ND	
75-35-4	1,1-Dichloroethene	0.21	1.06	ND	0.84	4.20	ND	
107-13-1	Acrylonitrile	0.85	1.27	ND	1.84	2.76	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.06	ND	1.62	8.12	ND	
107-05-1	Allyl chloride	0.21	4.23	ND	0.66	13.26	ND	
75-09-2	Methylene chloride	0.21	1.06	ND	0.74	3.68	ND	
75-15-0	Carbon disulfide	0.42	1.06	ND	1.32	3.30	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.84	3.36	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.85	ND	1.53	3.05	ND	
107-12-0	Propionitrile	1.06	1.69	ND	2.39	3.82	ND	
75-34-3	1,1-Dichloroethane	0.21	1.06	ND	0.86	4.29	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.06	ND	1.77	4.43	ND	
108-05-4	Vinyl acetate	0.21	4.23	ND	0.75	14.93	ND	
78-93-3	2-Butanone (MEK)	0.42	1.27	1.23	1.25	3.75	3.63	J
108-20-3	Diisopropyl ether	0.42	2.54	ND	1.77	10.63	ND	
110-54-3	Hexane	0.42	1.06	0.49	1.49	3.74	1.73	J
126-98-7	Methacrylonitrile	0.42	1.06	ND	1.16	2.91	ND	
141-78-6	Ethyl acetate	0.42	1.06	ND	1.53	3.82	ND	
74-97-5	Bromochloromethane	0.21	1.06	ND	1.12	5.61	ND	
96-33-3	Methyl acrylate	0.42	2.12	ND	1.49	7.46	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.27	ND	0.63	3.75	ND	
78-83-1	Isobutyl alcohol	0.85	3.39	ND	2.57	10.28	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.06	ND	0.84	4.20	ND	
594-20-7	2,2-Dichloropropane	0.21	1.06	ND	0.98	4.90	ND	
67-66-3	Chloroform	0.21	1.06	0.24	1.04	5.18	1.15	J
71-55-6	1,1,1-Trichloroethane	0.21	1.06	ND	1.16	5.78	ND	
107-06-2	1,2-Dichloroethane	0.21	1.06	ND	0.86	4.29	ND	
563-58-6	1,1-Dichloropropene	0.21	1.06	ND	0.96	4.81	ND	
110-82-7	Cyclohexane	0.21	1.06	0.40	0.73	3.65	1.39	J
71-43-2	Benzene	1.48	2.12	ND	4.74	6.77	ND	
56-23-5	Carbon tetrachloride	0.21	1.06	ND	1.33	6.67	ND	
994-05-8	t-Amyl methyl ether	0.42	2.12	ND	1.77	8.86	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.06	ND	0.99	4.95	ND	
142-82-5	n-Heptane	0.42	1.06	ND	1.74	4.34	ND	
78-87-5	1,2-Dichloropropane	0.21	1.06	ND	0.98	4.90	ND	
123-91-1	1,4 Dioxane	0.42	2.12	ND	1.53	7.64	ND	
74-95-3	Dibromomethane	0.21	1.06	ND	1.51	7.53	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.06	ND	0.57	5.70	ND	
75-27-4	Bromodichloromethane	0.21	1.06	ND	1.42	7.10	ND	
80-62-6	Methyl methacrylate	0.42	1.06	ND	1.74	4.34	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.39	ND	1.74	13.90	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.06	ND	0.96	4.81	ND	
108-88-3	Toluene	0.85	1.06	0.91	3.19	3.99	3.44	J
10061-02-6	trans-1,3-Dichloropropene	0.21	1.06	ND	0.96	4.81	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.06	ND	1.16	5.78	ND	
97-63-2	Ethyl methacrylate	0.42	1.06	ND	1.98	4.95	ND	
591-78-6	2-Hexanone	0.42	3.39	ND	1.74	13.90	ND	
142-28-9	1,3-Dichloropropane	0.21	2.96	ND	0.98	13.71	ND	
111-65-9	Octane	0.42	1.06	ND	1.98	4.95	ND	
124-48-1	Dibromochloromethane	0.42	1.06	ND	3.61	9.03	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.06	ND	3.26	8.14	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.06	ND	0.72	7.19	ND	
108-90-7	Chlorobenzene	0.42	1.06	ND	1.95	4.88	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.06	ND	2.91	7.27	ND	
100-41-4	Ethylbenzene	0.42	1.06	ND	1.84	4.60	ND	
1330-20-7	m,p-Xylenes	0.42	1.06	ND	1.84	4.60	ND	
111-84-2	Nonane	0.42	1.06	ND	2.22	5.56	ND	
100-42-5	Styrene	0.64	1.06	ND	2.71	4.52	ND	
75-25-2	Bromoform	0.42	1.06	ND	4.38	10.95	ND	
95-47-6	o-Xylene	0.42	1.06	ND	1.84	4.60	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.12	ND	5.82	14.55	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.54	ND	5.11	15.33	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.54	ND	4.33	13.00	ND	
103-65-1	n-Propylbenzene	0.85	2.96	ND	4.17	14.59	ND	
98-82-8	Isopropylbenzene	0.85	2.96	ND	4.17	14.59	ND	
622-96-8	4-Ethyltoluene	0.85	6.77	ND	4.17	33.34	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.81	ND	4.17	18.76	ND	
124-18-5	Decane	0.85	2.54	ND	4.93	14.80	ND	
98-06-6	tert-butyl benzene	0.85	2.54	ND	4.65	13.96	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.81	ND	4.17	18.76	ND	
538-93-2	i-Butylbenzene	0.85	2.54	ND	4.65	13.96	ND	
135-98-8	sec-butylbenzene	0.85	2.96	ND	4.65	16.29	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.39	ND	5.10	20.39	ND	
99-87-6	Isopropyltoluene	0.85	2.54	ND	4.65	13.96	ND	
100-44-7	Benzyl chloride	0.85	2.12	ND	4.39	10.97	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.12	ND	5.10	12.74	ND	
104-51-8	n-Butylbenzene	0.85	2.54	ND	4.65	13.96	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.96	ND	5.10	17.84	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.27	2.96	ND	12.29	28.68	ND	
120-82-1	1,2,4-Trichlorobenzene	1.27	2.12	ND	9.44	15.73	ND	
91-20-3	Naphthalene	2.12	0.42	ND	11.11	2.22	ND	
87-61-6	1,2,3-Trichlorobenzene	1.27	2.12	ND	9.44	15.73	ND	
87-68-3	Hexachlorobutadiene	1.06	1.27	ND	11.30	13.56	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	129	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 03
Canister: 547
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 08:12
Date Analyzed: 12/10/24 **Time:** 19:38
Can Dilution Factor: 1.27
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.96	6.35	ND	12.14	26.01	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**03**		
File Name:	2443503A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**8:12**
Sample ID:	T-403	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**19:38**
Anal Date:	10 Dec 124 7:38 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**547**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.27**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.259	4.41	42.00	62881
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.455	4.86	31.00	121712
74-87-3	Chloromethane	5	TRG	0.136	4.77	50.00	39194
76-14-2	1,2-Dichlorotetrafluoretha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.175	6.32	56.00	18542
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.153	6.42	58.00	289503
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.112	6.45	45.00	54629
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoretha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.057	7.61	76.00	46561
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.291	8.75	72.00	47673
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.116	8.86	57.00	54557
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.014	9.51	74.00	503
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.056	9.42	83.00	**31009**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.095	10.74	56.00	41458
71-43-2	Benzene	47	TRG	0.156	10.70	78.00	161991
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.216	13.50	91.00	314749
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.024	14.69	166.00	25985
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.065	15.90	106	165952
1330-20-7	m,p-Xylenes	75	TRG	0.068	16.06	91.00	141422
111-84-2	Nonane	76	TRG	0.027	16.43	57.00	32694
100-42-5	Styrene	77	TRG	0.078	16.61	104.00	130526
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.060	16.33	91.00	136444
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.046	18.04	91.00	184934
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.141	18.23	105.00	447556
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.096	18.31	105.00	313760
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.143	18.95	105.00	373296
538-93-2	i-Butylbenzene	90	TRG	0.036	19.24	91.00	134127
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.058	19.53	119.00	233903
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	496
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.027	23.13	225.00	49863
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**24706032**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**26151052**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**34124223**
2037-26-5	Toluene-d8	60	SURR	12.885	13.40	98.00	**20004680**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 03
File Name: 2443503A.D
Run Method: A1563_L.M
Can Factor: 1.27
Air Volume: 300.0 ml
Can/Tube Number: 547
Dilution Factor: 0.3810
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3810
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.26	1.10	1.89	1.10	1.89	1.89	1.89	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.46	1.93	2.53	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.14	0.57	1.19	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.18	0.74	1.70	0.74	1.70	1.70	1.70	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.15	4.88	11.62	4.88	11.62	11.62	11.62	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.11	0.48	1.17	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.06	0.24	0.76	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.29	1.23	3.63	1.23	3.63	3.63	3.63	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.12	0.49	1.73	0.49	1.73	1.73	1.73	**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		0.050	0.300
Isobutyl alcohol	74.1	0.01	0.06	0.18	ND	ND	0		0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Chloroform	119.4	0.06	0.24	1.15	0.24	1.15	1.15	1.15	0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Cyclohexane	84.2	0.10	0.40	1.39	0.40	1.39	1.39	1.39	0.050	0.250
Benzene	78.1	0.16	0.66	2.11	ND	ND	0		0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Toluene	92.1	0.22	0.91	3.44	0.91	3.44	3.44	3.44	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Tetrachloroethene (PCE)	165.8	0.02	0.10	0.68	ND	ND	0		0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethylbenzene	106.2	0.07	0.28	1.20	ND	ND	0		0.100	0.250
m,p-Xylenes	106.2	0.07	0.29	1.25	ND	ND	0		0.100	0.250
Nonane	128.3	0.03	0.11	0.60	ND	ND	0		0.100	0.250
Styrene	104.2	0.08	0.33	1.41	ND	ND	0		0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		0.100	0.250
o-Xylene	106.2	0.06	0.26	1.11	ND	ND	0		0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		0.200	0.600
n-Propylbenzene	120.2	0.05	0.19	0.95	ND	ND	0		0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
4-Ethyltoluene	120.2	0.14	0.60	2.94	ND	ND	0		0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.10	0.41	1.99	ND	ND	0		0.200	0.900
Decane	142.3	0.00	0.00	0.00	ND	ND	0		0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.14	0.61	2.99	ND	ND	0		0.200	0.900
i-Butylbenzene	134.2	0.04	0.15	0.84	ND	ND	0		0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.06	0.25	1.36	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.01	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.03	0.11	1.22	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.88	129	129	129	129	129	129	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.42	0.73	1.06	1.82				=		Y	1.10	1.89
0.64	3.14	1.06	5.24	U	ND		ND		Y	0.00	0.00
2.12	2.77	2.54	3.33	U	ND		ND		Y	0.00	0.00
0.64	1.31	1.06	2.19	U	ND		ND		Y	0.00	0.00
0.42	2.96	1.06	7.41	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.06	2.71	U	ND		ND		Y	0.00	0.00
0.21	0.47	1.06	2.34	U	ND		ND		Y	0.00	0.00
0.42	1.65	1.06	4.11	U	ND		ND		Y	0.00	0.00
0.42	1.12	1.06	2.80	U	ND		ND		Y	0.00	0.00
2.12	4.00	13.59	25.66	U	ND		ND		Y	0.00	0.00
0.42	0.97	1.27	2.92	J	J		=		Y	0.74	1.70
0.42	2.38	1.06	5.96	U	ND		ND		Y	0.00	0.00
2.12	5.04	2.54	6.04				=		Y	4.88	11.62
0.85	2.08	5.29	13.02	U	ND		ND		Y	0.00	0.00
0.42	1.28	4.23	12.85	U	ND		ND		Y	0.00	0.00
0.42	2.48	1.27	7.43	U	ND		ND		Y	0.00	0.00
0.21	0.84	1.06	4.20	U	ND		ND		Y	0.00	0.00
0.85	1.84	1.27	2.76	U	ND		ND		Y	0.00	0.00
0.21	1.62	1.06	8.12	U	ND		ND		Y	0.00	0.00
0.21	0.66	4.23	13.26	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.06	3.68	U	ND		ND		Y	0.00	0.00
0.42	1.32	1.06	3.30	U	ND		ND		Y	0.00	0.00
0.21	0.84	0.85	3.36	U	ND		ND		Y	0.00	0.00
0.42	1.53	0.85	3.05	U	ND		ND		Y	0.00	0.00
1.06	2.39	1.69	3.82	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.06	4.29	U	ND		ND		Y	0.00	0.00
0.42	1.77	1.06	4.43	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.23	14.93	U	ND		ND		Y	0.00	0.00
0.42	1.25	1.27	3.75	J	J		=		Y	1.23	3.63
0.42	1.77	2.54	10.63	U	ND		ND		Y	0.00	0.00
0.42	1.49	1.06	3.74	J	J		=		Y	0.49	1.73
0.42	1.16	1.06	2.91	U	ND		ND		Y	0.00	0.00
0.42	1.53	1.06	3.82	U	ND		ND		Y	0.00	0.00
0.21	1.12	1.06	5.61	U	ND		ND		Y	0.00	0.00

0.42	1.49	2.12	7.46	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.27	3.75	U	ND	ND	Y	0.00	0.00
0.85	2.57	3.39	10.28	U	ND	ND	Y	0.00	0.00
0.21	0.84	1.06	4.20	U	ND	ND	Y	0.00	0.00
0.21	0.98	1.06	4.90	U	ND	ND	Y	0.00	0.00
0.21	1.04	1.06	5.18	J	J	=	Y	0.24	1.15
0.21	1.16	1.06	5.78	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.06	4.29	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.06	4.81	U	ND	ND	Y	0.00	0.00
0.21	0.73	1.06	3.65	J	J	=	Y	0.40	1.39
1.48	4.74	2.12	6.77	U	ND	ND	Y	0.00	0.00
0.21	1.33	1.06	6.67	U	ND	ND	Y	0.00	0.00
0.42	1.77	2.12	8.86	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.06	4.95	U	ND	ND	Y	0.00	0.00
0.42	1.74	1.06	4.34	U	ND	ND	Y	0.00	0.00
0.21	0.98	1.06	4.90	U	ND	ND	Y	0.00	0.00
0.42	1.53	2.12	7.64	U	ND	ND	Y	0.00	0.00
0.21	1.51	1.06	7.53	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.06	5.70	U	ND	ND	Y	0.00	0.00
0.21	1.42	1.06	7.10	U	ND	ND	Y	0.00	0.00
0.42	1.74	1.06	4.34	U	ND	ND	Y	0.00	0.00
0.42	1.74	3.39	13.90	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.06	4.81	U	ND	ND	Y	0.00	0.00
0.85	3.19	1.06	3.99	J	J	=	Y	0.91	3.44
0.21	0.96	1.06	4.81	U	ND	ND	Y	0.00	0.00
0.21	1.16	1.06	5.78	U	ND	ND	Y	0.00	0.00
0.42	1.98	1.06	4.95	U	ND	ND	Y	0.00	0.00
0.42	1.74	3.39	13.90	U	ND	ND	Y	0.00	0.00
0.21	0.98	2.96	13.71	U	ND	ND	Y	0.00	0.00
0.42	1.98	1.06	4.95	U	ND	ND	Y	0.00	0.00
0.42	3.61	1.06	9.03	U	ND	ND	Y	0.00	0.00
0.42	3.26	1.06	8.14	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.06	7.19	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.06	4.88	U	ND	ND	Y	0.00	0.00
0.42	2.91	1.06	7.27	U	ND	ND	Y	0.00	0.00
0.42	1.84	1.06	4.60	U	ND	ND	Y	0.00	0.00
0.42	1.84	1.06	4.60	U	ND	ND	Y	0.00	0.00
0.42	2.22	1.06	5.56	U	ND	ND	Y	0.00	0.00
0.64	2.71	1.06	4.52	U	ND	ND	Y	0.00	0.00
0.42	4.38	1.06	10.95	U	ND	ND	Y	0.00	0.00
0.42	1.84	1.06	4.60	U	ND	ND	Y	0.00	0.00
0.85	5.82	2.12	14.55	U	ND	ND	Y	0.00	0.00
0.85	5.11	2.54	15.33	U	ND	ND	Y	0.00	0.00
0.85	4.33	2.54	13.00	U	ND	ND	Y	0.00	0.00
0.85	4.17	2.96	14.59	U	ND	ND	Y	0.00	0.00
0.85	4.17	2.96	14.59	U	ND	ND	Y	0.00	0.00
0.85	4.17	6.77	33.34	U	ND	ND	Y	0.00	0.00
0.85	4.17	3.81	18.76	U	ND	ND	Y	0.00	0.00
0.85	4.93	2.54	14.80	U	ND	ND	Y	0.00	0.00
0.85	4.65	2.54	13.96	U	ND	ND	Y	0.00	0.00
0.85	4.17	3.81	18.76	U	ND	ND	Y	0.00	0.00
0.85	4.65	2.54	13.96	U	ND	ND	Y	0.00	0.00

0.85	4.65	2.96	16.29	U	ND	ND	Y	0.00	0.00
0.85	5.10	3.39	20.39	U	ND	ND	Y	0.00	0.00
0.85	4.65	2.54	13.96	U	ND	ND	Y	0.00	0.00
0.85	4.39	2.12	10.97	U	ND	ND	Y	0.00	0.00
0.85	5.10	2.12	12.74	U	ND	ND	Y	0.00	0.00
0.85	4.65	2.54	13.96	U	ND	ND	Y	0.00	0.00
0.85	5.10	2.96	17.84	U	ND	ND	Y	0.00	0.00
1.27	12.29	2.96	28.68	U	ND	ND	Y	0.00	0.00
1.27	9.44	2.12	15.73	U	ND	ND	Y	0.00	0.00
2.12	11.11	0.42	2.22	U	ND	ND	Y	0.00	0.00
1.27	9.44	2.12	15.73	U	ND	ND	Y	0.00	0.00
1.06	11.30	1.27	13.56	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 03
Sample ID: T-403

Can Factor: 1.27
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	
ND	0.7	1.5	3.0	6.35	2.96	12.14	6.35	26.01	

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**03**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.27	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	62881	20.0	24706032	0.259	1.10	1.89
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	24706032	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	121712	20.0	24706032	0.455	1.93	2.53
5	Chloromethane	PFB	TRG	50.5	0.234	39194	20.0	24706032	0.136	0.57	1.19
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	24706032	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	24706032	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	24706032	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	24706032	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	24706032	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	24706032	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	18542	20.0	24706032	0.175	0.74	1.70
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	24706032	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	289503	20.0	24706032	1.153	4.88	11.62
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	54629	20.0	24706032	0.112	0.48	1.17
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	24706032	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	24706032	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	24706032	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	24706032	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	24706032	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	24706032	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	24706032	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	46561	20.0	24706032	0.057	0.24	0.76
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	24706032	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	24706032	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	24706032	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	24706032	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	24706032	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	24706032	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	47673	20.0	24706032	0.291	1.23	3.63
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	24706032	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	54557	20.0	24706032	0.116	0.49	1.73

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	24706032	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	24706032	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	24706032	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	24706032	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	24706032	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	503	20.0	24706032	0.014	0.06	0.18
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	24706032	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	24706032	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	31009	20.0	24706032	0.056	0.24	1.15
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	26151052	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	26151052	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	26151052	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	41458	20.0	26151052	0.095	0.40	1.39
47	Benzene	14DF	TRG	78.1	0.794	161991	20.0	26151052	0.156	0.66	2.11
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	26151052	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	26151052	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	26151052	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	26151052	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	26151052	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	26151052	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	26151052	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	26151052	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	26151052	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	26151052	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	26151052	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	26151052	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	314749	20.0	26151052	0.216	0.91	3.44
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	26151052	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	26151052	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	26151052	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	26151052	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	26151052	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	26151052	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	26151052	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	26151052	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	25985	20.0	26151052	0.024	0.10	0.68
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	34124223	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	34124223	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	165952	20.0	34124223	0.065	0.28	1.20
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	141422	20.0	34124223	0.068	0.29	1.25
76	Nonane	d5CB	TRG	128.3	0.711	32694	20.0	34124223	0.027	0.11	0.60
77	Styrene	d5CB	TRG	104.2	0.978	130526	20.0	34124223	0.078	0.33	1.41
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	34124223	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	136444	20.0	34124223	0.060	0.26	1.11
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	34124223	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	34124223	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	34124223	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	184934	20.0	34124223	0.046	0.19	0.95
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	34124223	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	447556	20.0	34124223	0.141	0.60	2.94
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	313760	20.0	34124223	0.096	0.41	1.99
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	34124223	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	34124223	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	373296	20.0	34124223	0.143	0.61	2.99
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	134127	20.0	34124223	0.036	0.15	0.84
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	34124223	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	34124223	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	233903	20.0	34124223	0.058	0.25	1.36
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	34124223	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	496	20.0	34124223	0.000	0.00	0.01
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	34124223	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	34124223	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	34124223	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	34124223	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	34124223	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	34124223	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	49863	20.0	34124223	0.027	0.11	1.22
1	Pentafluorobenzene	0	IS	0.0	0.000	24706032	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	26151052	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	34124223	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	20004680	10.0		12.885	128.85	129

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443503A.D
Acq Time : 10 Dec 124 7:38 pm
Sample : T-403
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 10:08 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.52	168	24706032	20.00	ppbV	-0.30
42) 1,4-Difluorobenzene	10.70	114	26151052	20.00	ppbV	-0.30
71) Chlorobenzene-d5	15.21	117	34124223	20.00	ppbV	-0.36
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	20004680	12.88	ppbV	128.85
Target Compounds						Qvalue
2) Propylene	4.19	42	62881	0.26	ppbV m	62
4) Methanol	4.81	31	121712	0.46	ppbV #	82
5) Chloromethane	4.52	50	39194	0.14	ppbV #	90
12) Acrolein	6.05	56	18542	0.18	ppbV m	89
14) Acetone	6.16	58	289503	1.15	ppbV m	24
15) 2-propanol (isopropylalcoh	6.22	45	54629	0.11	ppbV m	96
23) Carbon disulfide	7.30	76	46561	0.06	ppbV #	85
30) 2-Butanone (MEK)	8.48	72	47673	0.29	ppbV #	75
32) Hexane	8.55	57	54557	0.12	ppbV #	13
38) Isobutyl alcohol	9.71	74	503	0.01	ppbV m	81
41) Chloroform	9.11	83	31009	0.06	ppbV	86
46) Cyclohexane	10.41	56	41458	0.10	ppbV	97
47) Benzene	10.38	78	161991	0.16	ppbV m	75
61) Toluene	13.16	91	314749	0.22	ppbV m	96
70) Tetrachloroethene (PCE)	14.32	166	25985	0.02	ppbV #	90
74) Ethylbenzene	15.55	91	165952	0.07	ppbV #	82
75) m,p-Xylenes	15.70	91	141422	0.07	ppbV #	61
76) Nonane	16.08	57	32694	0.03	ppbV #	66
77) Styrene	16.25	104	130526	0.08	ppbV #	84
79) o-Xylene	16.33	91	136444	0.06	ppbV #	81
83) n-Propylbenzene	17.67	91	184934	0.05	ppbV #	91
85) 4-Ethyltoluene	17.85	105	447556	0.14	ppbV m	87
86) 1,3,5-Trimethylbenzene	17.94	105	313760	0.10	ppbV m	79
89) 1,2,4-Trimethylbenzene	18.55	105	373296	0.14	ppbV #	89
90) i-Butylbenzene	18.84	91	134127	0.04	ppbV m	96
93) Isopropyltoluene	19.15	119	233903	0.06	ppbV m	91
95) 1,4-Dichlorobenzene	19.22	146	496	0.00	ppbV m	94
102) Hexachlorobutadiene	23.13	225	49863	0.03	ppbV	96

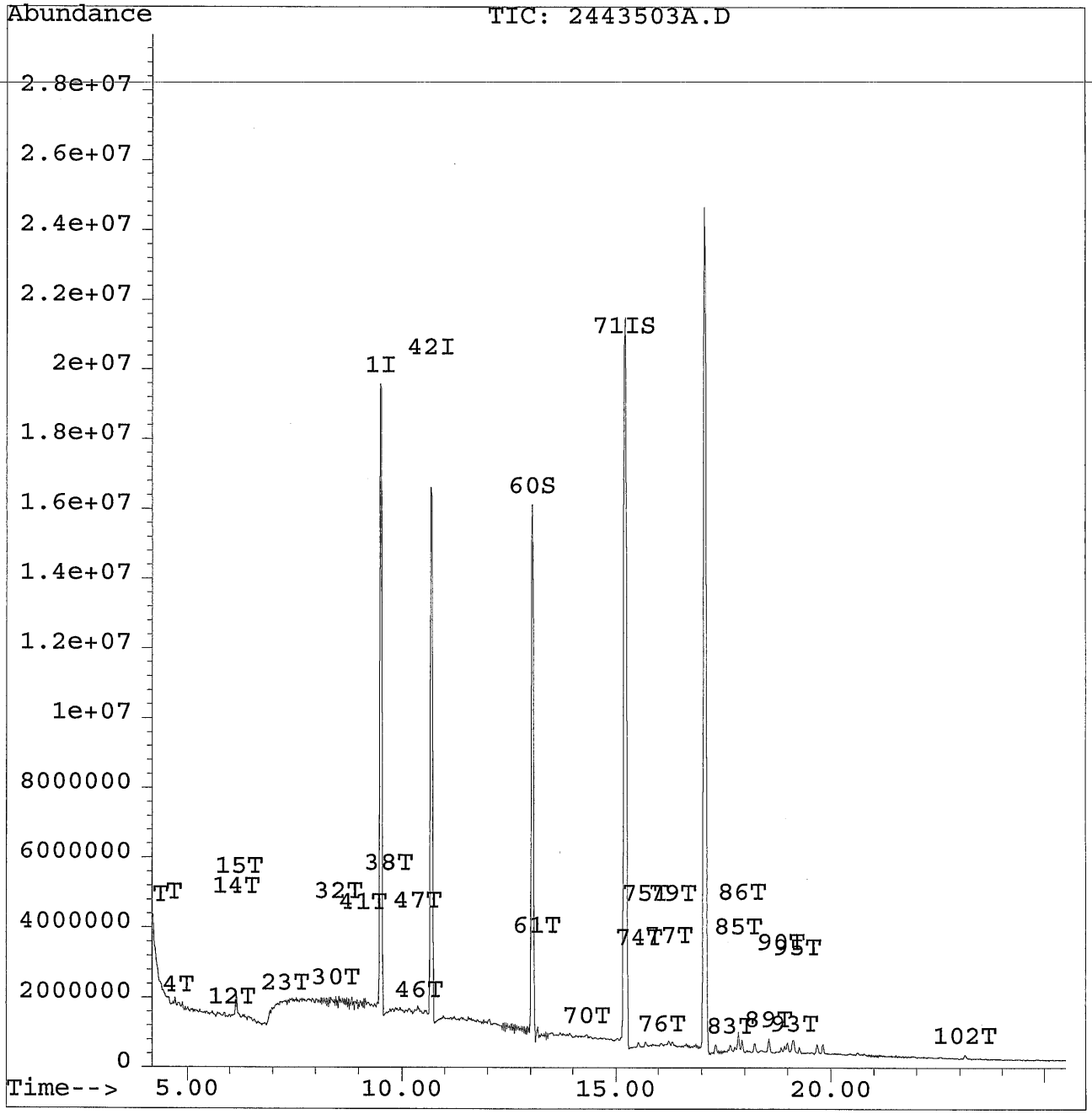
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443503A.D
Acq Time : 10 Dec 124 7:38 pm
Sample : T-403
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 10:08 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443503A.D
Acq Time : 10 Dec 124 7:38 pm
Sample : T-403
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	22.33 ppbV	111085415	Chlorobenzene-d5	15

Hit# of 7	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	93
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	87
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	58
4	Pyridine, 1-oxide	962	000694-59-7	9
5	Bicyclo[2.2.1]heptane-2-carboxaldeh	3691	003574-55-8	7

Sample Data Packages

SDG Number 224435

Lab Id Number 4

Client ID T-404

Analytical Method TO-15

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Analytical Report
Quantitation Report
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Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 04**

File Name: 2443504A.D **Date Sampled:** 11/19/24 **Time:** 08:24
Description: T-404 **Date Analyzed:** 12/10/24 **Time:** 20:17
Canister: 749 **Can Dilution Factor:** 1.24
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.41	1.03	1.25	0.71	1.78	2.16	
75-71-8	Dichlorodifluoromethane	0.62	1.03	ND	3.07	5.12	ND	
67-56-1	Methanol	2.07	2.48	2.16	2.71	3.25	2.83	J
74-87-3	Chloromethane	0.62	1.03	ND	1.28	2.14	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.41	1.03	ND	2.89	7.23	ND	
75-01-4	Vinyl chloride	0.21	1.03	ND	0.53	2.65	ND	
106-99-0	1,3-Butadiene	0.21	1.03	ND	0.46	2.29	ND	
74-83-9	Bromomethane	0.41	1.03	ND	1.61	4.02	ND	
75-00-3	Chloroethane	0.41	1.03	ND	1.09	2.73	ND	
64-17-5	Ethanol	2.07	13.27	ND	3.90	25.05	ND	
107-02-8	Acrolein	0.41	1.24	0.68	0.95	2.85	1.56	J
75-69-4	Trichlorofluoromethane	0.41	1.03	ND	2.33	5.81	ND	
67-64-1	Acetone	2.07	2.48	5.82	4.92	5.90	13.84	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.17	ND	2.03	12.72	ND	
75-65-0	t-Butyl alcohol	0.41	4.13	ND	1.25	12.54	ND	
4227-95-6	Methyl iodide	0.41	1.24	ND	2.42	7.26	ND	
75-35-4	1,1-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	
107-13-1	Acrylonitrile	0.83	1.24	ND	1.80	2.70	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.03	ND	1.59	7.93	ND	
107-05-1	Allyl chloride	0.21	4.13	ND	0.65	12.95	ND	
75-09-2	Methylene chloride	0.21	1.03	ND	0.72	3.59	ND	
75-15-0	Carbon disulfide	0.41	1.03	ND	1.29	3.22	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.82	3.28	ND	
1634-04-4	Methyl tert butyl ether	0.41	0.83	ND	1.49	2.98	ND	
107-12-0	Propionitrile	1.03	1.65	ND	2.33	3.73	ND	
75-34-3	1,1-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
637-92-3	Ethyl tert butyl ether	0.41	1.03	ND	1.73	4.33	ND	
108-05-4	Vinyl acetate	0.21	4.13	ND	0.73	14.58	ND	
78-93-3	2-Butanone (MEK)	0.41	1.24	0.60	1.22	3.66	1.77	J
108-20-3	Diisopropyl ether	0.41	2.48	ND	1.73	10.38	ND	
110-54-3	Hexane	0.41	1.03	ND	1.46	3.65	ND	
126-98-7	Methacrylonitrile	0.41	1.03	ND	1.14	2.84	ND	
141-78-6	Ethyl acetate	0.41	1.03	ND	1.49	3.73	ND	
74-97-5	Bromochloromethane	0.21	1.03	ND	1.10	5.48	ND	
96-33-3	Methyl acrylate	0.41	2.07	ND	1.46	7.29	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.24	ND	0.61	3.66	ND	
78-83-1	Isobutyl alcohol	0.83	3.31	ND	2.51	10.03	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	
594-20-7	2,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
67-66-3	Chloroform	0.21	1.03	ND	1.01	5.05	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
107-06-2	1,2-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
563-58-6	1,1-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
110-82-7	Cyclohexane	0.21	1.03	ND	0.71	3.56	ND	
71-43-2	Benzene	1.45	2.07	ND	4.63	6.61	ND	
56-23-5	Carbon tetrachloride	0.21	1.03	ND	1.30	6.51	ND	
994-05-8	t-Amyl methyl ether	0.41	2.07	ND	1.73	8.65	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.03	ND	0.97	4.83	ND	
142-82-5	n-Heptane	0.41	1.03	ND	1.70	4.24	ND	
78-87-5	1,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
123-91-1	1,4 Dioxane	0.41	2.07	ND	1.49	7.46	ND	
74-95-3	Dibromomethane	0.21	1.03	ND	1.47	7.36	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.03	ND	0.56	5.56	ND	
75-27-4	Bromodichloromethane	0.21	1.03	ND	1.39	6.93	ND	
80-62-6	Methyl methacrylate	0.41	1.03	ND	1.69	4.24	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.41	3.31	ND	1.70	13.57	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
108-88-3	Toluene	0.83	1.03	ND	3.12	3.90	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
97-63-2	Ethyl methacrylate	0.41	1.03	ND	1.93	4.83	ND	
591-78-6	2-Hexanone	0.41	3.31	ND	1.70	13.57	ND	
142-28-9	1,3-Dichloropropane	0.21	2.89	ND	0.96	13.39	ND	
111-65-9	Octane	0.41	1.03	ND	1.93	4.83	ND	
124-48-1	Dibromochloromethane	0.41	1.03	ND	3.53	8.82	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.41	1.03	ND	3.18	7.95	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.03	ND	0.70	7.02	ND	
108-90-7	Chlorobenzene	0.41	1.03	ND	1.91	4.77	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.41	1.03	ND	2.84	7.10	ND	
100-41-4	Ethylbenzene	0.41	1.03	ND	1.80	4.49	ND	
1330-20-7	m,p-Xylenes	0.41	1.03	ND	1.80	4.49	ND	
111-84-2	Nonane	0.41	1.03	ND	2.17	5.43	ND	
100-42-5	Styrene	0.62	1.03	ND	2.65	4.41	ND	
75-25-2	Bromoform	0.41	1.03	ND	4.28	10.69	ND	
95-47-6	o-Xylene	0.41	1.03	ND	1.80	4.49	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.07	ND	5.68	14.20	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.48	ND	4.99	14.97	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.48	ND	4.23	12.70	ND	
103-65-1	n-Propylbenzene	0.83	2.89	ND	4.07	14.24	ND	
98-82-8	Isopropylbenzene	0.83	2.89	ND	4.07	14.24	ND	
622-96-8	4-Ethyltoluene	0.83	6.61	ND	4.07	32.56	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
124-18-5	Decane	0.83	2.48	ND	4.82	14.45	ND	
98-06-6	tert-butyl benzene	0.83	2.48	ND	4.54	13.63	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
538-93-2	i-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
135-98-8	sec-butylbenzene	0.83	2.89	ND	4.54	15.90	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.31	ND	4.98	19.91	ND	
99-87-6	Isopropyltoluene	0.83	2.48	ND	4.54	13.63	ND	
100-44-7	Benzyl chloride	0.83	2.07	ND	4.29	10.72	ND	
106-46-7	1,4-Dichlorobenzene	0.83	2.07	ND	4.98	12.44	ND	
104-51-8	n-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.89	ND	4.98	17.42	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.24	2.89	ND	12.00	28.00	ND	
120-82-1	1,2,4-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
91-20-3	Naphthalene	2.07	0.41	ND	10.85	2.17	ND	
87-61-6	1,2,3-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
87-68-3	Hexachlorobutadiene	1.03	1.24	ND	11.04	13.24	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	130	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 04
Canister: 749
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 08:24
Date Analyzed: 12/10/24 **Time:** 20:17
Can Dilution Factor: 1.24
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.89	6.20	ND	11.85	25.39	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**04**		
File Name:	2443504A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**8:24**
Sample ID:	T-404	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**20:17**
Anal Date:	10 Dec 124 8:17 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**749**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.24**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.303	4.41	42.00	71992
75-71-8	Dichlorodifluoromethane	3	TRG	0.025	4.48	85.00	23993
67-56-1	Methanol	4	TRG	0.522	4.86	31.00	136797
74-87-3	Chloromethane	5	TRG	0.147	4.77	50.00	41711
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.164	6.32	56.00	17001
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.407	6.42	58.00	345947
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.131	6.45	45.00	62576
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.034	7.61	76.00	27250
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.145	8.75	72.00	23283
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.064	8.86	57.00	29455
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	0
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.046	10.74	56.00	20009
71-43-2	Benzene	47	TRG	0.117	10.70	78.00	119892
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	0
108-88-3	Toluene	61	TRG	0.179	13.50	91.00	258468
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.020	14.69	166.00	21854
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.042	15.90	106	103355
1330-20-7	m,p-Xylenes	75	TRG	0.044	16.06	91.00	88930
111-84-2	Nonane	76	TRG	0.018	16.43	57.00	21404
100-42-5	Styrene	77	TRG	0.050	16.61	104.00	81047
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.036	16.34	91.00	78831
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.033	18.04	91.00	128713
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.099	18.23	105.00	308519
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.051	18.31	105.00	162021
124-18-5	Decane	87	TRG	0.046	18.60	57.00	96405
98-06-6	tert-butyl benzene	88	TRG	0.025	18.93	119.00	80893

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.096	18.95	105.00	243646
538-93-2	i-Butylbenzene	90	TRG	0.018	19.24	91.00	65660
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.051	19.53	119.00	198885
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.052	20.20	91.00	195393
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.001	21.02	75.00	428
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.020	23.13	225.00	36169
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**24198718**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**25877454**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**33374470**
2037-26-5	Toluene-d8	60	SURR	12.975	13.40	98.00	**19934922**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 04
File Name: 2443504A.D
Run Method: A1563_L.M
Can Factor: 1.24
Air Volume: 300.0 ml
Can/Tube Number: 749
Dilution Factor: 0.3720
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3720
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.30	1.25	2.16	1.25	2.16	2.16	2.16	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.03	0.10	0.52	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.52	2.16	2.83	2.16	2.83	2.83	2.83	**0.500**	**0.600**
Chloromethane	50.5	0.15	0.61	1.26	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.16	0.68	1.56	0.68	1.56	1.56	1.56	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.41	5.82	13.84	5.82	13.84	13.84	13.84	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.13	0.54	1.34	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.03	0.14	0.44	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.14	0.60	1.77	0.60	1.77	1.77	1.77	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.06	0.26	0.93	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.05	0.19	0.66	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.12	0.48	1.54	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.18	0.74	2.79	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.02	0.08	0.57	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.04	0.17	0.75	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.04	0.18	0.79	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.02	0.07	0.39	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.05	0.21	0.88	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.04	0.15	0.64	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.03	0.13	0.66	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.10	0.41	2.02	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.05	0.21	1.03	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.05	0.19	1.11	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.03	0.10	0.58	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.10	0.40	1.95	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.02	0.07	0.41	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.05	0.21	1.15	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.05	0.22	1.19	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.01	0.05	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.02	0.08	0.88	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.98	130	130	130	130	130	130	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.41	0.71	1.03	1.78				=		Y	1.25	2.16
0.62	3.07	1.03	5.12	U	ND		ND		Y	0.00	0.00
2.07	2.71	2.48	3.25	J	J		=		Y	2.16	2.83
0.62	1.28	1.03	2.14	U	ND		ND		Y	0.00	0.00
0.41	2.89	1.03	7.23	U	ND		ND		Y	0.00	0.00
0.21	0.53	1.03	2.65	U	ND		ND		Y	0.00	0.00
0.21	0.46	1.03	2.29	U	ND		ND		Y	0.00	0.00
0.41	1.61	1.03	4.02	U	ND		ND		Y	0.00	0.00
0.41	1.09	1.03	2.73	U	ND		ND		Y	0.00	0.00
2.07	3.90	13.27	25.05	U	ND		ND		Y	0.00	0.00
0.41	0.95	1.24	2.85	J	J		=		Y	0.68	1.56
0.41	2.33	1.03	5.81	U	ND		ND		Y	0.00	0.00
2.07	4.92	2.48	5.90				=		Y	5.82	13.84
0.83	2.03	5.17	12.72	U	ND		ND		Y	0.00	0.00
0.41	1.25	4.13	12.54	U	ND		ND		Y	0.00	0.00
0.41	2.42	1.24	7.26	U	ND		ND		Y	0.00	0.00
0.21	0.82	1.03	4.10	U	ND		ND		Y	0.00	0.00
0.83	1.80	1.24	2.70	U	ND		ND		Y	0.00	0.00
0.21	1.59	1.03	7.93	U	ND		ND		Y	0.00	0.00
0.21	0.65	4.13	12.95	U	ND		ND		Y	0.00	0.00
0.21	0.72	1.03	3.59	U	ND		ND		Y	0.00	0.00
0.41	1.29	1.03	3.22	U	ND		ND		Y	0.00	0.00
0.21	0.82	0.83	3.28	U	ND		ND		Y	0.00	0.00
0.41	1.49	0.83	2.98	U	ND		ND		Y	0.00	0.00
1.03	2.33	1.65	3.73	U	ND		ND		Y	0.00	0.00
0.21	0.84	1.03	4.19	U	ND		ND		Y	0.00	0.00
0.41	1.73	1.03	4.33	U	ND		ND		Y	0.00	0.00
0.21	0.73	4.13	14.58	U	ND		ND		Y	0.00	0.00
0.41	1.22	1.24	3.66	J	J		=		Y	0.60	1.77
0.41	1.73	2.48	10.38	U	ND		ND		Y	0.00	0.00
0.41	1.46	1.03	3.65	U	ND		ND		Y	0.00	0.00
0.41	1.14	1.03	2.84	U	ND		ND		Y	0.00	0.00
0.41	1.49	1.03	3.73	U	ND		ND		Y	0.00	0.00
0.21	1.10	1.03	5.48	U	ND		ND		Y	0.00	0.00

0.41	1.46	2.07	7.29	U	ND	ND	Y	0.00	0.00
0.21	0.61	1.24	3.66	U	ND	ND	Y	0.00	0.00
0.83	2.51	3.31	10.03	U	ND	ND	Y	0.00	0.00
0.21	0.82	1.03	4.10	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.03	4.78	U	ND	ND	Y	0.00	0.00
0.21	1.01	1.03	5.05	U	ND	ND	Y	0.00	0.00
0.21	1.13	1.03	5.65	U	ND	ND	Y	0.00	0.00
0.21	0.84	1.03	4.19	U	ND	ND	Y	0.00	0.00
0.21	0.94	1.03	4.70	U	ND	ND	Y	0.00	0.00
0.21	0.71	1.03	3.56	U	ND	ND	Y	0.00	0.00
1.45	4.63	2.07	6.61	U	ND	ND	Y	0.00	0.00
0.21	1.30	1.03	6.51	U	ND	ND	Y	0.00	0.00
0.41	1.73	2.07	8.65	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.03	4.83	U	ND	ND	Y	0.00	0.00
0.41	1.70	1.03	4.24	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.03	4.78	U	ND	ND	Y	0.00	0.00
0.41	1.49	2.07	7.46	U	ND	ND	Y	0.00	0.00
0.21	1.47	1.03	7.36	U	ND	ND	Y	0.00	0.00
0.10	0.56	1.03	5.56	U	ND	ND	Y	0.00	0.00
0.21	1.39	1.03	6.93	U	ND	ND	Y	0.00	0.00
0.41	1.69	1.03	4.24	U	ND	ND	Y	0.00	0.00
0.41	1.70	3.31	13.57	U	ND	ND	Y	0.00	0.00
0.21	0.94	1.03	4.70	U	ND	ND	Y	0.00	0.00
0.83	3.12	1.03	3.90	U	ND	ND	Y	0.00	0.00
0.21	0.94	1.03	4.70	U	ND	ND	Y	0.00	0.00
0.21	1.13	1.03	5.65	U	ND	ND	Y	0.00	0.00
0.41	1.93	1.03	4.83	U	ND	ND	Y	0.00	0.00
0.41	1.70	3.31	13.57	U	ND	ND	Y	0.00	0.00
0.21	0.96	2.89	13.39	U	ND	ND	Y	0.00	0.00
0.41	1.93	1.03	4.83	U	ND	ND	Y	0.00	0.00
0.41	3.53	1.03	8.82	U	ND	ND	Y	0.00	0.00
0.41	3.18	1.03	7.95	U	ND	ND	Y	0.00	0.00
0.10	0.70	1.03	7.02	U	ND	ND	Y	0.00	0.00
0.41	1.91	1.03	4.77	U	ND	ND	Y	0.00	0.00
0.41	2.84	1.03	7.10	U	ND	ND	Y	0.00	0.00
0.41	1.80	1.03	4.49	U	ND	ND	Y	0.00	0.00
0.41	1.80	1.03	4.49	U	ND	ND	Y	0.00	0.00
0.41	2.17	1.03	5.43	U	ND	ND	Y	0.00	0.00
0.62	2.65	1.03	4.41	U	ND	ND	Y	0.00	0.00
0.41	4.28	1.03	10.69	U	ND	ND	Y	0.00	0.00
0.41	1.80	1.03	4.49	U	ND	ND	Y	0.00	0.00
0.83	5.68	2.07	14.20	U	ND	ND	Y	0.00	0.00
0.83	4.99	2.48	14.97	U	ND	ND	Y	0.00	0.00
0.83	4.23	2.48	12.70	U	ND	ND	Y	0.00	0.00
0.83	4.07	2.89	14.24	U	ND	ND	Y	0.00	0.00
0.83	4.07	2.89	14.24	U	ND	ND	Y	0.00	0.00
0.83	4.07	6.61	32.56	U	ND	ND	Y	0.00	0.00
0.83	4.07	3.72	18.31	U	ND	ND	Y	0.00	0.00
0.83	4.82	2.48	14.45	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00
0.83	4.07	3.72	18.31	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00

0.83	4.54	2.89	15.90	U	ND	ND	Y	0.00	0.00
0.83	4.98	3.31	19.91	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00
0.83	4.29	2.07	10.72	U	ND	ND	Y	0.00	0.00
0.83	4.98	2.07	12.44	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00
0.83	4.98	2.89	17.42	U	ND	ND	Y	0.00	0.00
1.24	12.00	2.89	28.00	U	ND	ND	Y	0.00	0.00
1.24	9.21	2.07	15.35	U	ND	ND	Y	0.00	0.00
2.07	10.85	0.41	2.17	U	ND	ND	Y	0.00	0.00
1.24	9.21	2.07	15.35	U	ND	ND	Y	0.00	0.00
1.03	11.04	1.24	13.24	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 04
Sample ID: T-404

Can Factor: 1.24
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**04**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.24
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	71992	20.0	24198718	0.303	1.25	2.16
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	23993	20.0	24198718	0.025	0.10	0.52
4	Methanol	PFB	TRG	32.0	0.216	136797	20.0	24198718	0.522	2.16	2.83
5	Chloromethane	PFB	TRG	50.5	0.234	41711	20.0	24198718	0.147	0.61	1.26
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	24198718	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	24198718	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	24198718	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	24198718	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	24198718	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	24198718	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	17001	20.0	24198718	0.164	0.68	1.56
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	24198718	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	345947	20.0	24198718	1.407	5.82	13.84
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	62576	20.0	24198718	0.131	0.54	1.34
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	24198718	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	24198718	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	24198718	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	24198718	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	24198718	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	24198718	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	24198718	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	27250	20.0	24198718	0.034	0.14	0.44
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	24198718	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	24198718	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	24198718	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	24198718	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	24198718	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	24198718	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	23283	20.0	24198718	0.145	0.60	1.77
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	24198718	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	29455	20.0	24198718	0.064	0.26	0.93

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	24198718	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	24198718	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	24198718	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	24198718	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	24198718	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	24198718	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	24198718	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	24198718	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	24198718	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	25877454	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	25877454	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	25877454	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	20009	20.0	25877454	0.046	0.19	0.66
47	Benzene	14DF	TRG	78.1	0.794	119892	20.0	25877454	0.117	0.48	1.54
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	25877454	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	25877454	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	25877454	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	25877454	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	25877454	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	25877454	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	25877454	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	25877454	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	25877454	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	25877454	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	25877454	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	25877454	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	258468	20.0	25877454	0.179	0.74	2.79
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	25877454	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	25877454	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	25877454	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	25877454	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	25877454	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	25877454	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	25877454	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	25877454	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	21854	20.0	25877454	0.020	0.08	0.57
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	33374470	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	33374470	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	103355	20.0	33374470	0.042	0.17	0.75
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	88930	20.0	33374470	0.044	0.18	0.79
76	Nonane	d5CB	TRG	128.3	0.711	21404	20.0	33374470	0.018	0.07	0.39
77	Styrene	d5CB	TRG	104.2	0.978	81047	20.0	33374470	0.050	0.21	0.88
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	33374470	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	78831	20.0	33374470	0.036	0.15	0.64
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	33374470	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	33374470	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	33374470	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	128713	20.0	33374470	0.033	0.13	0.66
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	33374470	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	308519	20.0	33374470	0.099	0.41	2.02
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	162021	20.0	33374470	0.051	0.21	1.03
87	Decane	d5CB	TRG	142.3	1.250	96405	20.0	33374470	0.046	0.19	1.11
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	80893	20.0	33374470	0.025	0.10	0.58
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	243646	20.0	33374470	0.096	0.40	1.95
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	65660	20.0	33374470	0.018	0.07	0.41
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	33374470	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	33374470	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	198885	20.0	33374470	0.051	0.21	1.15
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	33374470	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	33374470	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	195393	20.0	33374470	0.052	0.22	1.19
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	33374470	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	428	20.0	33374470	0.001	0.01	0.05
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	33374470	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	33374470	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	33374470	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	36169	20.0	33374470	0.020	0.08	0.88
1	Pentafluorobenzene	0	IS	0.0	0.000	24198718	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	25877454	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	33374470	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	19934922	10.0		12.975	129.75	130

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443504A.D
Acq Time : 10 Dec 124 8:17 pm
Sample : T-404
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 10:31 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.52	168	24198718	20.00	ppbV	-0.30
42) 1,4-Difluorobenzene	10.70	114	25877454	20.00	ppbV	-0.30
71) Chlorobenzene-d5	15.21	117	33374470	20.00	ppbV	-0.36
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	19934922	12.98	ppbV	129.75
Target Compounds						Qvalue
2) Propylene	4.21	42	71992	0.30	ppbV m	51
3) Dichlorodifluoromethane	4.28	85	23993	0.03	ppbV #	91
4) Methanol	4.82	31	136797	0.52	ppbV #	76
5) Chloromethane	4.55	50	41711	0.15	ppbV #	90
12) Acrolein	6.09	56	17001	0.16	ppbV	93
14) Acetone	6.19	58	345947	1.41	ppbV #	7
15) 2-propanol (isopropylalcoh	6.31	45	62576	0.13	ppbV m	90
23) Carbon disulfide	7.34	76	27250	0.03	ppbV #	90
30) 2-Butanone (MEK)	8.50	72	23283	0.14	ppbV #	71
32) Hexane	8.57	57	29455	0.06	ppbV #	13
46) Cyclohexane	10.41	56	20009	0.05	ppbV #	74
47) Benzene	10.38	78	119892	0.12	ppbV m	69
61) Toluene	13.16	91	258468	0.18	ppbV	98
70) Tetrachloroethene (PCE)	14.32	166	21854	0.02	ppbV #	84
74) Ethylbenzene	15.54	91	103355	0.04	ppbV	91
75) m,p-Xylenes	15.71	91	88930	0.04	ppbV #	84
76) Nonane	16.07	57	21404	0.02	ppbV #	54
77) Styrene	16.25	104	81047	0.05	ppbV #	87
79) o-Xylene	16.34	91	78831	0.04	ppbV	88
83) n-Propylbenzene	17.67	91	128713	0.03	ppbV #	91
85) 4-Ethyltoluene	17.86	105	308519	0.10	ppbV m	86
86) 1,3,5-Trimethylbenzene	17.94	105	162021	0.05	ppbV m	82
87) Decane	18.23	57	96405	0.05	ppbV #	92
88) tert-butyl benzene	18.56	119	80893	0.03	ppbV #	75
89) 1,2,4-Trimethylbenzene	18.56	105	243646	0.10	ppbV #	86
90) i-Butylbenzene	18.85	91	65660	0.02	ppbV m	98
93) Isopropyltoluene	19.15	119	198885	0.05	ppbV m	89
96) n-Butylbenzene	19.82	91	195393	0.05	ppbV #	96
98) 1,2-Dibromo-3-chloropropan	20.89	75	428	0.00	ppbV m	56
102) Hexachlorobutadiene	23.13	225	36169	0.02	ppbV #	88

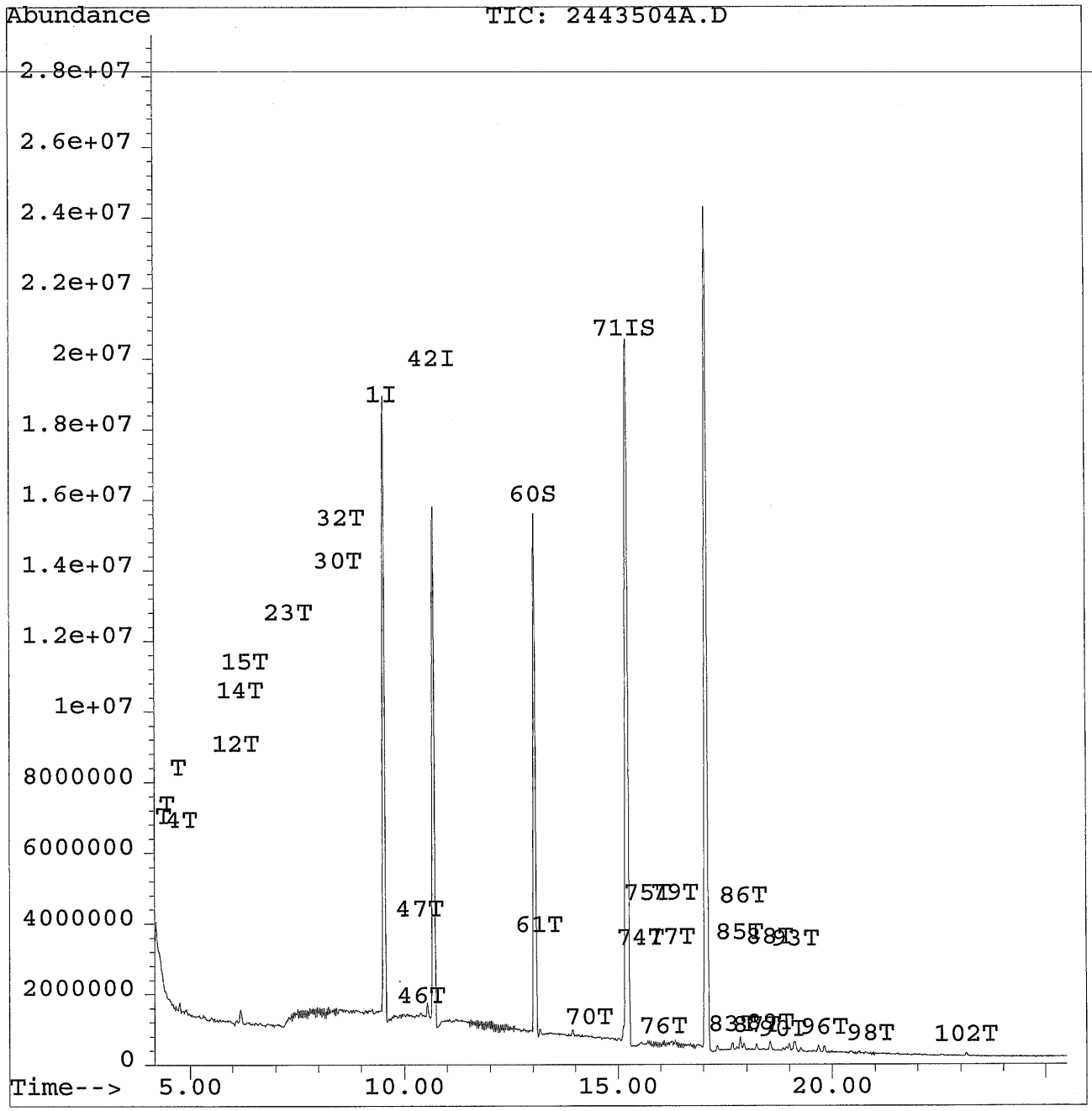
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443504A.D
Acq Time : 10 Dec 124 8:17 pm
Sample : T-404
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 10:31 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443504A.D
Acq Time : 10 Dec 124 8:17 pm Operator: UG
Sample : T-404 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	22.68 ppbV	107711882	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	83
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	53
4	Pyridine, 1-oxide	962	000694-59-7	7
5	3-Pyridinol	964	000109-00-2	7

Sample Data Packages

SDG Number 224435

Lab Id Number 5

Client ID T-405

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 05**

File Name: 2443505A.D **Date Sampled:** 11/19/24 **Time:** 10:20
Description: T-405 **Date Analyzed:** 12/10/24 **Time:** 20:54
Canister: 837 **Can Dilution Factor:** 1.28
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	2.38	0.74	1.84	4.10	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	0.71	1.32	2.21	1.48	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	3.49	5.08	6.09	8.32	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	0.45	1.51	3.77	1.60	J
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	0.43	0.74	3.68	1.48	J
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	1.12	3.22	4.02	4.24	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	0.13	0.72	7.24	0.90	J
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC

Analytical Method: TO-15 **Laboratory ID: B09124**

File Name: 224435 **Date Sampled:** 11/19/24 **Time:** 10:20
Descriptio 05 **Date Analyzed:** 12/10/24 **Time:** 20:54
Canister: 837 **Can Dilution Factor:** 1.28
QC_Batch: 121024-MA1 **Air Volume:** 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**05**		
File Name:	2443505A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**10:20**
Sample ID:	T-405	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**20:54**
Anal Date:	10 Dec 124 8:54 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**837**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.28**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.558	4.41	42.00	88145
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.391	4.86	31.00	68047
74-87-3	Chloromethane	5	TRG	0.168	4.77	50.00	31512
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.819	6.42	58.00	133733
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.055	7.61	76.00	29274
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.106	8.86	57.00	32717
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.047	9.42	83.00	**17006**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.101	10.74	56.00	27499
71-43-2	Benzene	47	TRG	0.192	10.70	78.00	125319
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.073	11.48	71.00	15263
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.264	13.50	91.00	241732
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.031	14.69	166.00	21498
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.068	15.90	106	118173
1330-20-7	m,p-Xylenes	75	TRG	0.087	16.06	91.00	122518
111-84-2	Nonane	76	TRG	0.032	16.43	57.00	26753
100-42-5	Styrene	77	TRG	0.082	16.61	104.00	93390
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.065	16.34	91.00	99265
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.053	18.04	91.00	144652
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.156	18.23	105.00	335460
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.100	18.31	105.00	222696
124-18-5	Decane	87	TRG	0.076	18.60	57.00	109347
98-06-6	tert-butyl benzene	88	TRG	0.043	18.93	119.00	95483

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.154	18.95	105.00	271196
538-93-2	i-Butylbenzene	90	TRG	0.044	19.24	91.00	111814
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.113	19.53	119.00	308656
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.079	20.20	91.00	203845
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.40	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**16071985**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**16425701**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**23157384**
2037-26-5	Toluene-d8	60	SURR	12.087	13.40	98.00	**11787310**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**		EDD SURR:	PERCENT						
Laboratory Number:	**05**		Sam Type:	SA						
File Name:	2443505A.D		Instrument:	MA1	IS LCL	**50**				
Run Method:	A1563_L.M		DETECT:	ND	IS UCL	**200**		Gas Constant		
Can Factor:	1.28		Matrix:	AA	SUR LCL	**70**		T	24.5	
Air Volume:	300.0	ml	Type:	TRG	SUR UCL	**130**		P	**760**	
Can/Tube Number:	837		Diluton:	0.3840	MDL Factor	**1.0**		MV	24.417	
Dilution Factor:	0.3840		Sig Figs:	2	E Flag	1.3		GC	24.417	
Base Volume:	1000	ml	MDLSF:	2						
Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.56	2.38	4.10	2.38	4.10	4.10	4.10	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.39	1.67	2.19	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.17	0.71	1.48	0.71	1.48	1.48	1.48	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.82	3.49	8.32	3.49	8.32	8.32	8.32	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.06	0.24	0.74	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.11	0.45	1.60	0.45	1.60	1.60	1.60	**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.05	0.20	0.98	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.10	0.43	1.48	0.43	1.48	1.48	1.48	**0.050**	**0.250**
Benzene	78.1	0.19	0.82	2.62	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.07	0.31	1.28	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.26	1.12	4.24	1.12	4.24	4.24	4.24	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.03	0.13	0.90	0.13	0.90	0.90	0.90	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.07	0.29	1.27	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.09	0.37	1.61	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.03	0.14	0.73	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.08	0.35	1.50	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.06	0.28	1.20	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.05	0.22	1.11	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.16	0.67	3.27	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.10	0.43	2.10	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.08	0.32	1.88	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.04	0.18	1.01	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.15	0.66	3.23	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.04	0.19	1.03	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.11	0.48	2.66	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.08	0.34	1.84	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.09	121	121	121	121	121	121	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.74	1.07	1.84				=		Y	2.38	4.10
0.64	3.17	1.07	5.28	U	ND		ND		Y	0.00	0.00
2.13	2.80	2.56	3.36	U	ND		ND		Y	0.00	0.00
0.64	1.32	1.07	2.21	J	J		=		Y	0.71	1.48
0.43	2.99	1.07	7.47	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.07	2.73	U	ND		ND		Y	0.00	0.00
0.21	0.48	1.07	2.36	U	ND		ND		Y	0.00	0.00
0.43	1.66	1.07	4.15	U	ND		ND		Y	0.00	0.00
0.43	1.13	1.07	2.82	U	ND		ND		Y	0.00	0.00
2.13	4.03	13.70	25.86	U	ND		ND		Y	0.00	0.00
0.43	0.98	1.28	2.94	U	ND		ND		Y	0.00	0.00
0.43	2.40	1.07	6.00	U	ND		ND		Y	0.00	0.00
2.13	5.08	2.56	6.09				=		Y	3.49	8.32
0.85	2.10	5.33	13.13	U	ND		ND		Y	0.00	0.00
0.43	1.29	4.27	12.95	U	ND		ND		Y	0.00	0.00
0.43	2.50	1.28	7.49	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND		ND		Y	0.00	0.00
0.85	1.86	1.28	2.78	U	ND		ND		Y	0.00	0.00
0.21	1.64	1.07	8.19	U	ND		ND		Y	0.00	0.00
0.21	0.67	4.27	13.37	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.07	3.71	U	ND		ND		Y	0.00	0.00
0.43	1.33	1.07	3.32	U	ND		ND		Y	0.00	0.00
0.21	0.85	0.85	3.39	U	ND		ND		Y	0.00	0.00
0.43	1.54	0.85	3.08	U	ND		ND		Y	0.00	0.00
1.07	2.41	1.71	3.85	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND		ND		Y	0.00	0.00
0.43	1.79	1.07	4.46	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.27	15.05	U	ND		ND		Y	0.00	0.00
0.43	1.26	1.28	3.78	U	ND		ND		Y	0.00	0.00
0.43	1.79	2.56	10.72	U	ND		ND		Y	0.00	0.00
0.43	1.51	1.07	3.77	J	J		=		Y	0.45	1.60
0.43	1.17	1.07	2.93	U	ND		ND		Y	0.00	0.00
0.43	1.54	1.07	3.85	U	ND		ND		Y	0.00	0.00
0.21	1.13	1.07	5.65	U	ND		ND		Y	0.00	0.00

0.43	1.50	2.13	7.52	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.28	3.78	U	ND	ND	Y	0.00	0.00
0.85	2.59	3.41	10.36	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.21	1.05	1.07	5.22	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	0.74	1.07	3.68	J	J	=	Y	0.43	1.48
1.49	4.78	2.13	6.82	U	ND	ND	Y	0.00	0.00
0.21	1.34	1.07	6.72	U	ND	ND	Y	0.00	0.00
0.43	1.79	2.13	8.93	U	ND	ND	Y	0.00	0.00
0.21	1.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.38	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.43	1.54	2.13	7.70	U	ND	ND	Y	0.00	0.00
0.21	1.52	1.07	7.59	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.07	5.74	U	ND	ND	Y	0.00	0.00
0.21	1.43	1.07	7.16	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.37	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.85	3.22	1.07	4.02			=	Y	1.12	4.24
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.99	2.99	13.82	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	3.64	1.07	9.10	U	ND	ND	Y	0.00	0.00
0.43	3.28	1.07	8.21	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.07	7.24	J	J	=	Y	0.13	0.90
0.43	1.97	1.07	4.92	U	ND	ND	Y	0.00	0.00
0.43	2.93	1.07	7.33	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	2.24	1.07	5.60	U	ND	ND	Y	0.00	0.00
0.64	2.73	1.07	4.55	U	ND	ND	Y	0.00	0.00
0.43	4.42	1.07	11.04	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.85	5.86	2.13	14.66	U	ND	ND	Y	0.00	0.00
0.85	5.15	2.56	15.45	U	ND	ND	Y	0.00	0.00
0.85	4.37	2.56	13.11	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	6.83	33.61	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.97	2.56	14.92	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00

0.85	4.69	2.99	16.42	U	ND	ND	Y	0.00	0.00
0.85	5.14	3.41	20.55	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.42	2.13	11.06	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.13	12.84	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.99	17.98	U	ND	ND	Y	0.00	0.00
1.28	12.39	2.99	28.90	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
2.13	11.20	0.43	2.24	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
1.07	11.39	1.28	13.67	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 05
Sample ID: T-405

Can Factor: 1.28
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**05**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.28
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i — Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)} \times \frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt) \times 1000}{(SV)} \times (CDF)$

4) Amount ug/m3 = $\frac{(amt(ppbv) \times MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	88145	20.0	16071985	0.558	2.38	4.10
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	16071985	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	68047	20.0	16071985	0.391	1.67	2.19
5	Chloromethane	PFB	TRG	50.5	0.234	31512	20.0	16071985	0.168	0.71	1.48
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	16071985	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	16071985	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	16071985	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	16071985	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	16071985	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	16071985	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	16071985	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	16071985	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	133733	20.0	16071985	0.819	3.49	8.32
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	16071985	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	16071985	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	16071985	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	16071985	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	16071985	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	16071985	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	16071985	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	16071985	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	29274	20.0	16071985	0.055	0.24	0.74
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	16071985	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	16071985	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	16071985	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	16071985	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	16071985	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	16071985	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	16071985	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	16071985	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	32717	20.0	16071985	0.106	0.45	1.60

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	16071985	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	16071985	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	16071985	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	16071985	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	16071985	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	16071985	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	16071985	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	16071985	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	17006	20.0	16071985	0.047	0.20	0.98
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	16425701	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	16425701	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	16425701	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	27499	20.0	16425701	0.101	0.43	1.48
47	Benzene	14DF	TRG	78.1	0.794	125319	20.0	16425701	0.192	0.82	2.62
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	16425701	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	16425701	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	16425701	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	15263	20.0	16425701	0.073	0.31	1.28
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	16425701	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	16425701	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	16425701	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	16425701	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	16425701	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	16425701	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	16425701	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	16425701	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	241732	20.0	16425701	0.264	1.12	4.24
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	16425701	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	16425701	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	16425701	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	16425701	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	16425701	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	16425701	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	16425701	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	16425701	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	21498	20.0	16425701	0.031	0.13	0.90
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	23157384	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	23157384	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	118173	20.0	23157384	0.068	0.29	1.27
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	122518	20.0	23157384	0.087	0.37	1.61
76	Nonane	d5CB	TRG	128.3	0.711	26753	20.0	23157384	0.032	0.14	0.73
77	Styrene	d5CB	TRG	104.2	0.978	93390	20.0	23157384	0.082	0.35	1.50
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	23157384	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	99265	20.0	23157384	0.065	0.28	1.20
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	23157384	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	23157384	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	23157384	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	144652	20.0	23157384	0.053	0.22	1.11
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	23157384	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	335460	20.0	23157384	0.156	0.67	3.27
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	222696	20.0	23157384	0.100	0.43	2.10
87	Decane	d5CB	TRG	142.3	1.250	109347	20.0	23157384	0.076	0.32	1.88
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	95483	20.0	23157384	0.043	0.18	1.01
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	271196	20.0	23157384	0.154	0.66	3.23
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	111814	20.0	23157384	0.044	0.19	1.03
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	23157384	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	23157384	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	308656	20.0	23157384	0.113	0.48	2.66
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	23157384	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	23157384	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	203845	20.0	23157384	0.079	0.34	1.84
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	23157384	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	23157384	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	23157384	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	23157384	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	23157384	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	23157384	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	16071985	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	16425701	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	23157384	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	11787310	10.0		12.087	120.87	121

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443505A.D
Acq Time : 10 Dec 124 8:54 pm Operator: UG
Sample : T-405 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00
Quant Time: Dec 12 11:02 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.54	168	16071985	20.00	ppbV	-0.28
42) 1,4-Difluorobenzene	10.70	114	16425701	20.00	ppbV	-0.30
71) Chlorobenzene-d5	15.21	117	23157384	20.00	ppbV	-0.36
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	11787310	12.09	ppbV	120.87
Target Compounds						Qvalue
2) Propylene	4.24	42	88145	0.56	ppbV #	35
4) Methanol	4.77	31	68047	0.39	ppbV #	91
5) Chloromethane	4.57	50	31512	0.17	ppbV #	83
14) Acetone	6.21	58	133733	0.82	ppbV #	1
23) Carbon disulfide	7.35	76	29274	0.06	ppbV #	87
32) Hexane	8.57	57	32717	0.11	ppbV #	13
41) Chloroform	9.13	83	17006	0.05	ppbV #	82
46) Cyclohexane	10.43	56	27499	0.10	ppbV #	75
47) Benzene	10.39	78	125319	0.19	ppbV m	75
51) n-Heptane	11.16	71	15263	0.07	ppbV	84
61) Toluene	13.16	91	241732	0.26	ppbV	99
70) Tetrachloroethene (PCE)	14.34	166	21498	0.03	ppbV m	70
74) Ethylbenzene	15.53	91	118173	0.07	ppbV #	90
75) m,p-Xylenes	15.70	91	122518	0.09	ppbV #	77
76) Nonane	16.06	57	26753	0.03	ppbV #	46
77) Styrene	16.25	104	93390	0.08	ppbV #	78
79) o-Xylene	16.34	91	99265	0.06	ppbV #	87
83) n-Propylbenzene	17.67	91	144652	0.05	ppbV #	91
85) 4-Ethyltoluene	17.86	105	335460	0.16	ppbV m	85
86) 1,3,5-Trimethylbenzene	17.94	105	222696	0.10	ppbV m	82
87) Decane	18.23	57	109347	0.08	ppbV #	73
88) tert-butyl benzene	18.55	119	95483	0.04	ppbV #	75
89) 1,2,4-Trimethylbenzene	18.55	105	271196	0.15	ppbV #	86
90) i-Butylbenzene	18.84	91	111814	0.04	ppbV	94
93) Isopropyltoluene	19.13	119	308656	0.11	ppbV m	93
96) n-Butylbenzene	19.82	91	203845	0.08	ppbV #	94

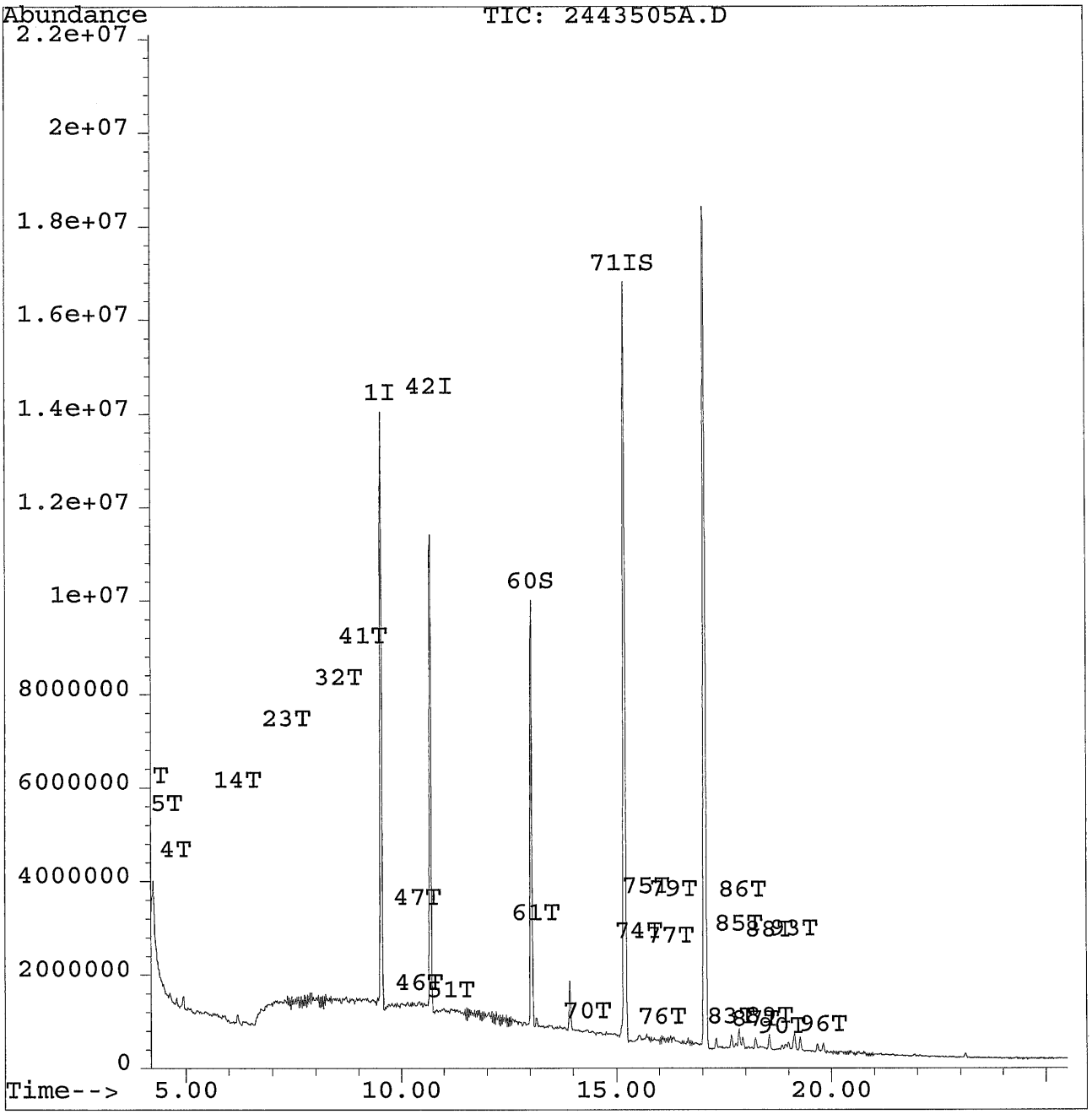
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443505A.D
Acq Time : 10 Dec 124 8:54 pm
Sample : T-405
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:02 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443505A.D
Acq Time : 10 Dec 124 8:54 pm
Sample : T-405
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.05	22.31 ppbV	64826873	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	91
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	37
4	3-Pyridinol	964	000109-00-2	14
5	2-Furancarbonyl chloride	4649	000527-69-5	7

Sample Data Packages

SDG Number 224435

Lab Id Number 6

Client ID T-406

Analytical Method TO-15

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 06**

File Name:	2443506A.D	**Date Sampled:**	11/19/24	**Time:**	10:06
Description:	T-406	**Date Analyzed:**	12/10/24	**Time:**	21:33
Canister:	626	**Can Dilution Factor:**	1.26		
QC_Batch:	121024-MA1	**Air Volume:**	300 ml		

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.05	0.80	0.72	1.81	1.38	J
75-71-8	Dichlorodifluoromethane	0.63	1.05	ND	3.12	5.20	ND	
67-56-1	Methanol	2.10	2.52	ND	2.75	3.30	ND	
74-87-3	Chloromethane	0.63	1.05	ND	1.30	2.17	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.05	ND	2.94	7.35	ND	
75-01-4	Vinyl chloride	0.21	1.05	ND	0.54	2.69	ND	
106-99-0	1,3-Butadiene	0.21	1.05	ND	0.47	2.33	ND	
74-83-9	Bromomethane	0.42	1.05	ND	1.63	4.08	ND	
75-00-3	Chloroethane	0.42	1.05	ND	1.11	2.77	ND	
64-17-5	Ethanol	2.10	13.48	ND	3.96	25.45	ND	
107-02-8	Acrolein	0.42	1.26	ND	0.96	2.89	ND	
75-69-4	Trichlorofluoromethane	0.42	1.05	ND	2.36	5.91	ND	
67-64-1	Acetone	2.10	2.52	3.07	5.00	6.00	7.31	
67-63-0	2-propanol (isopropylalcohol)	0.84	5.25	ND	2.07	12.92	ND	
75-65-0	t-Butyl alcohol	0.42	4.20	ND	1.27	12.75	ND	
4227-95-6	Methyl iodide	0.42	1.26	ND	2.46	7.37	ND	
75-35-4	1,1-Dichloroethene	0.21	1.05	ND	0.83	4.17	ND	
107-13-1	Acrylonitrile	0.84	1.26	ND	1.83	2.74	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.05	ND	1.61	8.06	ND	
107-05-1	Allyl chloride	0.21	4.20	ND	0.66	13.16	ND	
75-09-2	Methylene chloride	0.21	1.05	ND	0.73	3.65	ND	
75-15-0	Carbon disulfide	0.42	1.05	ND	1.31	3.27	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.84	ND	0.83	3.33	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.84	ND	1.52	3.03	ND	
107-12-0	Propionitrile	1.05	1.68	ND	2.37	3.79	ND	
75-34-3	1,1-Dichloroethane	0.21	1.05	ND	0.85	4.26	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.05	ND	1.76	4.39	ND	
108-05-4	Vinyl acetate	0.21	4.20	ND	0.74	14.81	ND	
78-93-3	2-Butanone (MEK)	0.42	1.26	ND	1.24	3.72	ND	
108-20-3	Diisopropyl ether	0.42	2.52	ND	1.76	10.55	ND	
110-54-3	Hexane	0.42	1.05	ND	1.48	3.71	ND	
126-98-7	Methacrylonitrile	0.42	1.05	ND	1.15	2.89	ND	
141-78-6	Ethyl acetate	0.42	1.05	ND	1.52	3.79	ND	
74-97-5	Bromochloromethane	0.21	1.05	ND	1.11	5.56	ND	
96-33-3	Methyl acrylate	0.42	2.10	ND	1.48	7.41	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.26	ND	0.62	3.72	ND	
78-83-1	Isobutyl alcohol	0.84	3.36	ND	2.55	10.20	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.05	ND	0.83	4.17	ND	
594-20-7	2,2-Dichloropropane	0.21	1.05	ND	0.97	4.86	ND	
67-66-3	Chloroform	0.21	1.05	ND	1.03	5.13	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.05	ND	1.15	5.74	ND	
107-06-2	1,2-Dichloroethane	0.21	1.05	ND	0.85	4.26	ND	
563-58-6	1,1-Dichloropropene	0.21	1.05	ND	0.95	4.77	ND	
110-82-7	Cyclohexane	0.21	1.05	0.28	0.72	3.62	0.96	J
71-43-2	Benzene	1.47	2.10	ND	4.70	6.72	ND	
56-23-5	Carbon tetrachloride	0.21	1.05	ND	1.32	6.61	ND	
994-05-8	t-Amyl methyl ether	0.42	2.10	ND	1.76	8.79	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.05	ND	0.98	4.91	ND	
142-82-5	n-Heptane	0.42	1.05	ND	1.72	4.31	ND	
78-87-5	1,2-Dichloropropane	0.21	1.05	ND	0.97	4.86	ND	
123-91-1	1,4 Dioxane	0.42	2.10	ND	1.52	7.58	ND	
74-95-3	Dibromomethane	0.21	1.05	ND	1.50	7.48	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.05	ND	0.57	5.65	ND	
75-27-4	Bromodichloromethane	0.21	1.05	ND	1.41	7.04	ND	
80-62-6	Methyl methacrylate	0.42	1.05	ND	1.72	4.30	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.36	ND	1.72	13.79	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.05	ND	0.95	4.77	ND	
108-88-3	Toluene	0.84	1.05	ND	3.17	3.96	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.05	ND	0.95	4.77	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.05	ND	1.15	5.74	ND	
97-63-2	Ethyl methacrylate	0.42	1.05	ND	1.96	4.91	ND	
591-78-6	2-Hexanone	0.42	3.36	ND	1.72	13.79	ND	
142-28-9	1,3-Dichloropropane	0.21	2.94	ND	0.97	13.61	ND	
111-65-9	Octane	0.42	1.05	ND	1.96	4.91	ND	
124-48-1	Dibromochloromethane	0.42	1.05	ND	3.58	8.96	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.05	ND	3.23	8.08	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.05	ND	0.71	7.13	ND	
108-90-7	Chlorobenzene	0.42	1.05	ND	1.94	4.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.05	ND	2.89	7.22	ND	
100-41-4	Ethylbenzene	0.42	1.05	ND	1.83	4.57	ND	
1330-20-7	m,p-Xylenes	0.42	1.05	ND	1.83	4.57	ND	
111-84-2	Nonane	0.42	1.05	ND	2.21	5.52	ND	
100-42-5	Styrene	0.63	1.05	ND	2.69	4.48	ND	
75-25-2	Bromoform	0.42	1.05	ND	4.35	10.87	ND	
95-47-6	o-Xylene	0.42	1.05	ND	1.83	4.57	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.84	2.10	ND	5.77	14.43	ND	
96-18-4	1,2,3-Trichloropropane	0.84	2.52	ND	5.07	15.21	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.84	2.52	ND	4.30	12.90	ND	
103-65-1	n-Propylbenzene	0.84	2.94	ND	4.14	14.47	ND	
98-82-8	Isopropylbenzene	0.84	2.94	ND	4.14	14.47	ND	
622-96-8	4-Ethyltoluene	0.84	6.72	ND	4.14	33.08	ND	
108-67-8	1,3,5-Trimethylbenzene	0.84	3.78	ND	4.14	18.61	ND	
124-18-5	Decane	0.84	2.52	ND	4.90	14.69	ND	
98-06-6	tert-butyl benzene	0.84	2.52	ND	4.62	13.85	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.84	3.78	ND	4.14	18.61	ND	
538-93-2	i-Butylbenzene	0.84	2.52	ND	4.62	13.85	ND	
135-98-8	sec-butylbenzene	0.84	2.94	ND	4.62	16.16	ND	
541-73-1	1,3-Dichlorobenzene	0.84	3.36	ND	5.06	20.23	ND	
99-87-6	Isopropyltoluene	0.84	2.52	ND	4.62	13.85	ND	
100-44-7	Benzyl chloride	0.84	2.10	ND	4.36	10.89	ND	
106-46-7	1,4-Dichlorobenzene	0.84	2.10	ND	5.06	12.64	ND	
104-51-8	n-Butylbenzene	0.84	2.52	ND	4.62	13.85	ND	
95-50-1	1,2-Dichlorobenzene	0.84	2.94	ND	5.06	17.70	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.26	2.94	ND	12.19	28.45	ND	
120-82-1	1,2,4-Trichlorobenzene	1.26	2.10	ND	9.36	15.60	ND	
91-20-3	Naphthalene	2.10	0.42	ND	11.03	2.21	ND	
87-61-6	1,2,3-Trichlorobenzene	1.26	2.10	ND	9.36	15.60	ND	
87-68-3	Hexachlorobutadiene	1.05	1.26	ND	11.22	13.46	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	126	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 06
Canister: 626
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 12/10/24 **Time:** 21:33
Can Dilution Factor: 1.26
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.94	6.30	ND	12.04	25.80	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**06**		
File Name:	2443506A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**10:06**
Sample ID:	T-406	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**21:33**
Anal Date:	10 Dec 124 9:33 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**626**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.26**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.191	4.41	42.00	37626
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.162	4.86	31.00	35177
74-87-3	Chloromethane	5	TRG	0.124	4.77	50.00	28996
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.731	6.42	58.00	148645
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.047	7.61	76.00	30872
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.081	8.86	57.00	30960
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.066	10.74	56.00	23530
71-43-2	Benzene	47	TRG	0.117	10.70	78.00	98880
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.063	11.48	71.00	17085
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.178	13.50	91.00	211301
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.018	14.69	166.00	16238
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.050	15.90	106	104561
1330-20-7	m,p-Xylenes	75	TRG	0.056	16.06	91.00	95343
111-84-2	Nonane	76	TRG	0.026	16.43	57.00	25734
100-42-5	Styrene	77	TRG	0.052	16.61	104.00	70753
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.045	16.34	91.00	83252
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.050	18.23	105.00	312937
622-96-8	4-Ethyltoluene	85	TRG	0.118	18.23	105.00	308186
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.059	18.31	105.00	159505
124-18-5	Decane	87	TRG	0.059	18.60	57.00	103023
98-06-6	tert-butyl benzene	88	TRG	0.033	18.93	119.00	88143

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.117	18.95	105.00	250081
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.070	19.53	119.00	232396
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.058	20.20	91.00	181436
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.023	23.15	225.00	35094
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**20016891**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**21322999**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**28060575**
2037-26-5	Toluene-d8	60	SURR	12.562	13.40	98.00	**15902448**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 06
File Name: 2443506A.D
Run Method: A1563_L.M
Can Factor: 1.26
Air Volume: 300.0 ml
Can/Tube Number: 626
Dilution Factor: 0.3780
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3780
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.19	0.80	1.38	0.80	1.38	1.38	1.38	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.16	0.68	0.89	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.12	0.52	1.08	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.73	3.07	7.31	3.07	7.31	7.31	7.31	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.05	0.20	0.61	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.08	0.34	1.20	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.07	0.28	0.96	0.28	0.96	0.96	0.96	**0.050**	**0.250**
Benzene	78.1	0.12	0.49	1.57	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.06	0.27	1.09	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.18	0.75	2.81	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.02	0.08	0.52	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.05	0.21	0.91	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.06	0.23	1.02	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.03	0.11	0.57	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.05	0.22	0.92	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.04	0.19	0.82	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.05	0.21	1.04	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.12	0.50	2.44	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.06	0.25	1.22	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.06	0.25	1.44	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.03	0.14	0.76	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.12	0.49	2.42	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.07	0.30	1.63	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.06	0.24	1.33	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.02	0.10	1.03	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.56	126	126	126	126	126	126	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.42	0.72	1.05	1.81	J	J		=		Y	0.80	1.38
0.63	3.12	1.05	5.20	U	ND		ND		Y	0.00	0.00
2.10	2.75	2.52	3.30	U	ND		ND		Y	0.00	0.00
0.63	1.30	1.05	2.17	U	ND		ND		Y	0.00	0.00
0.42	2.94	1.05	7.35	U	ND		ND		Y	0.00	0.00
0.21	0.54	1.05	2.69	U	ND		ND		Y	0.00	0.00
0.21	0.47	1.05	2.33	U	ND		ND		Y	0.00	0.00
0.42	1.63	1.05	4.08	U	ND		ND		Y	0.00	0.00
0.42	1.11	1.05	2.77	U	ND		ND		Y	0.00	0.00
2.10	3.96	13.48	25.45	U	ND		ND		Y	0.00	0.00
0.42	0.96	1.26	2.89	U	ND		ND		Y	0.00	0.00
0.42	2.36	1.05	5.91	U	ND		ND		Y	0.00	0.00
2.10	5.00	2.52	6.00				=		Y	3.07	7.31
0.84	2.07	5.25	12.92	U	ND		ND		Y	0.00	0.00
0.42	1.27	4.20	12.75	U	ND		ND		Y	0.00	0.00
0.42	2.46	1.26	7.37	U	ND		ND		Y	0.00	0.00
0.21	0.83	1.05	4.17	U	ND		ND		Y	0.00	0.00
0.84	1.83	1.26	2.74	U	ND		ND		Y	0.00	0.00
0.21	1.61	1.05	8.06	U	ND		ND		Y	0.00	0.00
0.21	0.66	4.20	13.16	U	ND		ND		Y	0.00	0.00
0.21	0.73	1.05	3.65	U	ND		ND		Y	0.00	0.00
0.42	1.31	1.05	3.27	U	ND		ND		Y	0.00	0.00
0.21	0.83	0.84	3.33	U	ND		ND		Y	0.00	0.00
0.42	1.52	0.84	3.03	U	ND		ND		Y	0.00	0.00
1.05	2.37	1.68	3.79	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.05	4.26	U	ND		ND		Y	0.00	0.00
0.42	1.76	1.05	4.39	U	ND		ND		Y	0.00	0.00
0.21	0.74	4.20	14.81	U	ND		ND		Y	0.00	0.00
0.42	1.24	1.26	3.72	U	ND		ND		Y	0.00	0.00
0.42	1.76	2.52	10.55	U	ND		ND		Y	0.00	0.00
0.42	1.48	1.05	3.71	U	ND		ND		Y	0.00	0.00
0.42	1.15	1.05	2.89	U	ND		ND		Y	0.00	0.00
0.42	1.52	1.05	3.79	U	ND		ND		Y	0.00	0.00
0.21	1.11	1.05	5.56	U	ND		ND		Y	0.00	0.00

0.42	1.48	2.10	7.41	U	ND	ND	Y	0.00	0.00
0.21	0.62	1.26	3.72	U	ND	ND	Y	0.00	0.00
0.84	2.55	3.36	10.20	U	ND	ND	Y	0.00	0.00
0.21	0.83	1.05	4.17	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.05	4.86	U	ND	ND	Y	0.00	0.00
0.21	1.03	1.05	5.13	U	ND	ND	Y	0.00	0.00
0.21	1.15	1.05	5.74	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.05	4.26	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.05	4.77	U	ND	ND	Y	0.00	0.00
0.21	0.72	1.05	3.62	J	J	=	Y	0.28	0.96
1.47	4.70	2.10	6.72	U	ND	ND	Y	0.00	0.00
0.21	1.32	1.05	6.61	U	ND	ND	Y	0.00	0.00
0.42	1.76	2.10	8.79	U	ND	ND	Y	0.00	0.00
0.21	0.98	1.05	4.91	U	ND	ND	Y	0.00	0.00
0.42	1.72	1.05	4.31	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.05	4.86	U	ND	ND	Y	0.00	0.00
0.42	1.52	2.10	7.58	U	ND	ND	Y	0.00	0.00
0.21	1.50	1.05	7.48	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.05	5.65	U	ND	ND	Y	0.00	0.00
0.21	1.41	1.05	7.04	U	ND	ND	Y	0.00	0.00
0.42	1.72	1.05	4.30	U	ND	ND	Y	0.00	0.00
0.42	1.72	3.36	13.79	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.05	4.77	U	ND	ND	Y	0.00	0.00
0.84	3.17	1.05	3.96	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.05	4.77	U	ND	ND	Y	0.00	0.00
0.21	1.15	1.05	5.74	U	ND	ND	Y	0.00	0.00
0.42	1.96	1.05	4.91	U	ND	ND	Y	0.00	0.00
0.42	1.72	3.36	13.79	U	ND	ND	Y	0.00	0.00
0.21	0.97	2.94	13.61	U	ND	ND	Y	0.00	0.00
0.42	1.96	1.05	4.91	U	ND	ND	Y	0.00	0.00
0.42	3.58	1.05	8.96	U	ND	ND	Y	0.00	0.00
0.42	3.23	1.05	8.08	U	ND	ND	Y	0.00	0.00
0.11	0.71	1.05	7.13	U	ND	ND	Y	0.00	0.00
0.42	1.94	1.05	4.84	U	ND	ND	Y	0.00	0.00
0.42	2.89	1.05	7.22	U	ND	ND	Y	0.00	0.00
0.42	1.83	1.05	4.57	U	ND	ND	Y	0.00	0.00
0.42	1.83	1.05	4.57	U	ND	ND	Y	0.00	0.00
0.42	2.21	1.05	5.52	U	ND	ND	Y	0.00	0.00
0.63	2.69	1.05	4.48	U	ND	ND	Y	0.00	0.00
0.42	4.35	1.05	10.87	U	ND	ND	Y	0.00	0.00
0.42	1.83	1.05	4.57	U	ND	ND	Y	0.00	0.00
0.84	5.77	2.10	14.43	U	ND	ND	Y	0.00	0.00
0.84	5.07	2.52	15.21	U	ND	ND	Y	0.00	0.00
0.84	4.30	2.52	12.90	U	ND	ND	Y	0.00	0.00
0.84	4.14	2.94	14.47	U	ND	ND	Y	0.00	0.00
0.84	4.14	2.94	14.47	U	ND	ND	Y	0.00	0.00
0.84	4.14	6.72	33.08	U	ND	ND	Y	0.00	0.00
0.84	4.14	3.78	18.61	U	ND	ND	Y	0.00	0.00
0.84	4.90	2.52	14.69	U	ND	ND	Y	0.00	0.00
0.84	4.62	2.52	13.85	U	ND	ND	Y	0.00	0.00
0.84	4.14	3.78	18.61	U	ND	ND	Y	0.00	0.00
0.84	4.62	2.52	13.85	U	ND	ND	Y	0.00	0.00

0.84	4.62	2.94	16.16	U	ND	ND	Y	0.00	0.00
0.84	5.06	3.36	20.23	U	ND	ND	Y	0.00	0.00
0.84	4.62	2.52	13.85	U	ND	ND	Y	0.00	0.00
0.84	4.36	2.10	10.89	U	ND	ND	Y	0.00	0.00
0.84	5.06	2.10	12.64	U	ND	ND	Y	0.00	0.00
0.84	4.62	2.52	13.85	U	ND	ND	Y	0.00	0.00
0.84	5.06	2.94	17.70	U	ND	ND	Y	0.00	0.00
1.26	12.19	2.94	28.45	U	ND	ND	Y	0.00	0.00
1.26	9.36	2.10	15.60	U	ND	ND	Y	0.00	0.00
2.10	11.03	0.42	2.21	U	ND	ND	Y	0.00	0.00
1.26	9.36	2.10	15.60	U	ND	ND	Y	0.00	0.00
1.05	11.22	1.26	13.46	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 06
Sample ID: T-406

Can Factor: 1.26
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	
ND	**0.7**	**1.5**	2.9	6.30	2.94	12.04	6.30	25.80	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**06**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.26
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i — Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	37626	20.0	20016891	0.191	0.80	1.38
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	20016891	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	35177	20.0	20016891	0.162	0.68	0.89
5	Chloromethane	PFB	TRG	50.5	0.234	28996	20.0	20016891	0.124	0.52	1.08
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	20016891	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	20016891	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	20016891	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	20016891	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	20016891	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	20016891	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	20016891	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	20016891	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	148645	20.0	20016891	0.731	3.07	7.31
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	20016891	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	20016891	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	20016891	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	20016891	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	20016891	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	20016891	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	20016891	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	20016891	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	30872	20.0	20016891	0.047	0.20	0.61
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	20016891	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	20016891	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	20016891	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	20016891	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	20016891	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	20016891	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	20016891	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	20016891	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	30960	20.0	20016891	0.081	0.34	1.20

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	20016891	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	20016891	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	20016891	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	20016891	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	20016891	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	20016891	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	20016891	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	20016891	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	20016891	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	21322999	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	21322999	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	21322999	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	23530	20.0	21322999	0.066	0.28	0.96
47	Benzene	14DF	TRG	78.1	0.794	98880	20.0	21322999	0.117	0.49	1.57
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	21322999	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	21322999	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	21322999	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	17085	20.0	21322999	0.063	0.27	1.09
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	21322999	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	21322999	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	21322999	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	21322999	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	21322999	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	21322999	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	21322999	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	21322999	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	211301	20.0	21322999	0.178	0.75	2.81
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	21322999	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	21322999	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	21322999	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	21322999	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	21322999	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	21322999	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	21322999	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	21322999	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	16238	20.0	21322999	0.018	0.08	0.52
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	28060575	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	28060575	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	104561	20.0	28060575	0.050	0.21	0.91
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	95343	20.0	28060575	0.056	0.23	1.02
76	Nonane	d5CB	TRG	128.3	0.711	25734	20.0	28060575	0.026	0.11	0.57
77	Styrene	d5CB	TRG	104.2	0.978	70753	20.0	28060575	0.052	0.22	0.92
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	28060575	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	83252	20.0	28060575	0.045	0.19	0.82
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	28060575	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	28060575	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	28060575	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	28060575	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	312937	20.0	28060575	0.050	0.21	1.04

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	308186	20.0	28060575	0.118	0.50	2.44
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	159505	20.0	28060575	0.059	0.25	1.22
87	Decane	d5CB	TRG	142.3	1.250	103023	20.0	28060575	0.059	0.25	1.44
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	88143	20.0	28060575	0.033	0.14	0.76
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	250081	20.0	28060575	0.117	0.49	2.42
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	28060575	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	28060575	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	28060575	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	232396	20.0	28060575	0.070	0.30	1.63
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	28060575	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	28060575	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	181436	20.0	28060575	0.058	0.24	1.33
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	28060575	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	28060575	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	28060575	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	28060575	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	28060575	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	35094	20.0	28060575	0.023	0.10	1.03
1	Pentafluorobenzene	0	IS	0.0	0.000	20016891	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	21322999	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	28060575	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	15902448	10.0		12.562	125.62	126

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443506A.D
Acq Time : 10 Dec 124 9:33 pm
Sample : T-406
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:14 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.56	168	20016891	20.00	ppbV		-0.27
42) 1,4-Difluorobenzene	10.70	114	21322999	20.00	ppbV		-0.30
71) Chlorobenzene-d5	15.21	117	28060575	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.06	98	15902448	12.56	ppbV		125.62
Target Compounds							Qvalue
2) Propylene	4.24	42	37626	0.19	ppbV	#	64
4) Methanol	4.70	31	35177	0.16	ppbV	#	70
5) Chloromethane	4.59	50	28996	0.12	ppbV	#	85
14) Acetone	6.21	58	148645	0.73	ppbV	m	1
23) Carbon disulfide	7.33	76	30872	0.05	ppbV	#	73
32) Hexane	8.58	57	30960	0.08	ppbV	#	12
46) Cyclohexane	10.43	56	23530	0.07	ppbV	#	77
47) Benzene	10.39	78	98880	0.12	ppbV	m	76
51) n-Heptane	11.18	71	17085	0.06	ppbV	#	58
61) Toluene	13.18	91	211301	0.18	ppbV		92
70) Tetrachloroethene (PCE)	14.34	166	16238	0.02	ppbV	m	91
74) Ethylbenzene	15.55	91	104561	0.05	ppbV	#	85
75) m,p-Xylenes	15.70	91	95343	0.06	ppbV	#	68
76) Nonane	16.08	57	25734	0.03	ppbV	#	57
77) Styrene	16.25	104	70753	0.05	ppbV	#	73
79) o-Xylene	16.34	91	83252	0.04	ppbV		92
84) Isopropylbenzene	17.86	105	312937	0.05	ppbV	m	86
85) 4-Ethyltoluene	17.86	105	308186	0.12	ppbV	m	86
86) 1,3,5-Trimethylbenzene	17.94	105	159505	0.06	ppbV	m	80
87) Decane	18.23	57	103023	0.06	ppbV	#	80
88) tert-butyl benzene	18.56	119	88143	0.03	ppbV	#	75
89) 1,2,4-Trimethylbenzene	18.56	105	250081	0.12	ppbV	#	87
93) Isopropyltoluene	19.14	119	232396	0.07	ppbV	#	88
96) n-Butylbenzene	19.82	91	181436	0.06	ppbV		97
102) Hexachlorobutadiene	23.15	225	35094	0.02	ppbV	#	89

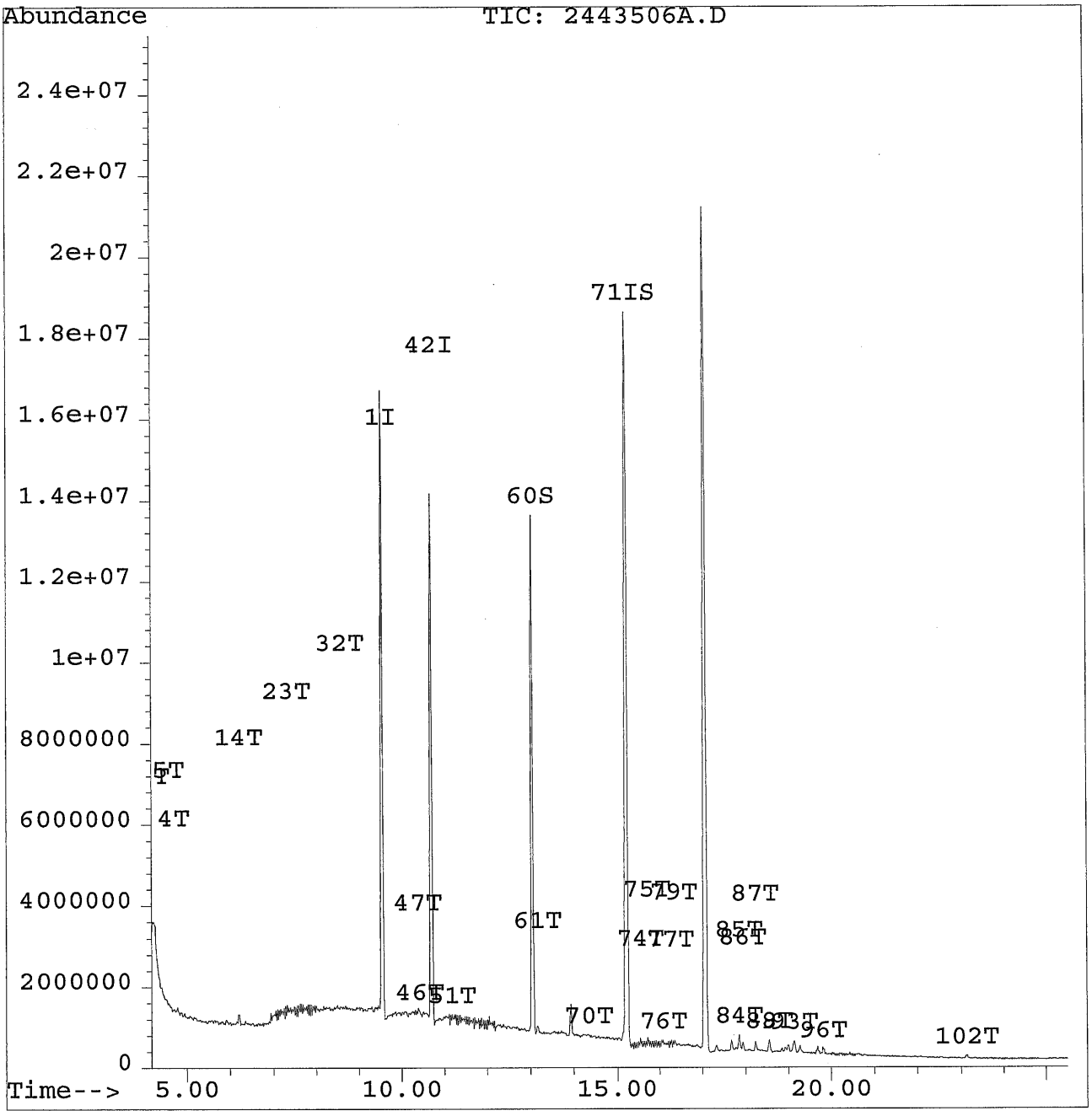
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443506A.D
Acq Time : 10 Dec 124 9:33 pm
Sample : T-406
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:14 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443506A.D
Acq Time : 10 Dec 124 9:33 pm Operator: UG
Sample : T-406 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	22.05 ppbV	82852778	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	91
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	90
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	37
4	3-Pyridinol	964	000109-00-2	14

Sample Data Packages

SDG Number 224435

Lab Id Number 7

Client ID T-407

Analytical Method TO-15

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 07**

File Name: 2443507A.D **Date Sampled:** 11/19/24 **Time:** 10:05
Description: T-407 **Date Analyzed:** 12/10/24 **Time:** 22:11
Canister: 740 **Can Dilution Factor:** 1.32
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.10	0.77	0.76	1.90	1.33	J
75-71-8	Dichlorodifluoromethane	0.66	1.10	ND	3.27	5.45	ND	
67-56-1	Methanol	2.20	2.64	4.77	2.88	3.46	6.26	
74-87-3	Chloromethane	0.66	1.10	ND	1.37	2.28	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.10	ND	3.08	7.70	ND	
75-01-4	Vinyl chloride	0.22	1.10	ND	0.57	2.82	ND	
106-99-0	1,3-Butadiene	0.22	1.10	ND	0.49	2.44	ND	
74-83-9	Bromomethane	0.44	1.10	ND	1.71	4.28	ND	
75-00-3	Chloroethane	0.44	1.10	ND	1.16	2.91	ND	
64-17-5	Ethanol	2.20	14.12	ND	4.15	26.67	ND	
107-02-8	Acrolein	0.44	1.32	ND	1.01	3.03	ND	
75-69-4	Trichlorofluoromethane	0.44	1.10	ND	2.48	6.19	ND	
67-64-1	Acetone	2.20	2.64	3.38	5.23	6.28	8.03	
67-63-0	2-propanol (isopropylalcohol)	0.88	5.50	ND	2.17	13.54	ND	
75-65-0	t-Butyl alcohol	0.44	4.40	ND	1.34	13.35	ND	
4227-95-6	Methyl iodide	0.44	1.32	ND	2.58	7.73	ND	
75-35-4	1,1-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
107-13-1	Acrylonitrile	0.88	1.32	ND	1.91	2.87	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.10	ND	1.69	8.44	ND	
107-05-1	Allyl chloride	0.22	4.40	ND	0.69	13.79	ND	
75-09-2	Methylene chloride	0.22	1.10	ND	0.76	3.82	ND	
75-15-0	Carbon disulfide	0.44	1.10	ND	1.37	3.43	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.88	ND	0.87	3.49	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.88	ND	1.59	3.18	ND	
107-12-0	Propionitrile	1.10	1.76	ND	2.48	3.97	ND	
75-34-3	1,1-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.10	ND	1.84	4.60	ND	
108-05-4	Vinyl acetate	0.22	4.40	ND	0.78	15.52	ND	
78-93-3	2-Butanone (MEK)	0.44	1.32	ND	1.30	3.90	ND	
108-20-3	Diisopropyl ether	0.44	2.64	ND	1.84	11.05	ND	
110-54-3	Hexane	0.44	1.10	ND	1.55	3.88	ND	
126-98-7	Methacrylonitrile	0.44	1.10	ND	1.21	3.02	ND	
141-78-6	Ethyl acetate	0.44	1.10	ND	1.59	3.97	ND	
74-97-5	Bromochloromethane	0.22	1.10	ND	1.17	5.83	ND	
96-33-3	Methyl acrylate	0.44	2.20	ND	1.55	7.76	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.32	ND	0.65	3.90	ND	
78-83-1	Isobutyl alcohol	0.88	3.52	ND	2.67	10.68	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
594-20-7	2,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
67-66-3	Chloroform	0.22	1.10	ND	1.08	5.38	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
107-06-2	1,2-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
563-58-6	1,1-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
110-82-7	Cyclohexane	0.22	1.10	ND	0.76	3.79	ND	
71-43-2	Benzene	1.54	2.20	ND	4.93	7.04	ND	
56-23-5	Carbon tetrachloride	0.22	1.10	ND	1.39	6.93	ND	
994-05-8	t-Amyl methyl ether	0.44	2.20	ND	1.84	9.21	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.10	ND	1.03	5.14	ND	
142-82-5	n-Heptane	0.44	1.10	ND	1.81	4.51	ND	
78-87-5	1,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
123-91-1	1,4 Dioxane	0.44	2.20	ND	1.59	7.94	ND	
74-95-3	Dibromomethane	0.22	1.10	ND	1.57	7.83	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.10	ND	0.59	5.92	ND	
75-27-4	Bromodichloromethane	0.22	1.10	ND	1.48	7.38	ND	
80-62-6	Methyl methacrylate	0.44	1.10	ND	1.80	4.51	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.52	ND	1.81	14.44	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
108-88-3	Toluene	0.88	1.10	ND	3.32	4.15	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
97-63-2	Ethyl methacrylate	0.44	1.10	ND	2.06	5.14	ND	
591-78-6	2-Hexanone	0.44	3.52	ND	1.81	14.44	ND	
142-28-9	1,3-Dichloropropane	0.22	3.08	ND	1.02	14.25	ND	
111-65-9	Octane	0.44	1.10	ND	2.06	5.14	ND	
124-48-1	Dibromochloromethane	0.44	1.10	ND	3.75	9.38	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.10	ND	3.39	8.46	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.10	ND	0.75	7.47	ND	
108-90-7	Chlorobenzene	0.44	1.10	ND	2.03	5.07	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.10	ND	3.02	7.56	ND	
100-41-4	Ethylbenzene	0.44	1.10	ND	1.91	4.78	ND	
1330-20-7	m,p-Xylenes	0.44	1.10	ND	1.91	4.78	ND	
111-84-2	Nonane	0.44	1.10	ND	2.31	5.78	ND	
100-42-5	Styrene	0.66	1.10	ND	2.82	4.69	ND	
75-25-2	Bromoform	0.44	1.10	ND	4.55	11.38	ND	
95-47-6	o-Xylene	0.44	1.10	ND	1.91	4.78	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.88	2.20	ND	6.05	15.12	ND	
96-18-4	1,2,3-Trichloropropane	0.88	2.64	ND	5.31	15.94	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.88	2.64	ND	4.51	13.52	ND	
103-65-1	n-Propylbenzene	0.88	3.08	ND	4.33	15.16	ND	
98-82-8	Isopropylbenzene	0.88	3.08	ND	4.33	15.16	ND	
622-96-8	4-Ethyltoluene	0.88	7.04	ND	4.33	34.66	ND	
108-67-8	1,3,5-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
124-18-5	Decane	0.88	2.64	ND	5.13	15.39	ND	
98-06-6	tert-butyl benzene	0.88	2.64	ND	4.84	14.51	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
538-93-2	i-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
135-98-8	sec-butylbenzene	0.88	3.08	ND	4.84	16.93	ND	
541-73-1	1,3-Dichlorobenzene	0.88	3.52	ND	5.30	21.19	ND	
99-87-6	Isopropyltoluene	0.88	2.64	ND	4.84	14.51	ND	
100-44-7	Benzyl chloride	0.88	2.20	ND	4.56	11.41	ND	
106-46-7	1,4-Dichlorobenzene	0.88	2.20	ND	5.30	13.24	ND	
104-51-8	n-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
95-50-1	1,2-Dichlorobenzene	0.88	3.08	ND	5.30	18.54	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.32	3.08	ND	12.77	29.81	ND	
120-82-1	1,2,4-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
91-20-3	Naphthalene	2.20	0.44	ND	11.55	2.31	ND	
87-61-6	1,2,3-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
87-68-3	Hexachlorobutadiene	1.10	1.32	ND	11.75	14.10	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	130	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC

Analytical Method: TO-15 **Laboratory ID: B09124**

File Name: 224435 **Date Sampled:** 11/19/24 **Time:** 10:05
Descriptio 07 **Date Analyzed:** 12/10/24 **Time:** 22:11
Canister: 740 **Can Dilution Factor:** 1.32
QC_Batch: 121024-MA1 **Air Volume:** 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.08	6.60	ND	12.61	27.03	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**07**		
File Name:	2443507A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**10:05**
Sample ID:	T-407	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**22:11**
Anal Date:	10 Dec 124 10:11 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**740**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.32**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.175	4.41	42.00	43797
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.085	4.86	31.00	298918
74-87-3	Chloromethane	5	TRG	0.108	4.77	50.00	32299
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.767	6.42	58.00	198415
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.032	7.61	76.00	26703
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.042	8.86	57.00	20387
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.111	10.70	78.00	112173
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.123	13.50	91.00	175004
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.034	15.90	106	79496
1330-20-7	m,p-Xylenes	75	TRG	0.037	16.06	91.00	71598
111-84-2	Nonane	76	TRG	0.014	16.43	57.00	16117
100-42-5	Styrene	77	TRG	0.047	16.61	104.00	72465
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.033	16.34	91.00	69974
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.086	18.23	105.00	251433
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.053	18.31	105.00	161746
124-18-5	Decane	87	TRG	0.040	18.60	57.00	78726
98-06-6	tert-butyl benzene	88	TRG	0.024	18.93	119.00	71413

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.090	18.95	105.00	216317
538-93-2	i-Butylbenzene	90	TRG	0.023	19.24	91.00	80777
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.058	19.53	119.00	214634
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.045	20.20	91.00	158594
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**25453049**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**25482641**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**31558958**
2037-26-5	Toluene-d8	60	SURR	12.975	13.40	98.00	**19629987**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 07
File Name: 2443507A.D
Run Method: A1563_L.M
Can Factor: 1.32
Air Volume: 300.0 ml
Can/Tube Number: 740
Dilution Factor: 0.3960
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3960
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.18	0.77	1.33	0.77	1.33	1.33	1.33	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.09	4.77	6.26	4.77	6.26	6.26	6.26	**0.500**	**0.600**
Chloromethane	50.5	0.11	0.48	0.99	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.77	3.38	8.03	3.38	8.03	8.03	8.03	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.03	0.14	0.44	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.04	0.18	0.65	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.11	0.49	1.56	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.12	0.54	2.04	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.15	0.65	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.04	0.16	0.71	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.01	0.06	0.33	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.05	0.21	0.88	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.03	0.15	0.64	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.09	0.38	1.86	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.05	0.23	1.16	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.04	0.18	1.02	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.02	0.10	0.57	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.09	0.40	1.95	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.02	0.10	0.57	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.06	0.25	1.40	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.04	0.20	1.09	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.97	130	130	130	130	130	130	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.76	1.10	1.90	J	J		=		Y	0.77	1.33
0.66	3.27	1.10	5.45	U	ND		ND		Y	0.00	0.00
2.20	2.88	2.64	3.46				=		Y	4.77	6.26
0.66	1.37	1.10	2.28	U	ND		ND		Y	0.00	0.00
0.44	3.08	1.10	7.70	U	ND		ND		Y	0.00	0.00
0.22	0.57	1.10	2.82	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.10	2.44	U	ND		ND		Y	0.00	0.00
0.44	1.71	1.10	4.28	U	ND		ND		Y	0.00	0.00
0.44	1.16	1.10	2.91	U	ND		ND		Y	0.00	0.00
2.20	4.15	14.12	26.67	U	ND		ND		Y	0.00	0.00
0.44	1.01	1.32	3.03	U	ND		ND		Y	0.00	0.00
0.44	2.48	1.10	6.19	U	ND		ND		Y	0.00	0.00
2.20	5.23	2.64	6.28				=		Y	3.38	8.03
0.88	2.17	5.50	13.54	U	ND		ND		Y	0.00	0.00
0.44	1.34	4.40	13.35	U	ND		ND		Y	0.00	0.00
0.44	2.58	1.32	7.73	U	ND		ND		Y	0.00	0.00
0.22	0.87	1.10	4.37	U	ND		ND		Y	0.00	0.00
0.88	1.91	1.32	2.87	U	ND		ND		Y	0.00	0.00
0.22	1.69	1.10	8.44	U	ND		ND		Y	0.00	0.00
0.22	0.69	4.40	13.79	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.10	3.82	U	ND		ND		Y	0.00	0.00
0.44	1.37	1.10	3.43	U	ND		ND		Y	0.00	0.00
0.22	0.87	0.88	3.49	U	ND		ND		Y	0.00	0.00
0.44	1.59	0.88	3.18	U	ND		ND		Y	0.00	0.00
1.10	2.48	1.76	3.97	U	ND		ND		Y	0.00	0.00
0.22	0.89	1.10	4.46	U	ND		ND		Y	0.00	0.00
0.44	1.84	1.10	4.60	U	ND		ND		Y	0.00	0.00
0.22	0.78	4.40	15.52	U	ND		ND		Y	0.00	0.00
0.44	1.30	1.32	3.90	U	ND		ND		Y	0.00	0.00
0.44	1.84	2.64	11.05	U	ND		ND		Y	0.00	0.00
0.44	1.55	1.10	3.88	U	ND		ND		Y	0.00	0.00
0.44	1.21	1.10	3.02	U	ND		ND		Y	0.00	0.00
0.44	1.59	1.10	3.97	U	ND		ND		Y	0.00	0.00
0.22	1.17	1.10	5.83	U	ND		ND		Y	0.00	0.00

0.44	1.55	2.20	7.76	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.32	3.90	U	ND	ND	Y	0.00	0.00
0.88	2.67	3.52	10.68	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.10	4.37	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.10	5.09	U	ND	ND	Y	0.00	0.00
0.22	1.08	1.10	5.38	U	ND	ND	Y	0.00	0.00
0.22	1.20	1.10	6.01	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.10	4.46	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.22	0.76	1.10	3.79	U	ND	ND	Y	0.00	0.00
1.54	4.93	2.20	7.04	U	ND	ND	Y	0.00	0.00
0.22	1.39	1.10	6.93	U	ND	ND	Y	0.00	0.00
0.44	1.84	2.20	9.21	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	1.81	1.10	4.51	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.10	5.09	U	ND	ND	Y	0.00	0.00
0.44	1.59	2.20	7.94	U	ND	ND	Y	0.00	0.00
0.22	1.57	1.10	7.83	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.10	5.92	U	ND	ND	Y	0.00	0.00
0.22	1.48	1.10	7.38	U	ND	ND	Y	0.00	0.00
0.44	1.80	1.10	4.51	U	ND	ND	Y	0.00	0.00
0.44	1.81	3.52	14.44	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.88	3.32	1.10	4.15	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.22	1.20	1.10	6.01	U	ND	ND	Y	0.00	0.00
0.44	2.06	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	1.81	3.52	14.44	U	ND	ND	Y	0.00	0.00
0.22	1.02	3.08	14.25	U	ND	ND	Y	0.00	0.00
0.44	2.06	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	3.75	1.10	9.38	U	ND	ND	Y	0.00	0.00
0.44	3.39	1.10	8.46	U	ND	ND	Y	0.00	0.00
0.11	0.75	1.10	7.47	U	ND	ND	Y	0.00	0.00
0.44	2.03	1.10	5.07	U	ND	ND	Y	0.00	0.00
0.44	3.02	1.10	7.56	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.44	2.31	1.10	5.78	U	ND	ND	Y	0.00	0.00
0.66	2.82	1.10	4.69	U	ND	ND	Y	0.00	0.00
0.44	4.55	1.10	11.38	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.88	6.05	2.20	15.12	U	ND	ND	Y	0.00	0.00
0.88	5.31	2.64	15.94	U	ND	ND	Y	0.00	0.00
0.88	4.51	2.64	13.52	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.08	15.16	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.08	15.16	U	ND	ND	Y	0.00	0.00
0.88	4.33	7.04	34.66	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.96	19.49	U	ND	ND	Y	0.00	0.00
0.88	5.13	2.64	15.39	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.96	19.49	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00

0.88	4.84	3.08	16.93	U	ND	ND	Y	0.00	0.00
0.88	5.30	3.52	21.19	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	4.56	2.20	11.41	U	ND	ND	Y	0.00	0.00
0.88	5.30	2.20	13.24	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	5.30	3.08	18.54	U	ND	ND	Y	0.00	0.00
1.32	12.77	3.08	29.81	U	ND	ND	Y	0.00	0.00
1.32	9.81	2.20	16.34	U	ND	ND	Y	0.00	0.00
2.20	11.55	0.44	2.31	U	ND	ND	Y	0.00	0.00
1.32	9.81	2.20	16.34	U	ND	ND	Y	0.00	0.00
1.10	11.75	1.32	14.10	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 07
Sample ID: T-407

Can Factor: 1.32
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**07**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.32
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|\left|\frac{(Cistdi)}{(Aistdi)}\right|_i$ Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)} \times \frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)}{(SV)} \times \frac{1000}{1} \times (CDF)$

4) Amount ug/m3 = $\frac{(amt(ppbv)}{24.42} \times MW$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	43797	20.0	25453049	0.175	0.77	1.33
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	25453049	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	298918	20.0	25453049	1.085	4.77	6.26
5	Chloromethane	PFB	TRG	50.5	0.234	32299	20.0	25453049	0.108	0.48	0.99
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	25453049	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	25453049	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	25453049	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	25453049	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	25453049	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	25453049	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	25453049	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	25453049	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	198415	20.0	25453049	0.767	3.38	8.03
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	25453049	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	25453049	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	25453049	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	25453049	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	25453049	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	25453049	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	25453049	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	25453049	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	26703	20.0	25453049	0.032	0.14	0.44
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	25453049	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	25453049	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	25453049	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	25453049	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	25453049	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	25453049	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	25453049	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	25453049	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	20387	20.0	25453049	0.042	0.18	0.65

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	25453049	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	25453049	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	25453049	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	25453049	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	25453049	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	25453049	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	25453049	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	25453049	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	25453049	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	25482641	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	25482641	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	25482641	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	25482641	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	112173	20.0	25482641	0.111	0.49	1.56
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	25482641	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	25482641	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	25482641	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	25482641	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	25482641	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	25482641	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	25482641	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	25482641	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	25482641	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	25482641	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	25482641	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	25482641	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	175004	20.0	25482641	0.123	0.54	2.04
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	25482641	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	25482641	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	25482641	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	25482641	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	25482641	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	25482641	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	25482641	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	25482641	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	25482641	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	31558958	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	31558958	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	79496	20.0	31558958	0.034	0.15	0.65
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	71598	20.0	31558958	0.037	0.16	0.71
76	Nonane	d5CB	TRG	128.3	0.711	16117	20.0	31558958	0.014	0.06	0.33
77	Styrene	d5CB	TRG	104.2	0.978	72465	20.0	31558958	0.047	0.21	0.88
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	31558958	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	69974	20.0	31558958	0.033	0.15	0.64
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	31558958	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	31558958	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	31558958	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	31558958	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	31558958	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	251433	20.0	31558958	0.086	0.38	1.86
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	161746	20.0	31558958	0.053	0.23	1.16
87	Decane	d5CB	TRG	142.3	1.250	78726	20.0	31558958	0.040	0.18	1.02
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	71413	20.0	31558958	0.024	0.10	0.57
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	216317	20.0	31558958	0.090	0.40	1.95
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	80777	20.0	31558958	0.023	0.10	0.57
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	31558958	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	31558958	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	214634	20.0	31558958	0.058	0.25	1.40
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	31558958	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	31558958	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	158594	20.0	31558958	0.045	0.20	1.09
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	31558958	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	31558958	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	31558958	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	31558958	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	31558958	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	31558958	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	25453049	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	25482641	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	31558958	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	19629987	10.0		12.975	129.75	130

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443507A.D
Acq Time : 10 Dec 124 10:11 pm
Sample : T-407
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:33 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.54	168	25453049	20.00	ppbV		-0.28
42) 1,4-Difluorobenzene	10.70	114	25482641	20.00	ppbV		-0.30
71) Chlorobenzene-d5	15.21	117	31558958	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.06	98	19629987	12.97	ppbV		129.75
Target Compounds							Qvalue
2) Propylene	4.21	42	43797	0.18	ppbV	m	38
4) Methanol	4.69	31	298918	1.09	ppbV	#	100
5) Chloromethane	4.55	50	32299	0.11	ppbV	#	88
14) Acetone	6.19	58	198415	0.77	ppbV	#	1
23) Carbon disulfide	7.34	76	26703	0.03	ppbV	#	87
32) Hexane	8.57	57	20387	0.04	ppbV	#	9
47) Benzene	10.39	78	112173	0.11	ppbV	m	70
61) Toluene	13.18	91	175004	0.12	ppbV		95
74) Ethylbenzene	15.53	91	79496	0.03	ppbV		91
75) m,p-Xylenes	15.70	91	71598	0.04	ppbV	#	74
76) Nonane	16.08	57	16117	0.01	ppbV	#	45
77) Styrene	16.25	104	72465	0.05	ppbV	#	77
79) o-Xylene	16.34	91	69974	0.03	ppbV	#	65
85) 4-Ethyltoluene	17.86	105	251433	0.09	ppbV	m	85
86) 1,3,5-Trimethylbenzene	17.94	105	161746	0.05	ppbV	m	82
87) Decane	18.23	57	78726	0.04	ppbV	#	79
88) tert-butyl benzene	18.54	119	71413	0.02	ppbV	#	77
89) 1,2,4-Trimethylbenzene	18.56	105	216317	0.09	ppbV	#	87
90) i-Butylbenzene	18.85	91	80777	0.02	ppbV	#	96
93) Isopropyltoluene	19.14	119	214634	0.06	ppbV	#	90
96) n-Butylbenzene	19.82	91	158594	0.04	ppbV	m	97

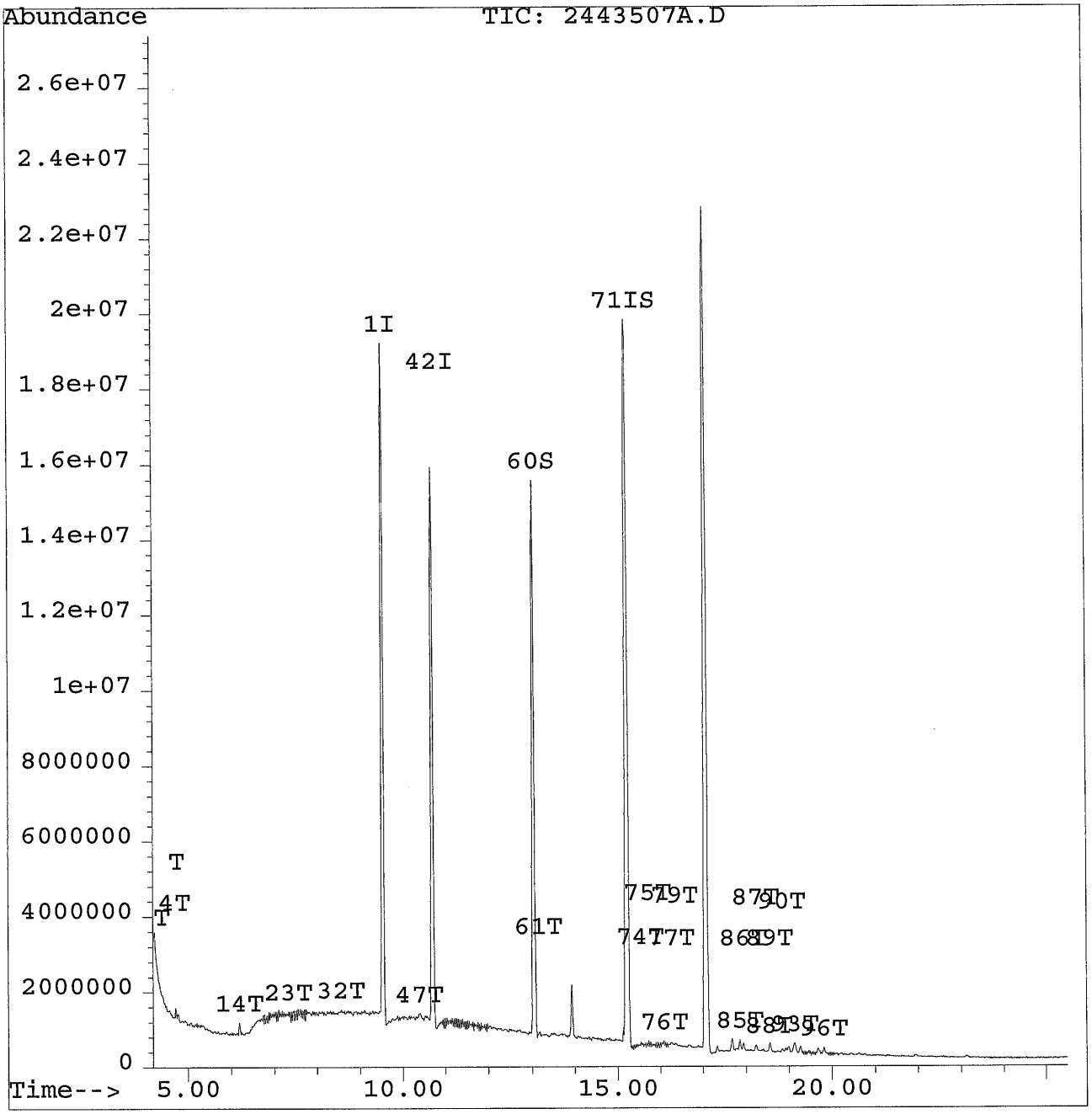
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443507A.D
Acq Time : 10 Dec 124 10:11 pm
Sample : T-407
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:33 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443507A.D
Acq Time : 10 Dec 124 10:11 pm
Sample : T-407
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
13.95	0.86 ppbV	3814835	Chlorobenzene-d5	15

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	23660	000541-05-9	49
2	1H-Indole, 1-methyl-2-phenyl-	20928	003558-24-5	39
3	1H-Indole, 5-methyl-2-phenyl-	20927	013228-36-9	38

****

Peak Number 2 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	21.96 ppbV	97636851	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	90
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	90
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	37
4	3-Pyridinol	964	000109-00-2	7

Sample Data Packages

SDG Number 224435

Lab Id Number 8

Client ID T-408

Analytical Method TO-15

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 08**

File Name: 2443508A.D **Date Sampled:** 11/19/24 **Time:** 10:19
Description: T-408 **Date Analyzed:** 12/10/24 **Time:** 22:47
Canister: 805 **Can Dilution Factor:** 1.31
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	1.11	0.75	1.88	1.91	
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	4.49	2.86	3.43	5.88	
74-87-3	Chloromethane	0.66	1.09	0.85	1.35	2.26	1.76	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	ND	4.12	26.46	ND	
107-02-8	Acrolein	0.44	1.31	1.09	1.00	3.01	2.50	J
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	6.52	5.20	6.23	15.51	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	2.40	2.15	13.44	5.90	J
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	0.54	1.29	3.87	1.60	J
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.31	ND	0.65	3.87	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	128	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 08
Canister: 805
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 12/10/24 **Time:** 22:47
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**08**		
File Name:	2443508A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**10:19**
Sample ID:	T-408	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**22:47**
Anal Date:	10 Dec 124 10:47 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**805**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.31**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.254	4.41	42.00	58299
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.028	4.86	31.00	260233
74-87-3	Chloromethane	5	TRG	0.195	4.77	50.00	53444
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.250	6.32	56.00	25007
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.492	6.42	58.00	354593
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.549	6.45	45.00	252658
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.027	7.61	76.00	20776
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.124	8.75	72.00	19203
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.131	10.70	78.00	131754
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.083	13.50	91.00	117689
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.023	15.90	106	55417
1330-20-7	m,p-Xylenes	75	TRG	0.036	16.06	91.00	70597
111-84-2	Nonane	76	TRG	0.024	16.43	57.00	27394
100-42-5	Styrene	77	TRG	0.041	16.61	104.00	64512
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.023	16.34	91.00	50516
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.037	18.23	105.00	111892
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.027	18.31	105.00	85348
124-18-5	Decane	87	TRG	0.028	18.60	57.00	56419
98-06-6	tert-butyl benzene	88	TRG	0.016	18.93	119.00	48362

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.067	18.95	105.00	165892
538-93-2	i-Butylbenzene	90	TRG	0.014	19.24	91.00	49329
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.075	19.53	119.00	287044
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.015	23.13	225.00	26337
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**23386252**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**25278147**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**32512688**
2037-26-5	Toluene-d8	60	SURR	12.837	13.40	98.00	**19265202**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**		EDD SURR:	PERCENT							
Laboratory Number:	**08**		Sam Type:	SA							
File Name:	2443508A.D		Instrument:	MA1		IS LCL	**50**		Gas Constant	
Run Method:	A1563_L.M		DETECT:	ND		IS UCL	**200**		T	24.5
Can Factor:	1.31		Matrix:	AA		SUR LCL	**70**		P	**760**
Air Volume:	300.0 ml		Type:	TRG		SUR UCL	**130**		MV	24.417
Can/Tube Number:	805		Diluton:	0.3930		MDL Factor	**1.0**		GC	24.417
Dilution Factor:	0.3930		Sig Figs:	2		E Flag	1.3			
Base Volume:	1000 ml		MDLSF:	2						
Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.25	1.11	1.91	1.11	1.91	1.91	1.91	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.03	4.49	5.88	4.49	5.88	5.88	5.88	**0.500**	**0.600**
Chloromethane	50.5	0.20	0.85	1.76	0.85	1.76	1.76	1.76	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.25	1.09	2.50	1.09	2.50	2.50	2.50	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.49	6.52	15.51	6.52	15.51	15.51	15.51	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.55	2.40	5.90	2.40	5.90	5.90	5.90	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.03	0.12	0.37	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.12	0.54	1.60	0.54	1.60	1.60	1.60	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.13	0.57	1.83	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.08	0.36	1.37	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.02	0.10	0.43	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.04	0.16	0.68	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.02	0.10	0.54	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.04	0.18	0.76	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.02	0.10	0.45	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.04	0.16	0.80	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.03	0.12	0.59	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.03	0.12	0.71	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.02	0.07	0.37	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.07	0.29	1.44	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.01	0.06	0.33	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.08	0.33	1.80	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.01	0.07	0.70	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.84	128	128	128	128	128	128	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.75	1.09	1.88				=		Y	1.11	1.91
0.66	3.24	1.09	5.41	U	ND		ND		Y	0.00	0.00
2.18	2.86	2.62	3.43				=		Y	4.49	5.88
0.66	1.35	1.09	2.26	J	J		=		Y	0.85	1.76
0.44	3.06	1.09	7.64	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.09	2.79	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.09	2.42	U	ND		ND		Y	0.00	0.00
0.44	1.70	1.09	4.24	U	ND		ND		Y	0.00	0.00
0.44	1.15	1.09	2.88	U	ND		ND		Y	0.00	0.00
2.18	4.12	14.02	26.46	U	ND		ND		Y	0.00	0.00
0.44	1.00	1.31	3.01	J	J		=		Y	1.09	2.50
0.44	2.46	1.09	6.14	U	ND		ND		Y	0.00	0.00
2.18	5.20	2.62	6.23				=		Y	6.52	15.51
0.87	2.15	5.46	13.44	J	J		=		Y	2.40	5.90
0.44	1.33	4.37	13.25	U	ND		ND		Y	0.00	0.00
0.44	2.56	1.31	7.67	U	ND		ND		Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND		ND		Y	0.00	0.00
0.87	1.90	1.31	2.85	U	ND		ND		Y	0.00	0.00
0.22	1.68	1.09	8.38	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.37	13.68	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.09	3.80	U	ND		ND		Y	0.00	0.00
0.44	1.36	1.09	3.40	U	ND		ND		Y	0.00	0.00
0.22	0.87	0.87	3.47	U	ND		ND		Y	0.00	0.00
0.44	1.58	0.87	3.15	U	ND		ND		Y	0.00	0.00
1.09	2.46	1.75	3.94	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.09	4.43	U	ND		ND		Y	0.00	0.00
0.44	1.83	1.09	4.57	U	ND		ND		Y	0.00	0.00
0.22	0.77	4.37	15.40	U	ND		ND		Y	0.00	0.00
0.44	1.29	1.31	3.87	J	J		=		Y	0.54	1.60
0.44	1.83	2.62	10.97	U	ND		ND		Y	0.00	0.00
0.44	1.54	1.09	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.20	1.09	3.00	U	ND		ND		Y	0.00	0.00
0.44	1.58	1.09	3.94	U	ND		ND		Y	0.00	0.00
0.22	1.16	1.09	5.79	U	ND		ND		Y	0.00	0.00

0.44	1.54	2.18	7.70	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.31	3.87	U	ND	ND	Y	0.00	0.00
0.87	2.65	3.49	10.60	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.22	1.07	1.09	5.34	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.09	4.43	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	0.75	1.09	3.76	U	ND	ND	Y	0.00	0.00
1.53	4.89	2.18	6.98	U	ND	ND	Y	0.00	0.00
0.22	1.38	1.09	6.88	U	ND	ND	Y	0.00	0.00
0.44	1.83	2.18	9.14	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.44	1.58	2.18	7.88	U	ND	ND	Y	0.00	0.00
0.22	1.55	1.09	7.77	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.09	5.87	U	ND	ND	Y	0.00	0.00
0.22	1.46	1.09	7.32	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.87	3.29	1.09	4.12	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	1.01	3.06	14.15	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	3.73	1.09	9.31	U	ND	ND	Y	0.00	0.00
0.44	3.36	1.09	8.40	U	ND	ND	Y	0.00	0.00
0.11	0.74	1.09	7.41	U	ND	ND	Y	0.00	0.00
0.44	2.01	1.09	5.03	U	ND	ND	Y	0.00	0.00
0.44	3.00	1.09	7.50	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	2.29	1.09	5.74	U	ND	ND	Y	0.00	0.00
0.66	2.80	1.09	4.66	U	ND	ND	Y	0.00	0.00
0.44	4.52	1.09	11.30	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.87	6.00	2.18	15.00	U	ND	ND	Y	0.00	0.00
0.87	5.27	2.62	15.82	U	ND	ND	Y	0.00	0.00
0.87	4.47	2.62	13.41	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	6.99	34.39	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	5.09	2.62	15.27	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00

0.87	4.80	3.06	16.80	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.49	21.03	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.53	2.18	11.32	U	ND	ND	Y	0.00	0.00
0.87	5.26	2.18	13.14	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.06	18.40	U	ND	ND	Y	0.00	0.00
1.31	12.68	3.06	29.58	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
2.18	11.46	0.44	2.29	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
1.09	11.66	1.31	13.99	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435 **Can Factor:** 1.31
EASID: 08 **Gas Constant** 24.417049
Sample ID: T-408 **Volume:** 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**08**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.31	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	58299	20.0	23386252	0.254	1.11	1.91
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	23386252	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	260233	20.0	23386252	1.028	4.49	5.88
5	Chloromethane	PFB	TRG	50.5	0.234	53444	20.0	23386252	0.195	0.85	1.76
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	23386252	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	23386252	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	23386252	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	23386252	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	23386252	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	23386252	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	25007	20.0	23386252	0.250	1.09	2.50
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	23386252	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	354593	20.0	23386252	1.492	6.52	15.51
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	252658	20.0	23386252	0.549	2.40	5.90
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	23386252	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	23386252	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	23386252	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	23386252	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	23386252	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	23386252	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	23386252	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	20776	20.0	23386252	0.027	0.12	0.37
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	23386252	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	23386252	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	23386252	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	23386252	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	23386252	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	23386252	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	19203	20.0	23386252	0.124	0.54	1.60
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	23386252	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	23386252	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	23386252	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	23386252	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	23386252	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	23386252	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	23386252	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	23386252	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	23386252	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	23386252	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	23386252	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	25278147	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	25278147	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	25278147	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	25278147	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	131754	20.0	25278147	0.131	0.57	1.83
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	25278147	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	25278147	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	25278147	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	25278147	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	25278147	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	25278147	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	25278147	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	25278147	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	25278147	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	25278147	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	25278147	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	25278147	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	117689	20.0	25278147	0.083	0.36	1.37
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	25278147	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	25278147	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	25278147	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	25278147	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	25278147	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	25278147	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	25278147	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	25278147	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	25278147	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	32512688	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	32512688	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	55417	20.0	32512688	0.023	0.10	0.43
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	70597	20.0	32512688	0.036	0.16	0.68
76	Nonane	d5CB	TRG	128.3	0.711	27394	20.0	32512688	0.024	0.10	0.54
77	Styrene	d5CB	TRG	104.2	0.978	64512	20.0	32512688	0.041	0.18	0.76
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	32512688	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	50516	20.0	32512688	0.023	0.10	0.45
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	32512688	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	32512688	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	32512688	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	32512688	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	32512688	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	111892	20.0	32512688	0.037	0.16	0.80
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	85348	20.0	32512688	0.027	0.12	0.59
87	Decane	d5CB	TRG	142.3	1.250	56419	20.0	32512688	0.028	0.12	0.71
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	48362	20.0	32512688	0.016	0.07	0.37
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	165892	20.0	32512688	0.067	0.29	1.44
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	49329	20.0	32512688	0.014	0.06	0.33
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	32512688	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	32512688	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	287044	20.0	32512688	0.075	0.33	1.80
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	32512688	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	32512688	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	32512688	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	32512688	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	32512688	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	32512688	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	32512688	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	32512688	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	26337	20.0	32512688	0.015	0.07	0.70
1	Pentafluorobenzene	0	IS	0.0	0.000	23386252	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	25278147	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	32512688	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	19265202	10.0		12.837	128.37	128

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443508A.D
Acq Time : 10 Dec 124 10:47 pm
Sample : T-408
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:47 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.56	168	23386252	20.00	ppbV		-0.27
42) 1,4-Difluorobenzene	10.70	114	25278147	20.00	ppbV		-0.30
71) Chlorobenzene-d5	15.21	117	32512688	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.06	98	19265202	12.84	ppbV		128.37
Target Compounds							Qvalue
2) Propylene	4.26	42	58299	0.25	ppbV		91
4) Methanol	4.74	31	260233	1.03	ppbV	#	98
5) Chloromethane	4.60	50	53444	0.20	ppbV		93
12) Acrolein	6.11	56	25007	0.25	ppbV	#	81
14) Acetone	6.21	58	354593	1.49	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.28	45	252658	0.55	ppbV	#	91
23) Carbon disulfide	7.35	76	20776	0.03	ppbV	#	92
30) 2-Butanone (MEK)	8.51	72	19203	0.12	ppbV		94
47) Benzene	10.39	78	131754	0.13	ppbV	m	73
61) Toluene	13.18	91	117689	0.08	ppbV		97
74) Ethylbenzene	15.55	91	55417	0.02	ppbV	#	71
75) m,p-Xylenes	15.70	91	70597	0.04	ppbV	#	85
76) Nonane	15.82	57	27394	0.02	ppbV	#	74
77) Styrene	16.25	104	64512	0.04	ppbV	#	80
79) o-Xylene	16.34	91	50516	0.02	ppbV	#	72
85) 4-Ethyltoluene	17.85	105	111892	0.04	ppbV	m	83
86) 1,3,5-Trimethylbenzene	17.94	105	85348	0.03	ppbV	m	84
87) Decane	18.23	57	56419	0.03	ppbV	#	78
88) tert-butyl benzene	18.55	119	48362	0.02	ppbV		87
89) 1,2,4-Trimethylbenzene	18.55	105	165892	0.07	ppbV	#	84
90) i-Butylbenzene	18.84	91	49329	0.01	ppbV	#	95
93) Isopropyltoluene	19.15	119	287044	0.08	ppbV	#	88
102) Hexachlorobutadiene	23.13	225	26337	0.01	ppbV	#	85

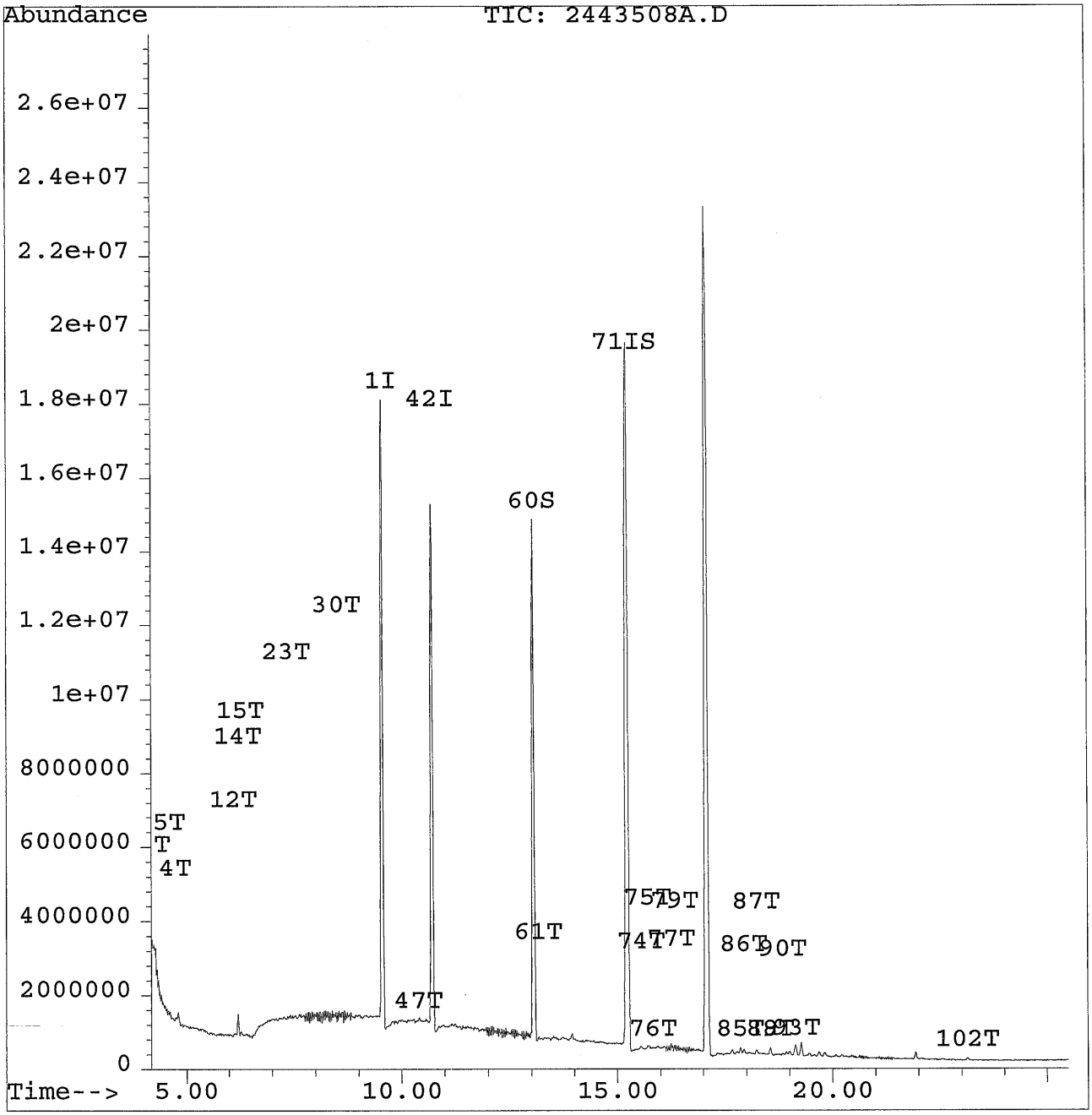
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443508A.D
Acq Time : 10 Dec 124 10:47 pm
Sample : T-408
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 11:47 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443508A.D
Acq Time : 10 Dec 124 10:47 pm Operator: UG
Sample : T-408 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	22.91 ppbV	103408251	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	90
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	81
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	72
4	Pyridine, 1-oxide	962	000694-59-7	9
5	3-Pyridinol	964	000109-00-2	7

Sample Data Packages

SDG Number 224435

Lab Id Number 9

Client ID T-409

Analytical Method TO-15

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 09**

File Name: 2443509A.D
Description: T-409
Canister: 631
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/11/24 **Time:** 15:13
Can Dilution Factor: 1.36
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	16.16	0.78	1.95	27.85	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	0.93	1.41	2.34	1.92	J
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	ND	5.39	6.47	ND	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	0.16	0.61	6.10	0.87	J
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	0.13	0.77	7.70	0.89	J
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.97	4.93	ND	
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	0.75	2.90	4.84	3.21	J
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	0.55	1.97	4.93	2.40	J
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	1.57	4.46	35.71	7.71	J
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	1.37	4.46	20.08	6.76	J
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	112	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 09
Canister: 631
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/11/24 **Time:** 15:13
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**09**		
File Name:	2443509A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**11:45**
Sample ID:	T-409	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**15:13**
Anal Date:	11 Dec 124 3:13 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**631**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.36**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	3.565	4.41	42.00	455152
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.204	4.77	50.00	31077
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.313	6.42	58.00	41253
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.077	10.70	78.00	40823
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.036	10.70	130.00	11686
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.115	13.50	91.00	86283
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.029	14.69	166.00	16240
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.083	15.90	106	115325
1330-20-7	m,p-Xylenes	75	TRG	0.099	16.06	91.00	112573
111-84-2	Nonane	76	TRG	0.038	16.43	57.00	25317
100-42-5	Styrene	77	TRG	0.166	16.61	104.00	151285
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.122	16.35	91.00	150490
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.005	18.04	91.00	10282
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.346	18.23	105.00	599054
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.164	18.31	105.00	294078
124-18-5	Decane	87	TRG	0.115	18.60	57.00	133656
98-06-6	tert-butyl benzene	88	TRG	0.090	18.93	119.00	161382

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.303	18.95	105.00	430632
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.153	19.53	119.00	334930
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**12988963**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**13423358**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18653674**
2037-26-5	Toluene-d8	60	SURR	11.209	13.40	98.00	**8932744**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 09
File Name: 2443509A.D
Run Method: A1563_L.M
Can Factor: 1.36
Air Volume: 300.0 ml
Can/Tube Number: 631
Dilution Factor: 0.4080
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4080
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	3.57	16.16	27.85	16.16	27.85	27.85	27.85	0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.20	0.93	1.92	0.93	1.92	1.92	1.92	0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.31	1.42	3.37	ND	ND	0		0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.08	0.35	1.11	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.04	0.16	0.87	0.16	0.87	0.87	0.87	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.12	0.52	1.97	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.03	0.13	0.89	0.13	0.89	0.89	0.89	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.08	0.38	1.63	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.10	0.45	1.96	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.04	0.17	0.91	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.17	0.75	3.21	0.75	3.21	3.21	3.21	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.12	0.55	2.40	0.55	2.40	2.40	2.40	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.02	0.10	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.35	1.57	7.71	1.57	7.71	7.71	7.71	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.16	0.74	3.66	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.11	0.52	3.03	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.09	0.41	2.25	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.30	1.37	6.76	1.37	6.76	6.76	6.76	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.15	0.69	3.81	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.21	112	112	112	112	112	112	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.95				=		Y	16.16	27.85
0.68	3.37	1.13	5.61	U	ND		ND		Y	0.00	0.00
2.27	2.97	2.72	3.56	U	ND		ND		Y	0.00	0.00
0.68	1.41	1.13	2.34	J	J		=		Y	0.93	1.92
0.45	3.17	1.13	7.93	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.90	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.13	2.51	U	ND		ND		Y	0.00	0.00
0.45	1.76	1.13	4.40	U	ND		ND		Y	0.00	0.00
0.45	1.20	1.13	2.99	U	ND		ND		Y	0.00	0.00
2.27	4.28	14.55	27.47	U	ND		ND		Y	0.00	0.00
0.45	1.04	1.36	3.12	U	ND		ND		Y	0.00	0.00
0.45	2.55	1.13	6.38	U	ND		ND		Y	0.00	0.00
2.27	5.39	2.72	6.47	U	ND		ND		Y	0.00	0.00
0.91	2.23	5.67	13.95	U	ND		ND		Y	0.00	0.00
0.45	1.38	4.53	13.76	U	ND		ND		Y	0.00	0.00
0.45	2.65	1.36	7.96	U	ND		ND		Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND		ND		Y	0.00	0.00
0.91	1.97	1.36	2.96	U	ND		ND		Y	0.00	0.00
0.23	1.74	1.13	8.70	U	ND		ND		Y	0.00	0.00
0.23	0.71	4.53	14.20	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.13	3.94	U	ND		ND		Y	0.00	0.00
0.45	1.41	1.13	3.53	U	ND		ND		Y	0.00	0.00
0.23	0.90	0.91	3.60	U	ND		ND		Y	0.00	0.00
0.45	1.64	0.91	3.27	U	ND		ND		Y	0.00	0.00
1.13	2.56	1.81	4.09	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND		ND		Y	0.00	0.00
0.45	1.90	1.13	4.74	U	ND		ND		Y	0.00	0.00
0.23	0.80	4.53	15.99	U	ND		ND		Y	0.00	0.00
0.45	1.34	1.36	4.02	U	ND		ND		Y	0.00	0.00
0.45	1.90	2.72	11.38	U	ND		ND		Y	0.00	0.00
0.45	1.60	1.13	4.00	U	ND		ND		Y	0.00	0.00
0.45	1.25	1.13	3.11	U	ND		ND		Y	0.00	0.00
0.45	1.64	1.13	4.09	U	ND		ND		Y	0.00	0.00
0.23	1.20	1.13	6.01	U	ND		ND		Y	0.00	0.00

0.45	1.60	2.27	7.99	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.36	4.02	U	ND	ND	Y	0.00	0.00
0.91	2.75	3.63	11.01	U	ND	ND	Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.23	1.11	1.13	5.54	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND	ND	Y	0.00	0.00
1.59	5.08	2.27	7.25	U	ND	ND	Y	0.00	0.00
0.23	1.43	1.13	7.14	U	ND	ND	Y	0.00	0.00
0.45	1.90	2.27	9.49	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.45	1.64	2.27	8.18	U	ND	ND	Y	0.00	0.00
0.23	1.61	1.13	8.07	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.10	J	J	=	Y	0.16	0.87
0.23	1.52	1.13	7.60	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.91	3.42	1.13	4.27	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.05	3.17	14.69	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	3.87	1.13	9.67	U	ND	ND	Y	0.00	0.00
0.45	3.49	1.13	8.72	U	ND	ND	Y	0.00	0.00
0.11	0.77	1.13	7.70	J	J	=	Y	0.13	0.89
0.45	2.09	1.13	5.23	U	ND	ND	Y	0.00	0.00
0.45	3.12	1.13	7.79	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.45	2.38	1.13	5.96	U	ND	ND	Y	0.00	0.00
0.68	2.90	1.13	4.84	J	J	=	Y	0.75	3.21
0.45	4.69	1.13	11.73	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	J	J	=	Y	0.55	2.40
0.91	6.23	2.27	15.58	U	ND	ND	Y	0.00	0.00
0.91	5.47	2.72	16.42	U	ND	ND	Y	0.00	0.00
0.91	4.64	2.72	13.92	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	7.25	35.71	J	J	=	Y	1.57	7.71
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	5.28	2.72	15.85	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	J	J	=	Y	1.37	6.76
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00

0.91	4.98	3.17	17.44	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.63	21.83	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.70	2.27	11.75	U	ND	ND	Y	0.00	0.00
0.91	5.46	2.27	13.65	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.17	19.10	U	ND	ND	Y	0.00	0.00
1.36	13.16	3.17	30.71	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
2.27	11.90	0.45	2.38	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
1.13	12.11	1.36	14.53	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 09
Sample ID: T-409

Can Factor: 1.36
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**09**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.36
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)]$_i$ Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	455152	20.0	12988963	3.565	16.16	27.85
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	12988963	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	12988963	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	31077	20.0	12988963	0.204	0.93	1.92
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	12988963	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	12988963	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	12988963	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	12988963	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	12988963	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	12988963	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	12988963	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	12988963	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	41253	20.0	12988963	0.313	1.42	3.37
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	12988963	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	12988963	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	12988963	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	12988963	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	12988963	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	12988963	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	12988963	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	12988963	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	12988963	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	12988963	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	12988963	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	12988963	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	12988963	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	12988963	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	12988963	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	12988963	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	12988963	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	12988963	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	12988963	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	12988963	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	12988963	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	12988963	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	12988963	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	12988963	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	12988963	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	12988963	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	12988963	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	13423358	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	13423358	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	13423358	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	13423358	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	40823	20.0	13423358	0.077	0.35	1.11
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	13423358	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	13423358	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	13423358	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	13423358	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	13423358	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	13423358	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	13423358	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	11686	20.0	13423358	0.036	0.16	0.87
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	13423358	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	13423358	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	13423358	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	13423358	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	86283	20.0	13423358	0.115	0.52	1.97
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	13423358	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	13423358	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	13423358	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	13423358	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	13423358	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	13423358	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	13423358	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	13423358	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	16240	20.0	13423358	0.029	0.13	0.89
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18653674	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18653674	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	115325	20.0	18653674	0.083	0.38	1.63
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	112573	20.0	18653674	0.099	0.45	1.96
76	Nonane	d5CB	TRG	128.3	0.711	25317	20.0	18653674	0.038	0.17	0.91
77	Styrene	d5CB	TRG	104.2	0.978	151285	20.0	18653674	0.166	0.75	3.21
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18653674	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	150490	20.0	18653674	0.122	0.55	2.40
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18653674	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18653674	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18653674	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	10282	20.0	18653674	0.005	0.02	0.10
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18653674	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	599054	20.0	18653674	0.346	1.57	7.71
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	294078	20.0	18653674	0.164	0.74	3.66
87	Decane	d5CB	TRG	142.3	1.250	133656	20.0	18653674	0.115	0.52	3.03
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	161382	20.0	18653674	0.090	0.41	2.25
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	430632	20.0	18653674	0.303	1.37	6.76
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18653674	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18653674	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18653674	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	334930	20.0	18653674	0.153	0.69	3.81
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18653674	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18653674	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18653674	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18653674	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18653674	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18653674	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18653674	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18653674	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18653674	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	12988963	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	13423358	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18653674	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8932744	10.0		11.209	112.09	112

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443509A.D
Acq Time : 11 Dec 124 3:13 pm
Sample : T-409
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 14:21 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	12988963	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	13423358	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.23	117	18653674	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8932744	11.21	ppbV		112.09
Target Compounds							Qvalue
2) Propylene	4.33	42	455152	3.57	ppbV	#	82
5) Chloromethane	4.67	50	31077	0.20	ppbV	m	91
14) Acetone	6.29	58	41253	0.31	ppbV	#	1
47) Benzene	10.43	78	40823	0.08	ppbV	m	81
55) Trichloroethene (TCE)	11.38	130	11686	0.04	ppbV	m	69
61) Toluene	13.19	91	86283	0.12	ppbV		99
70) Tetrachloroethene (PCE)	14.36	166	16240	0.03	ppbV	m	78
74) Ethylbenzene	15.57	91	115325	0.08	ppbV		96
75) m,p-Xylenes	15.74	91	112573	0.10	ppbV	#	77
76) Nonane	16.10	57	25317	0.04	ppbV	#	61
77) Styrene	16.27	104	151285	0.17	ppbV	#	83
79) o-Xylene	16.35	91	150490	0.12	ppbV	#	85
83) n-Propylbenzene	17.96	91	10282	0.00	ppbV	m	92
85) 4-Ethyltoluene	17.87	105	599054	0.35	ppbV	m	88
86) 1,3,5-Trimethylbenzene	17.96	105	294078	0.16	ppbV	m	79
87) Decane	18.25	57	133656	0.11	ppbV	#	81
88) tert-butyl benzene	18.57	119	161382	0.09	ppbV	#	80
89) 1,2,4-Trimethylbenzene	18.57	105	430632	0.30	ppbV	#	88
93) Isopropyltoluene	19.17	119	334930	0.15	ppbV	#	88

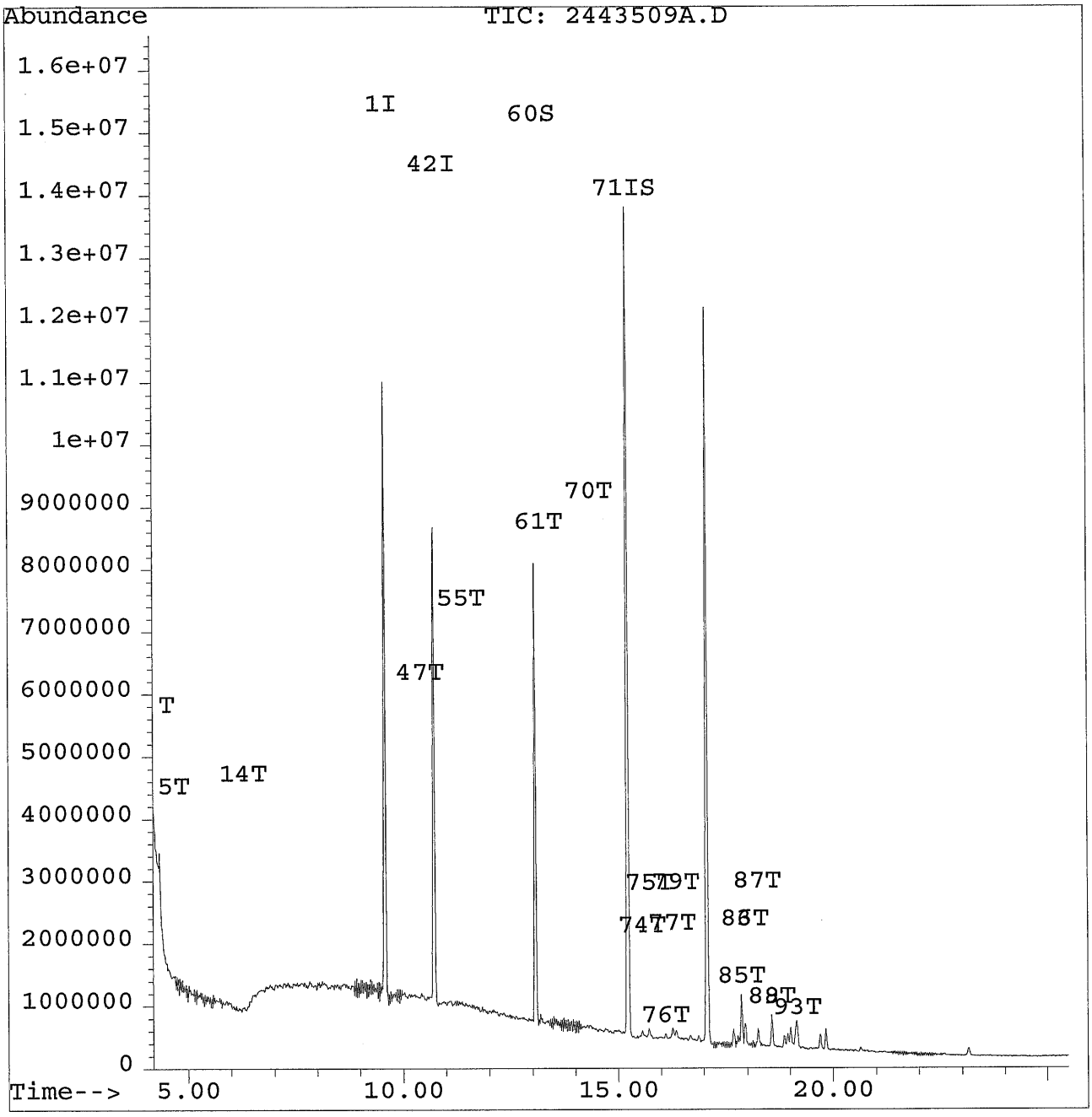
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443509A.D
Acq Time : 11 Dec 124 3:13 pm
Sample : T-409
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 14:21 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443509A.D
Acq Time : 11 Dec 124 3:13 pm Operator: TR
Sample : T-409 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	18.45 ppbV	40095901	Chlorobenzene-d5	15

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	72
3	4(1H)-Pyrimidinone, 5-bromo-	13697	019808-30-1	39
4	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	38
5	4-(4-Fluorophenyl)pyrimidine	13873	068049-19-4	10

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
19.83	0.45 ppbV	981522	Chlorobenzene-d5	15

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[3.1.0]hexan-3-ol, 4-methyle	8936	000471-16-9	45
2	Benzene, (butoxymethyl)-	11646	000588-67-0	40
3	Benzene, (2-methylpropyl)-	5390	000538-93-2	39
4	Bicyclo[3.2.2]nona-6,8-dien-3-one	5351	026788-91-0	38
5	Benzenemethanamine, N-(1-methylethy	8239	000102-97-6	35

****

Peak Number 3 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
23.16	0.20 ppbV	438255	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	1,3-Butadiene, 1,1,2,3,4,4-hexachlo	30019	000087-68-3	96
2	2,4-Dichloro-6-phenyl-1,3,5-triazin	24435	001700-02-3	38
3	16-Azatricyclo[9.2.2.14,8]hexadeca-	24524	051760-15-7	7
4	Stannane, trimethylphenyl-	27358	000934-56-5	6

Sample Data Packages

SDG Number **224435**

Lab Id Number **10**

Client ID T-410

Analytical Method TO-15

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 10**

File Name: 2443510A.D **Date Sampled:** 11/19/24 **Time:** 11:59
Description: T-410 **Date Analyzed:** 12/11/24 **Time:** 15:51
Canister: 714 **Can Dilution Factor:** 1.36
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	135.08	0.78	1.95	232.79	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	7.00	2.97	3.56	9.17	
74-87-3	Chloromethane	0.68	1.13	32.94	1.41	2.34	68.12	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	50.10	1.76	4.40	194.73	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	6.67	5.39	6.47	15.87	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	2.19	1.41	3.53	6.82	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	2.22	1.34	4.02	6.55	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	11.52	1.60	4.00	40.66	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.36	2.45	0.67	4.02	7.25	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	27.33	0.78	3.91	94.23	
71-43-2	Benzene	1.59	2.27	4.10	5.08	7.25	13.12	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	5.71	1.06	5.30	26.73	
142-82-5	n-Heptane	0.45	1.13	6.57	1.86	4.65	26.98	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	0.87	0.61	6.10	4.68	J
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	5.52	3.42	4.27	20.81	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	1.90	0.77	7.70	12.88	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	27.89	1.97	4.93	121.31	
1330-20-7	m,p-Xylenes	0.45	1.13	26.32	1.97	4.93	114.46	
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	0.89	2.90	4.84	3.82	J
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	8.11	1.97	4.93	35.26	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	5.30	4.46	35.71	26.12	J
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	7.72	4.46	20.08	38.01	
124-18-5	Decane	0.91	2.72	2.21	5.28	15.85	12.85	J
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	4.14	4.46	20.08	20.36	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	3.40	11.90	2.38	17.88	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	109	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 10

File Name: 224435
Descriptio T-410
Canister: 714
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/11/24 **Time:** 15:51
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
2-Butene, Z	3.17	6.80	77.61	13.00	27.85	317.85
2-Butene, E	3.17	6.80	56.30	13.00	27.85	230.59
Unknown	3.17	6.80	62.47	13.00	27.85	255.84
Unknown	3.17	6.80	145.57	13.00	27.85	596.16
Methylcyclohexane	3.17	6.80	43.29	13.00	27.85	177.31
Trimethylcyclopentane	3.17	6.80	26.57	13.00	27.85	108.80
Trimethyl 2-hexene	3.17	6.80	43.02	13.00	27.85	176.19
a-Pinene	3.17	6.80	35.86	13.00	27.85	146.86
Methyl nonane	3.17	6.80	21.62	13.00	27.85	88.56
Octamethyl cyclotetrasiloxane	3.17	6.80	85.09	13.00	27.85	348.49

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**10**		
File Name:	2443510A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**11:59**
Sample ID:	T-410	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**15:51**
Anal Date:	11 Dec 124 3:51 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**714**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.36**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.5**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	29.797	4.41	42.00	2824723
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.543	4.86	31.00	161085
74-87-3	Chloromethane	5	TRG	7.265	4.77	50.00	820099
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	11.052	5.56	94.00	1301453
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.471	6.42	58.00	144131
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.173	6.45	45.00	32746
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.483	7.61	76.00	152880
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.489	8.75	72.00	31310
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	2.541	8.86	57.00	468469
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.541	9.72	72.00	35885
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	6.028	10.74	56.00	1043323
71-43-2	Benzene	47	TRG	0.905	10.70	78.00	373364
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	1.261	11.25	57.00	742194
142-82-5	n-Heptane	51	TRG	1.450	11.48	71.00	191267
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.192	10.70	130.00	48555
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	1.217	13.50	91.00	706227
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.418	14.69	166.00	182361
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	6.152	15.90	106	4807324
1330-20-7	m,p-Xylenes	75	TRG	5.805	16.06	91.00	3698247
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.197	16.61	104.00	101139
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	1.788	16.36	91.00	1240106
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	1.170	18.23	105.00	1139436
108-67-8	1,3,5-Trimethylbenzene	86	TRG	1.703	18.31	105.00	1715083
124-18-5	Decane	87	TRG	0.487	18.60	57.00	318685
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.912	18.95	105.00	728584
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.751	23.23	128.00	25148
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.30	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**9645265**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**10394396**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**10476712**
2037-26-5	Toluene-d8	60	SURR	10.947	13.40	98.00	**6755823**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 10
File Name: 2443510A.D
Run Method: A1563_L.M
Can Factor: 1.36
Air Volume: 300.0 ml
Can/Tube Number: 714
Dilution Factor: 0.4080
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4080
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.5

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	29.80	135.08	232.79	135.08	232.79	232.79	232.79	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.54	7.00	9.17	7.00	9.17	9.17	9.17	**0.500**	**0.600**
Chloromethane	50.5	7.27	32.94	68.12	32.94	68.12	68.12	68.12	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	11.05	50.10	194.73	50.10	194.73	194.73	194.73	**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.47	6.67	15.87	6.67	15.87	15.87	15.87	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.17	0.78	1.93	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.48	2.19	6.82	2.19	6.82	6.82	6.82	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.49	2.22	6.55	2.22	6.55	6.55	6.55	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	2.54	11.52	40.66	11.52	40.66	40.66	40.66	**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.54	2.45	7.25	2.45	7.25	7.25	7.25	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	6.03	27.33	94.23	27.33	94.23	94.23	94.23	**0.050**	**0.250**
Benzene	78.1	0.90	4.10	13.12	4.10	13.12	13.12	13.12	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	1.26	5.71	26.73	5.71	26.73	26.73	26.73	**0.050**	**0.250**
n-Heptane	100.2	1.45	6.57	26.98	6.57	26.98	26.98	26.98	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.19	0.87	4.68	0.87	4.68	4.68	4.68	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	1.22	5.52	20.81	5.52	20.81	20.81	20.81	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.42	1.90	12.88	1.90	12.88	12.88	12.88	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	6.15	27.89	121.31	27.89	121.31	121.31	121.31	**0.100**	**0.250**
m,p-Xylenes	106.2	5.81	26.32	114.46	26.32	114.46	114.46	114.46	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.20	0.89	3.82	0.89	3.82	3.82	3.82	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	1.79	8.11	35.26	8.11	35.26	35.26	35.26	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	1.17	5.30	26.12	5.30	26.12	26.12	26.12	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	1.70	7.72	38.01	7.72	38.01	38.01	38.01	**0.200**	**0.900**
Decane	142.3	0.49	2.21	12.85	2.21	12.85	12.85	12.85	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.91	4.14	20.36	4.14	20.36	20.36	20.36	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.75	3.40	17.88	3.40	17.88	17.88	17.88	**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		10.95	109	109	109	109	109	109	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.95				=		Y	135.08	232.79
0.68	3.37	1.13	5.61	U	ND		ND		Y	0.00	0.00
2.27	2.97	2.72	3.56				=		Y	7.00	9.17
0.68	1.41	1.13	2.34				=		Y	32.94	68.12
0.45	3.17	1.13	7.93	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.90	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.13	2.51	U	ND		ND		Y	0.00	0.00
0.45	1.76	1.13	4.40				=		Y	50.10	194.73
0.45	1.20	1.13	2.99	U	ND		ND		Y	0.00	0.00
2.27	4.28	14.55	27.47	U	ND		ND		Y	0.00	0.00
0.45	1.04	1.36	3.12	U	ND		ND		Y	0.00	0.00
0.45	2.55	1.13	6.38	U	ND		ND		Y	0.00	0.00
2.27	5.39	2.72	6.47				=		Y	6.67	15.87
0.91	2.23	5.67	13.95	U	ND		ND		Y	0.00	0.00
0.45	1.38	4.53	13.76	U	ND		ND		Y	0.00	0.00
0.45	2.65	1.36	7.96	U	ND		ND		Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND		ND		Y	0.00	0.00
0.91	1.97	1.36	2.96	U	ND		ND		Y	0.00	0.00
0.23	1.74	1.13	8.70	U	ND		ND		Y	0.00	0.00
0.23	0.71	4.53	14.20	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.13	3.94	U	ND		ND		Y	0.00	0.00
0.45	1.41	1.13	3.53				=		Y	2.19	6.82
0.23	0.90	0.91	3.60	U	ND		ND		Y	0.00	0.00
0.45	1.64	0.91	3.27	U	ND		ND		Y	0.00	0.00
1.13	2.56	1.81	4.09	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND		ND		Y	0.00	0.00
0.45	1.90	1.13	4.74	U	ND		ND		Y	0.00	0.00
0.23	0.80	4.53	15.99	U	ND		ND		Y	0.00	0.00
0.45	1.34	1.36	4.02				=		Y	2.22	6.55
0.45	1.90	2.72	11.38	U	ND		ND		Y	0.00	0.00
0.45	1.60	1.13	4.00				=		Y	11.52	40.66
0.45	1.25	1.13	3.11	U	ND		ND		Y	0.00	0.00
0.45	1.64	1.13	4.09	U	ND		ND		Y	0.00	0.00
0.23	1.20	1.13	6.01	U	ND		ND		Y	0.00	0.00

0.45	1.60	2.27	7.99	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.36	4.02			=	Y	2.45	7.25
0.91	2.75	3.63	11.01	U	ND	ND	Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.23	1.11	1.13	5.54	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.91			=	Y	27.33	94.23
1.59	5.08	2.27	7.25			=	Y	4.10	13.12
0.23	1.43	1.13	7.14	U	ND	ND	Y	0.00	0.00
0.45	1.90	2.27	9.49	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.13	5.30			=	Y	5.71	26.73
0.45	1.86	1.13	4.65			=	Y	6.57	26.98
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.45	1.64	2.27	8.18	U	ND	ND	Y	0.00	0.00
0.23	1.61	1.13	8.07	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.10	J	J	=	Y	0.87	4.68
0.23	1.52	1.13	7.60	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.91	3.42	1.13	4.27			=	Y	5.52	20.81
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.05	3.17	14.69	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	3.87	1.13	9.67	U	ND	ND	Y	0.00	0.00
0.45	3.49	1.13	8.72	U	ND	ND	Y	0.00	0.00
0.11	0.77	1.13	7.70			=	Y	1.90	12.88
0.45	2.09	1.13	5.23	U	ND	ND	Y	0.00	0.00
0.45	3.12	1.13	7.79	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93			=	Y	27.89	121.31
0.45	1.97	1.13	4.93			=	Y	26.32	114.46
0.45	2.38	1.13	5.96	U	ND	ND	Y	0.00	0.00
0.68	2.90	1.13	4.84	J	J	=	Y	0.89	3.82
0.45	4.69	1.13	11.73	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93			=	Y	8.11	35.26
0.91	6.23	2.27	15.58	U	ND	ND	Y	0.00	0.00
0.91	5.47	2.72	16.42	U	ND	ND	Y	0.00	0.00
0.91	4.64	2.72	13.92	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	7.25	35.71	J	J	=	Y	5.30	26.12
0.91	4.46	4.08	20.08			=	Y	7.72	38.01
0.91	5.28	2.72	15.85	J	J	=	Y	2.21	12.85
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08			=	Y	4.14	20.36
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00

0.91	4.98	3.17	17.44	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.63	21.83	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.70	2.27	11.75	U	ND	ND	Y	0.00	0.00
0.91	5.46	2.27	13.65	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.17	19.10	U	ND	ND	Y	0.00	0.00
1.36	13.16	3.17	30.71	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
2.27	11.90	0.45	2.38			=	Y	3.40	17.88
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
1.13	12.11	1.36	14.53	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 10
Sample ID: T-410

Can Factor: 1.36
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	2-Butene,	**4.91**	**80**	**17.12**	**100**	TIC	77.6	317.9	77.61
	2-Butene,	5.11	72	**12.42**	**100**	TIC	56.3	230.6	56.30
	Unknown	7.74	0	**13.78**	**100**	TIC	62.5	255.8	62.47
	Unknown	10.58	0	**32.11**	**100**	TIC	145.6	596.2	145.57
	Methylcycl	12.08	91	**9.55**	**100**	TIC	43.3	177.3	43.29
	Trimethylc	12.61	50	**5.86**	**100**	TIC	26.6	108.8	26.57
	Trimethyl	16.71	72	**9.49**	**100**	TIC	43.0	176.2	43.02
	a-Pinene	17.35	91	**7.91**	**100**	TIC	35.9	146.9	35.86
	Methyl no	17.59	50	**4.77**	**100**	TIC	21.6	88.6	21.62
	Octameth	17.71	45	**18.77**	**100**	TIC	85.1	348.5	85.09
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			597.4	2446.7	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
317.85	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
230.59	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
255.84	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
596.16	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
177.31	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
108.80	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
176.19	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
146.86	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
88.56	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
348.49	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**10**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.36	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) / (Avg RFn) × (Cistdi) / (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) × 1000 / (SV) × (CDF)

4) Amount ug/m3 = (amt(ppbv) × MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	2824723	20.0	9645265	29.797	135.08	232.79
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	9645265	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	161085	20.0	9645265	1.543	7.00	9.17
5	Chloromethane	PFB	TRG	50.5	0.234	820099	20.0	9645265	7.265	32.94	68.12
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	9645265	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	9645265	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	9645265	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	1301453	20.0	9645265	11.052	50.10	194.73
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	9645265	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	9645265	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	9645265	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	9645265	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	144131	20.0	9645265	1.471	6.67	15.87
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	32746	20.0	9645265	0.173	0.78	1.93
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	9645265	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	9645265	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	9645265	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	9645265	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	9645265	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	9645265	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	9645265	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	152880	20.0	9645265	0.483	2.19	6.82
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	9645265	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	9645265	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	9645265	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	9645265	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	9645265	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	9645265	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	31310	20.0	9645265	0.489	2.22	6.55
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	9645265	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	468469	20.0	9645265	2.541	11.52	40.66

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	9645265	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	9645265	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	9645265	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	9645265	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	35885	20.0	9645265	0.541	2.45	7.25
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	9645265	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	9645265	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	9645265	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	9645265	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	10394396	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	10394396	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	10394396	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	1043323	20.0	10394396	6.028	27.33	94.23
47	Benzene	14DF	TRG	78.1	0.794	373364	20.0	10394396	0.905	4.10	13.12
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	10394396	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	10394396	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	742194	20.0	10394396	1.261	5.71	26.73
51	n-Heptane	14DF	TRG	100.2	0.254	191267	20.0	10394396	1.450	6.57	26.98
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	10394396	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	10394396	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	10394396	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	48555	20.0	10394396	0.192	0.87	4.68
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	10394396	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	10394396	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	10394396	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	10394396	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	706227	20.0	10394396	1.217	5.52	20.81
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	10394396	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	10394396	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	10394396	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	10394396	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	10394396	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	10394396	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	10394396	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	10394396	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	182361	20.0	10394396	0.418	1.90	12.88
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	10476712	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	10476712	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	4807324	20.0	10476712	6.152	27.89	121.31
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	3698247	20.0	10476712	5.805	26.32	114.46
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	10476712	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	101139	20.0	10476712	0.197	0.89	3.82
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	10476712	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	1240106	20.0	10476712	1.788	8.11	35.26
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	10476712	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	10476712	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	10476712	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	10476712	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	10476712	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	1139436	20.0	10476712	1.170	5.30	26.12
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	1715083	20.0	10476712	1.703	7.72	38.01
87	Decane	d5CB	TRG	142.3	1.250	318685	20.0	10476712	0.487	2.21	12.85
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	10476712	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	728584	20.0	10476712	0.912	4.14	20.36
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	10476712	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	10476712	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	10476712	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	10476712	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	10476712	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	10476712	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	10476712	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	10476712	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	10476712	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	10476712	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	25148	20.0	10476712	0.751	3.40	17.88
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	10476712	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	10476712	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	9645265	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	10394396	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	10476712	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6755823	10.0		10.947	109.47	109

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443510A.D
Acq Time : 11 Dec 124 3:51 pm
Sample : T-410
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 14:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	9645265	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.73	114	10394396	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.24	117	10476712	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	6755823	10.95	ppbV		109.47
Target Compounds							Qvalue
2) Propylene	4.33	42	2824723	29.80	ppbV	m	77
4) Methanol	4.81	31	161085	1.54	ppbV	#	93
5) Chloromethane	4.65	50	820099	7.27	ppbV	#	86
9) Bromomethane	5.40	94	1301453	11.05	ppbV		94
14) Acetone	6.28	58	144131	1.47	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.53	45	32746	0.17	ppbV	#	1
23) Carbon disulfide	7.40	76	152880	0.48	ppbV	#	80
30) 2-Butanone (MEK)	8.55	72	31310	0.49	ppbV	#	84
32) Hexane	8.62	57	468469	2.54	ppbV	#	66
37) Tetrahydrofuran	9.49	72	35885	0.54	ppbV		94
46) Cyclohexane	10.46	56	1043323	6.03	ppbV	#	79
47) Benzene	10.43	78	373364	0.90	ppbV	#	73
50) 2,2,4-Trimethylpentane	10.96	57	742194	1.26	ppbV	#	35
51) n-Heptane	11.19	71	191267	1.45	ppbV	#	79
55) Trichloroethene (TCE)	11.36	130	48555	0.19	ppbV	#	76
61) Toluene	13.19	91	706227	1.22	ppbV		93
70) Tetrachloroethene (PCE)	14.35	166	182361	0.42	ppbV	#	83
74) Ethylbenzene	15.58	91	4807324	6.15	ppbV	#	84
75) m,p-Xylenes	15.73	91	3698247	5.81	ppbV	#	70
77) Styrene	16.28	104	101139	0.20	ppbV	#	71
79) o-Xylene	16.36	91	1240106	1.79	ppbV	#	78
85) 4-Ethyltoluene	17.83	105	1139436	1.17	ppbV	m	77
86) 1,3,5-Trimethylbenzene	17.97	105	1715083	1.70	ppbV	#	73
87) Decane	18.09	57	318685	0.49	ppbV	#	1
89) 1,2,4-Trimethylbenzene	18.60	105	728584	0.91	ppbV	#	77
100) Naphthalene	22.86	128	25148	0.75	ppbV	m	89

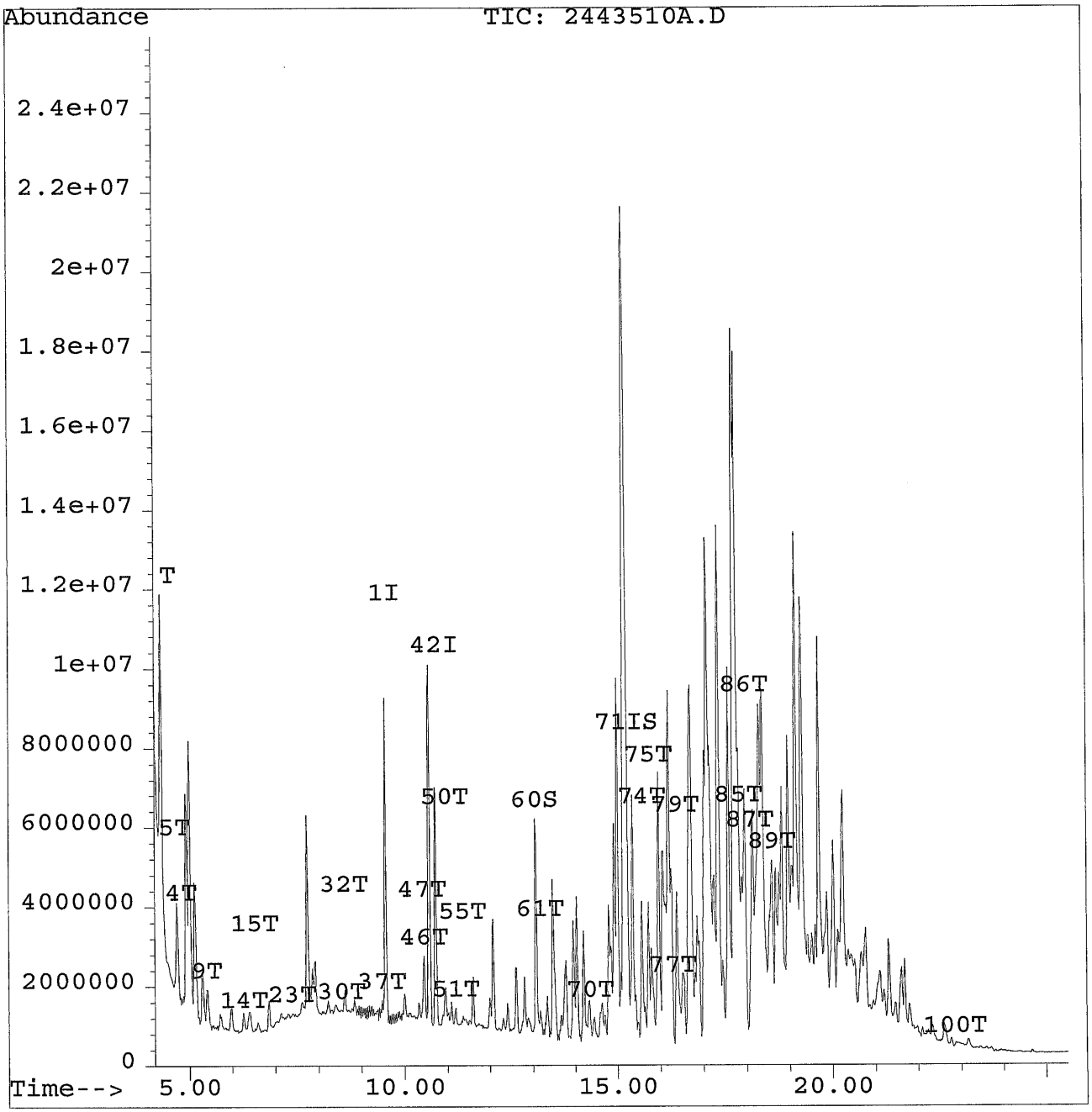
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443510A.D
Acq Time : 11 Dec 124 3:51 pm
Sample : T-410
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 14:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443510A.D
Acq Time : 11 Dec 124 3:51 pm Operator: TR
Sample : T-410 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
4.91	17.12 ppbV	17517543	Pentafluorobenzene	9

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	2-Butene, (Z)-	78	000590-18-1	80
2	2-Butene	77	000107-01-7	64
3	Cyclobutane	81	000287-23-0	49
4	2-Butene, (E)-	76	000624-64-6	47
5	2-Propenal	73	000107-02-8	27

****

Peak Number 2 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
5.11	12.42 ppbV	12708699	Pentafluorobenzene	9

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	2-Butene, (E)-	76	000624-64-6	72
2	2-Butene, (Z)-	78	000590-18-1	64

****

Peak Number 3 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
7.74	13.78 ppbV	14097617	Pentafluorobenzene	9

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443510A.D
Acq Time : 11 Dec 124 3:51 pm Operator: TR
Sample : T-410 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 4 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
10.58	32.11 ppbV	27117146	1,4-Difluorobenzene	10

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0

****

Peak Number 5 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
12.08	9.55 ppbV	8064293	1,4-Difluorobenzene	10

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, methyl-	1211	000108-87-2	91
2	2-Pentene, 2,3-dimethyl-	1208	010574-37-5	72
3	Furan, 2,5-dihydro-2,5-dimethyl-	1137	059242-27-2	64
4	2-Pentene, 3,4-dimethyl-, (E)-	1240	004914-92-5	64
5	2-Pentene, 3,4-dimethyl-, (Z)-	1236	004914-91-4	64

****

Peak Number 6 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
12.61	5.86 ppbV	4944051	1,4-Difluorobenzene	10

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1,2,3-trimethyl-, (1.	2425	002613-69-6	50
2	Cyclopentane, 1,2,4-trimethyl-	2375	000000-00-0	47
3	Cyclopentane, 1,2,4-trimethyl-, (1.	2404	004850-28-6	43
4	Cyclopentane, 1,2,3-trimethyl-	2400	002815-57-8	43
5	Cyclopentane, 1,2,3-trimethyl-, (1.	2429	015890-40-1	27

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443510A.D
Acq Time : 11 Dec 124 3:51 pm Operator: TR
Sample : T-410 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 7 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
15.17	20.00 ppbV	108490483	Chlorobenzene-d5	15

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-chloro-4-(trifluoromethy	14995	000098-56-6	95
2	1,3-Benzenedicarboxylic acid, monom	15056	001877-71-0	22
3	2-Piperidinecarboxylic acid, 1-(tri	33592	054965-28-5	10

****

Peak Number 8 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
16.71	9.49 ppbV	51501082	Chlorobenzene-d5	15

Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	1H-Pyrazole, 4,5-dihydro-3-methyl-1	3975	026964-49-8	72
2	2-Hexene, 3,4,4-trimethyl-	4110	053941-19-8	64
3	2-Pyrazoline, 5-ethyl-1,4-dimethyl-	3987	014339-23-2	64
4	Cyclohexane, 1,3-dimethyl-, cis-	2399	000638-04-0	64
5	Furan, 2,3-dihydro-4-(1-methylpropy	4008	034379-54-9	59

****

Peak Number 9 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
17.08	17.96 ppbV	97421305	Chlorobenzene-d5	15

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	90
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	87
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	87
4	4(1H)-Pyrimidinone, 5-bromo-	13697	019808-30-1	38
5	Cyclohexanemethanol, 4-(1-methyleth	9955	013674-19-6	9

Page 3 of 12

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443510A.D
Acq Time : 11 Dec 124 3:51 pm Operator: TR
Sample : T-410 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 10 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
17.35	7.91 ppbV	42895199	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	.alpha.-Pinene	5805	000080-56-8	91
2	Cyclohexene, 4-methylene-1-(1-methy	5732	000099-84-3	83
3	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	83
4	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5	5773	002867-05-2	64
5	Bicyclo[3.1.0]hexane, 4-methyl-1-(1	5777	058037-87-9	59

****

Peak Number 11 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
17.59	4.77 ppbV	25880150	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,2,3,4,6,6-hexamethyl-	16235	062108-32-1	53
2	~~Undecane~~, 3-methyl-	13155	001002-43-3	50
3	Hexane, 3-ethyl-4-methyl-	4526	003074-77-9	50
4	Heptane, 4-ethyl-2,2,6,6-tetramethy	16233	062108-31-0	50
5	Octane, 3,5-dimethyl-	7013	015869-93-9	47

nonane

****

Peak Number 12 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
17.71	18.77 ppbV	101823969	Chlorobenzene-d5	15

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	2-OXO-4-PHENYL-6-(4-CHLOROPHENYL)-1	33755	000000-00-0	45
2	Cyclotetrasiloxane, octamethyl-	35637	000556-67-2	42

Sample Data Packages

SDG Number 224435

Lab Id Number 11

Client ID T-411

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 11**

File Name: 2443511A.D
Description: T-411
Canister: 551
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 12/11/24 **Time:** 16:29
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	0.77	0.74	1.84	1.33	J
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	15.93	2.80	3.36	20.88	
74-87-3	Chloromethane	0.64	1.07	5.44	1.32	2.21	11.26	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	4.83	5.08	6.09	11.48	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	0.91	4.20	33.61	4.48	J
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	1.01	4.20	18.90	4.96	J
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	116	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC

Analytical Method: TO-15 **Laboratory ID: B09124**

File Name: 224435 **Date Sampled:** 11/19/24 **Time:** 11:51
Descriptio 11 **Date Analyzed:** 12/11/24 **Time:** 16:29
Canister: 551 **Can Dilution Factor:** 1.28
QC_Batch: 121124-MA1 **Air Volume:** 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**11**		
File Name:	2443511A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**11:51**
Sample ID:	T-411	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**16:29**
Anal Date:	11 Dec 124 4:29 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**551**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.28**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.181	4.41	42.00	14417
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	3.734	4.86	31.00	327045
74-87-3	Chloromethane	5	TRG	1.276	4.77	50.00	120836
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.131	6.42	58.00	93001
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.137	10.70	78.00	46162
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.086	13.50	91.00	40915
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.054	15.90	106	53050
1330-20-7	m,p-Xylenes	75	TRG	0.077	16.06	91.00	61810
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.108	16.61	104.00	69606
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.069	16.36	91.00	60050
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.213	18.23	105.00	260093
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.126	18.31	105.00	159306
124-18-5	Decane	87	TRG	0.130	18.60	57.00	106814
98-06-6	tert-butyl benzene	88	TRG	0.064	18.93	119.00	80356

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.236	18.95	105.00	236174
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.138	19.53	119.00	213210
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.169	20.20	91.00	248336
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.35	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**8092371**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8485405**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**13123454**
2037-26-5	Toluene-d8	60	SURR	11.570	13.40	98.00	**5828783**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**		EDD SURR:	PERCENT					Gas Constant	
Laboratory Number:	**11**		Sam Type:	SA					T	24.5
File Name:	2443511A.D		Instrument:	MA1		IS LCL	**50**		P	**760**
Run Method:	A1563_L.M		DETECT:	ND		IS UCL	**200**		MV	24.417
Can Factor:	1.28		Matrix:	AA		SUR LCL	**70**		GC	24.417
Air Volume:	300.0 ml		Type:	TRG		SUR UCL	**130**			
Can/Tube Number:	551		Diluton:	0.3840		MDL Factor	**1.0**			
Dilution Factor:	0.3840		Sig Figs:	2		E Flag	1.3			
Base Volume:	1000 ml		MDLSF:	2						
Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.18	0.77	1.33	0.77	1.33	1.33	1.33	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	3.73	15.93	20.88	15.93	20.88	20.88	20.88	**0.500**	**0.600**
Chloromethane	50.5	1.28	5.44	11.26	5.44	11.26	11.26	11.26	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.13	4.83	11.48	4.83	11.48	11.48	11.48	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.14	0.58	1.87	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.09	0.37	1.39	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.05	0.23	1.01	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.08	0.33	1.44	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.11	0.46	1.97	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.07	0.29	1.28	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.21	0.91	4.48	0.91	4.48	4.48	4.48	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.13	0.54	2.65	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.13	0.56	3.24	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.06	0.27	1.50	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.24	1.01	4.96	1.01	4.96	4.96	4.96	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.14	0.59	3.24	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.17	0.72	3.96	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.57	116	116	116	116	116	116	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.74	1.07	1.84	J	J		=		Y	0.77	1.33
0.64	3.17	1.07	5.28	U	ND		ND		Y	0.00	0.00
2.13	2.80	2.56	3.36				=		Y	15.93	20.88
0.64	1.32	1.07	2.21				=		Y	5.44	11.26
0.43	2.99	1.07	7.47	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.07	2.73	U	ND		ND		Y	0.00	0.00
0.21	0.48	1.07	2.36	U	ND		ND		Y	0.00	0.00
0.43	1.66	1.07	4.15	U	ND		ND		Y	0.00	0.00
0.43	1.13	1.07	2.82	U	ND		ND		Y	0.00	0.00
2.13	4.03	13.70	25.86	U	ND		ND		Y	0.00	0.00
0.43	0.98	1.28	2.94	U	ND		ND		Y	0.00	0.00
0.43	2.40	1.07	6.00	U	ND		ND		Y	0.00	0.00
2.13	5.08	2.56	6.09				=		Y	4.83	11.48
0.85	2.10	5.33	13.13	U	ND		ND		Y	0.00	0.00
0.43	1.29	4.27	12.95	U	ND		ND		Y	0.00	0.00
0.43	2.50	1.28	7.49	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND		ND		Y	0.00	0.00
0.85	1.86	1.28	2.78	U	ND		ND		Y	0.00	0.00
0.21	1.64	1.07	8.19	U	ND		ND		Y	0.00	0.00
0.21	0.67	4.27	13.37	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.07	3.71	U	ND		ND		Y	0.00	0.00
0.43	1.33	1.07	3.32	U	ND		ND		Y	0.00	0.00
0.21	0.85	0.85	3.39	U	ND		ND		Y	0.00	0.00
0.43	1.54	0.85	3.08	U	ND		ND		Y	0.00	0.00
1.07	2.41	1.71	3.85	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND		ND		Y	0.00	0.00
0.43	1.79	1.07	4.46	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.27	15.05	U	ND		ND		Y	0.00	0.00
0.43	1.26	1.28	3.78	U	ND		ND		Y	0.00	0.00
0.43	1.79	2.56	10.72	U	ND		ND		Y	0.00	0.00
0.43	1.51	1.07	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.17	1.07	2.93	U	ND		ND		Y	0.00	0.00
0.43	1.54	1.07	3.85	U	ND		ND		Y	0.00	0.00
0.21	1.13	1.07	5.65	U	ND		ND		Y	0.00	0.00

0.43	1.50	2.13	7.52	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.28	3.78	U	ND	ND	Y	0.00	0.00
0.85	2.59	3.41	10.36	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.21	1.05	1.07	5.22	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	0.74	1.07	3.68	U	ND	ND	Y	0.00	0.00
1.49	4.78	2.13	6.82	U	ND	ND	Y	0.00	0.00
0.21	1.34	1.07	6.72	U	ND	ND	Y	0.00	0.00
0.43	1.79	2.13	8.93	U	ND	ND	Y	0.00	0.00
0.21	1.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.38	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.43	1.54	2.13	7.70	U	ND	ND	Y	0.00	0.00
0.21	1.52	1.07	7.59	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.07	5.74	U	ND	ND	Y	0.00	0.00
0.21	1.43	1.07	7.16	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.37	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.85	3.22	1.07	4.02	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.99	2.99	13.82	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	3.64	1.07	9.10	U	ND	ND	Y	0.00	0.00
0.43	3.28	1.07	8.21	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.07	7.24	U	ND	ND	Y	0.00	0.00
0.43	1.97	1.07	4.92	U	ND	ND	Y	0.00	0.00
0.43	2.93	1.07	7.33	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	2.24	1.07	5.60	U	ND	ND	Y	0.00	0.00
0.64	2.73	1.07	4.55	U	ND	ND	Y	0.00	0.00
0.43	4.42	1.07	11.04	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.85	5.86	2.13	14.66	U	ND	ND	Y	0.00	0.00
0.85	5.15	2.56	15.45	U	ND	ND	Y	0.00	0.00
0.85	4.37	2.56	13.11	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	6.83	33.61	J	J	=	Y	0.91	4.48
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.97	2.56	14.92	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	J	J	=	Y	1.01	4.96
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00

0.85	4.69	2.99	16.42	U	ND	ND	Y	0.00	0.00
0.85	5.14	3.41	20.55	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.42	2.13	11.06	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.13	12.84	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.99	17.98	U	ND	ND	Y	0.00	0.00
1.28	12.39	2.99	28.90	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
2.13	11.20	0.43	2.24	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
1.07	11.39	1.28	13.67	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 11
Sample ID: T-411

Can Factor: 1.28
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**11**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.28	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}\ \frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	14417	20.0	8092371	0.181	0.77	1.33
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	8092371	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	327045	20.0	8092371	3.734	15.93	20.88
5	Chloromethane	PFB	TRG	50.5	0.234	120836	20.0	8092371	1.276	5.44	11.26
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	8092371	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	8092371	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	8092371	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	8092371	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	8092371	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	8092371	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	8092371	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	8092371	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	93001	20.0	8092371	1.131	4.83	11.48
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	8092371	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	8092371	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	8092371	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	8092371	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	8092371	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	8092371	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	8092371	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	8092371	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	8092371	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	8092371	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	8092371	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	8092371	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	8092371	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	8092371	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	8092371	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	8092371	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	8092371	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	8092371	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	8092371	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	8092371	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	8092371	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	8092371	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	8092371	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	8092371	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	8092371	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	8092371	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	8092371	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	8485405	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	8485405	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	8485405	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	8485405	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	46162	20.0	8485405	0.137	0.58	1.87
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	8485405	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	8485405	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	8485405	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	8485405	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	8485405	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	8485405	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	8485405	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	8485405	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	8485405	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	8485405	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	8485405	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	8485405	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	40915	20.0	8485405	0.086	0.37	1.39
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	8485405	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	8485405	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	8485405	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	8485405	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	8485405	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	8485405	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	8485405	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	8485405	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	8485405	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	13123454	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	13123454	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	53050	20.0	13123454	0.054	0.23	1.01
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	61810	20.0	13123454	0.077	0.33	1.44
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	13123454	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	69606	20.0	13123454	0.108	0.46	1.97
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	13123454	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	60050	20.0	13123454	0.069	0.29	1.28
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	13123454	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	13123454	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	13123454	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	13123454	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	13123454	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	260093	20.0	13123454	0.213	0.91	4.48
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	159306	20.0	13123454	0.126	0.54	2.65
87	Decane	d5CB	TRG	142.3	1.250	106814	20.0	13123454	0.130	0.56	3.24
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	80356	20.0	13123454	0.064	0.27	1.50
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	236174	20.0	13123454	0.236	1.01	4.96
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	13123454	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	13123454	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	13123454	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	213210	20.0	13123454	0.138	0.59	3.24
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	13123454	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	13123454	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	248336	20.0	13123454	0.169	0.72	3.96
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	13123454	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	13123454	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	13123454	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	13123454	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	13123454	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	13123454	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	8092371	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	8485405	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	13123454	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	5828783	10.0		11.570	115.70	116

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443511A.D
Acq Time : 11 Dec 124 4:29 pm
Sample : T-411
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 15:15 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	8092371	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.75	114	8485405	20.00	ppbV		-0.25
71) Chlorobenzene-d5	15.23	117	13123454	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	5828783	11.57	ppbV		115.70
Target Compounds							Qvalue
2) Propylene	4.36	42	14417	0.18	ppbV	m	97
4) Methanol	4.88	31	327045	3.73	ppbV	#	100
5) Chloromethane	4.70	50	120836	1.28	ppbV		92
14) Acetone	6.31	58	93001	1.13	ppbV	#	18
47) Benzene	10.45	78	46162	0.14	ppbV	m	81
61) Toluene	13.20	91	40915	0.09	ppbV		97
74) Ethylbenzene	15.57	91	53050	0.05	ppbV	#	87
75) m,p-Xylenes	15.74	91	61810	0.08	ppbV		90
77) Styrene	16.27	104	69606	0.11	ppbV	#	86
79) o-Xylene	16.36	91	60050	0.07	ppbV		91
85) 4-Ethyltoluene	17.87	105	260093	0.21	ppbV	m	90
86) 1,3,5-Trimethylbenzene	17.96	105	159306	0.13	ppbV	m	78
87) Decane	18.25	57	106814	0.13	ppbV	#	93
88) tert-butyl benzene	18.57	119	80356	0.06	ppbV		86
89) 1,2,4-Trimethylbenzene	18.57	105	236174	0.24	ppbV	#	88
93) Isopropyltoluene	19.17	119	213210	0.14	ppbV	#	90
96) n-Butylbenzene	19.84	91	248336	0.17	ppbV		98

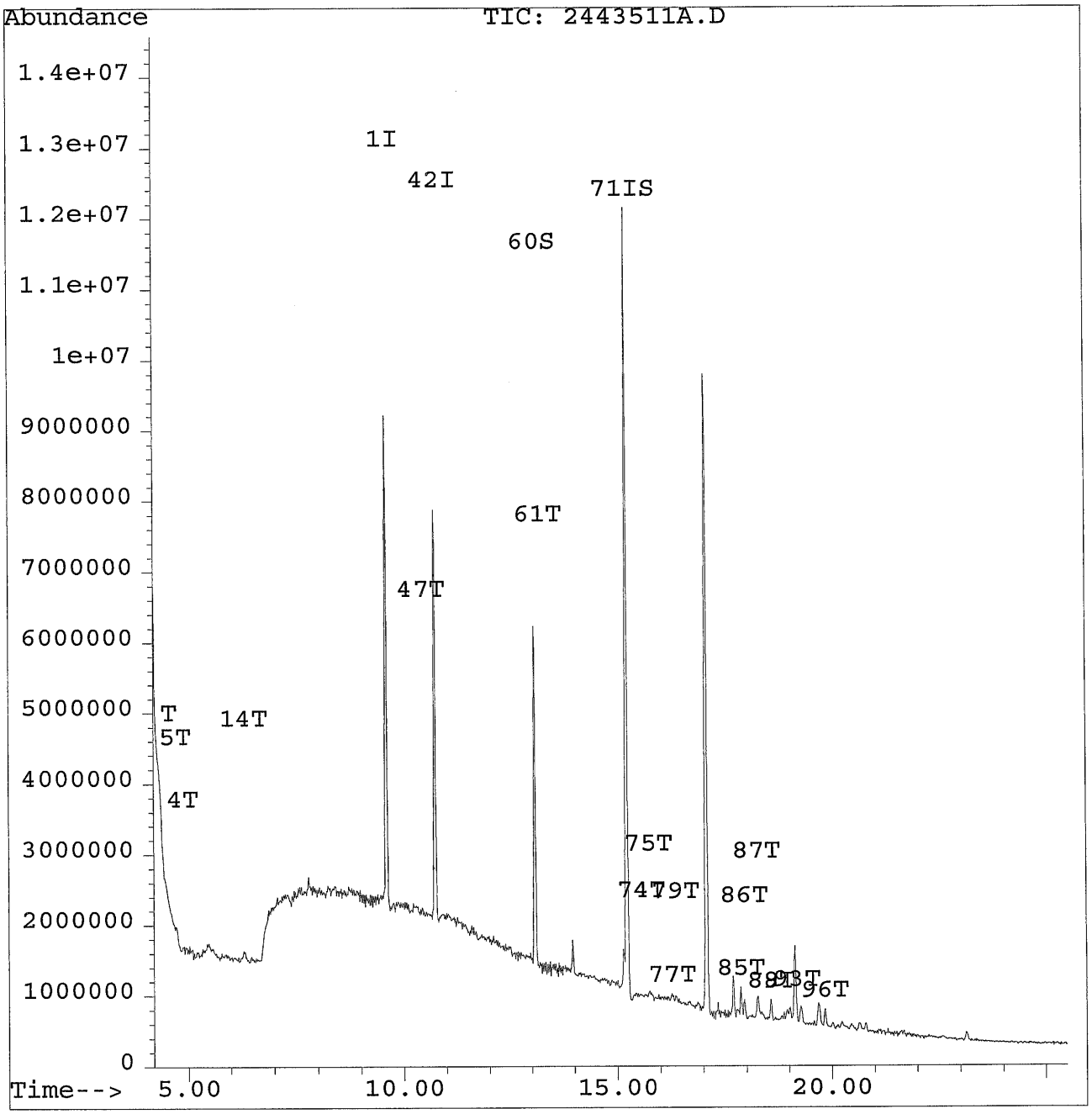
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443511A.D
Acq Time : 11 Dec 124 4:29 pm
Sample : T-411
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 15:15 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443511A.D
Acq Time : 11 Dec 124 4:29 pm
Sample : T-411
Misc : SCHMIDT, 300 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	17.00 ppbV	28394269	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	91
4	Pyridine, 1-oxide	962	000694-59-7	10
5	3-Pyridinol	964	000109-00-2	10

Sample Data Packages

SDG Number **224435**

Lab Id Number **12**

Client ID T-412

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 12**

File Name: 2443512A.D **Date Sampled:** 11/19/24 **Time:** 12:06
Description: T-412 **Date Analyzed:** 12/11/24 **Time:** 17:06
Canister: 881 **Can Dilution Factor:** 1.32
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.10	1.90	0.76	1.90	3.28	
75-71-8	Dichlorodifluoromethane	0.66	1.10	ND	3.27	5.45	ND	
67-56-1	Methanol	2.20	2.64	7.15	2.88	3.46	9.37	
74-87-3	Chloromethane	0.66	1.10	3.08	1.37	2.28	6.37	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.10	ND	3.08	7.70	ND	
75-01-4	Vinyl chloride	0.22	1.10	ND	0.57	2.82	ND	
106-99-0	1,3-Butadiene	0.22	1.10	ND	0.49	2.44	ND	
74-83-9	Bromomethane	0.44	1.10	3.36	1.71	4.28	13.05	
75-00-3	Chloroethane	0.44	1.10	ND	1.16	2.91	ND	
64-17-5	Ethanol	2.20	14.12	ND	4.15	26.67	ND	
107-02-8	Acrolein	0.44	1.32	ND	1.01	3.03	ND	
75-69-4	Trichlorofluoromethane	0.44	1.10	ND	2.48	6.19	ND	
67-64-1	Acetone	2.20	2.64	2.91	5.23	6.28	6.93	
67-63-0	2-propanol (isopropylalcohol)	0.88	5.50	ND	2.17	13.54	ND	
75-65-0	t-Butyl alcohol	0.44	4.40	ND	1.34	13.35	ND	
4227-95-6	Methyl iodide	0.44	1.32	ND	2.58	7.73	ND	
75-35-4	1,1-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
107-13-1	Acrylonitrile	0.88	1.32	ND	1.91	2.87	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.10	ND	1.69	8.44	ND	
107-05-1	Allyl chloride	0.22	4.40	ND	0.69	13.79	ND	
75-09-2	Methylene chloride	0.22	1.10	ND	0.76	3.82	ND	
75-15-0	Carbon disulfide	0.44	1.10	ND	1.37	3.43	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.88	ND	0.87	3.49	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.88	ND	1.59	3.18	ND	
107-12-0	Propionitrile	1.10	1.76	ND	2.48	3.97	ND	
75-34-3	1,1-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.10	ND	1.84	4.60	ND	
108-05-4	Vinyl acetate	0.22	4.40	ND	0.78	15.52	ND	
78-93-3	2-Butanone (MEK)	0.44	1.32	ND	1.30	3.90	ND	
108-20-3	Diisopropyl ether	0.44	2.64	ND	1.84	11.05	ND	
110-54-3	Hexane	0.44	1.10	ND	1.55	3.88	ND	
126-98-7	Methacrylonitrile	0.44	1.10	ND	1.21	3.02	ND	
141-78-6	Ethyl acetate	0.44	1.10	ND	1.59	3.97	ND	
74-97-5	Bromochloromethane	0.22	1.10	ND	1.17	5.83	ND	
96-33-3	Methyl acrylate	0.44	2.20	ND	1.55	7.76	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.32	ND	0.65	3.90	ND	
78-83-1	Isobutyl alcohol	0.88	3.52	ND	2.67	10.68	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
594-20-7	2,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
67-66-3	Chloroform	0.22	1.10	ND	1.08	5.38	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
107-06-2	1,2-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
563-58-6	1,1-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
110-82-7	Cyclohexane	0.22	1.10	ND	0.76	3.79	ND	
71-43-2	Benzene	1.54	2.20	ND	4.93	7.04	ND	
56-23-5	Carbon tetrachloride	0.22	1.10	ND	1.39	6.93	ND	
994-05-8	t-Amyl methyl ether	0.44	2.20	ND	1.84	9.21	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.10	ND	1.03	5.14	ND	
142-82-5	n-Heptane	0.44	1.10	ND	1.81	4.51	ND	
78-87-5	1,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
123-91-1	1,4 Dioxane	0.44	2.20	ND	1.59	7.94	ND	
74-95-3	Dibromomethane	0.22	1.10	ND	1.57	7.83	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.10	ND	0.59	5.92	ND	
75-27-4	Bromodichloromethane	0.22	1.10	ND	1.48	7.38	ND	
80-62-6	Methyl methacrylate	0.44	1.10	ND	1.80	4.51	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.52	ND	1.81	14.44	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
108-88-3	Toluene	0.88	1.10	ND	3.32	4.15	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
97-63-2	Ethyl methacrylate	0.44	1.10	ND	2.06	5.14	ND	
591-78-6	2-Hexanone	0.44	3.52	ND	1.81	14.44	ND	
142-28-9	1,3-Dichloropropane	0.22	3.08	ND	1.02	14.25	ND	
111-65-9	Octane	0.44	1.10	ND	2.06	5.14	ND	
124-48-1	Dibromochloromethane	0.44	1.10	ND	3.75	9.38	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.10	ND	3.39	8.46	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.10	ND	0.75	7.47	ND	
108-90-7	Chlorobenzene	0.44	1.10	ND	2.03	5.07	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.10	ND	3.02	7.56	ND	
100-41-4	Ethylbenzene	0.44	1.10	ND	1.91	4.78	ND	
1330-20-7	m,p-Xylenes	0.44	1.10	ND	1.91	4.78	ND	
111-84-2	Nonane	0.44	1.10	ND	2.31	5.78	ND	
100-42-5	Styrene	0.66	1.10	ND	2.82	4.69	ND	
75-25-2	Bromoform	0.44	1.10	ND	4.55	11.38	ND	
95-47-6	o-Xylene	0.44	1.10	ND	1.91	4.78	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.88	2.20	ND	6.05	15.12	ND	
96-18-4	1,2,3-Trichloropropane	0.88	2.64	ND	5.31	15.94	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.88	2.64	ND	4.51	13.52	ND	
103-65-1	n-Propylbenzene	0.88	3.08	ND	4.33	15.16	ND	
98-82-8	Isopropylbenzene	0.88	3.08	ND	4.33	15.16	ND	
622-96-8	4-Ethyltoluene	0.88	7.04	ND	4.33	34.66	ND	
108-67-8	1,3,5-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
124-18-5	Decane	0.88	2.64	ND	5.13	15.39	ND	
98-06-6	tert-butyl benzene	0.88	2.64	ND	4.84	14.51	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
538-93-2	i-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
135-98-8	sec-butylbenzene	0.88	3.08	ND	4.84	16.93	ND	
541-73-1	1,3-Dichlorobenzene	0.88	3.52	ND	5.30	21.19	ND	
99-87-6	Isopropyltoluene	0.88	2.64	ND	4.84	14.51	ND	
100-44-7	Benzyl chloride	0.88	2.20	ND	4.56	11.41	ND	
106-46-7	1,4-Dichlorobenzene	0.88	2.20	ND	5.30	13.24	ND	
104-51-8	n-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
95-50-1	1,2-Dichlorobenzene	0.88	3.08	ND	5.30	18.54	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.32	3.08	ND	12.77	29.81	ND	
120-82-1	1,2,4-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
91-20-3	Naphthalene	2.20	0.44	ND	11.55	2.31	ND	
87-61-6	1,2,3-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
87-68-3	Hexachlorobutadiene	1.10	1.32	ND	11.75	14.10	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	113	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 12
Canister: 881
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 12/11/24 **Time:** 17:06
Can Dilution Factor: 1.32
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.08	6.60	ND	12.61	27.03	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**12**		
File Name:	2443512A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**12:06**
Sample ID:	T-412	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**17:06**
Anal Date:	11 Dec 124 5:06 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**881**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.32**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.432	4.41	42.00	37095
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.625	4.86	31.00	153682
74-87-3	Chloromethane	5	TRG	0.700	4.77	50.00	71627
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.763	5.56	94.00	81416
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.662	6.42	58.00	58802
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.055	7.61	76.00	15829
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.125	10.70	78.00	47935
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.068	13.50	91.00	36583
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.011	15.90	106	13287
1330-20-7	m,p-Xylenes	75	TRG	0.019	16.06	91.00	19135
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.033	16.61	104.00	26994
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	0.00	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.038	18.23	105.00	59436
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.023	18.31	105.00	37172
124-18-5	Decane	87	TRG	0.019	18.60	57.00	19643
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.048	18.95	105.00	61206
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.070	19.39	146.00	71185
99-87-6	Isopropyltoluene	93	TRG	0.027	19.53	119.00	52915
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.040	20.20	91.00	74184
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.31	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**8738590**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**9667860**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**16626879**
2037-26-5	Toluene-d8	60	SURR	11.322	13.40	98.00	**6498480**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 12
File Name: 2443512A.D
Run Method: A1563_L.M
Can Factor: 1.32
Air Volume: 300.0 ml
Can/Tube Number: 881
Dilution Factor: 0.3960
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3960
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	UG/M3 ResultV PPBV	UG/M3 Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.43	1.90	3.28	1.90	3.28	3.28	3.28	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.62	7.15	9.37	7.15	9.37	9.37	9.37	**0.500**	**0.600**
Chloromethane	50.5	0.70	3.08	6.37	3.08	6.37	6.37	6.37	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.76	3.36	13.05	3.36	13.05	13.05	13.05	**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.66	2.91	6.93	2.91	6.93	6.93	6.93	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.06	0.24	0.76	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.12	0.55	1.76	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.07	0.30	1.13	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.01	0.05	0.21	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.02	0.08	0.36	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.03	0.15	0.62	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.04	0.17	0.83	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.02	0.10	0.50	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.02	0.08	0.48	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.05	0.21	1.05	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.07	0.31	1.85	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.03	0.12	0.65	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.04	0.18	0.96	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.32	113	113	113	113	113	113	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.76	1.10	1.90				=		Y	1.90	3.28
0.66	3.27	1.10	5.45	U	ND		ND		Y	0.00	0.00
2.20	2.88	2.64	3.46				=		Y	7.15	9.37
0.66	1.37	1.10	2.28				=		Y	3.08	6.37
0.44	3.08	1.10	7.70	U	ND		ND		Y	0.00	0.00
0.22	0.57	1.10	2.82	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.10	2.44	U	ND		ND		Y	0.00	0.00
0.44	1.71	1.10	4.28				=		Y	3.36	13.05
0.44	1.16	1.10	2.91	U	ND		ND		Y	0.00	0.00
2.20	4.15	14.12	26.67	U	ND		ND		Y	0.00	0.00
0.44	1.01	1.32	3.03	U	ND		ND		Y	0.00	0.00
0.44	2.48	1.10	6.19	U	ND		ND		Y	0.00	0.00
2.20	5.23	2.64	6.28				=		Y	2.91	6.93
0.88	2.17	5.50	13.54	U	ND		ND		Y	0.00	0.00
0.44	1.34	4.40	13.35	U	ND		ND		Y	0.00	0.00
0.44	2.58	1.32	7.73	U	ND		ND		Y	0.00	0.00
0.22	0.87	1.10	4.37	U	ND		ND		Y	0.00	0.00
0.88	1.91	1.32	2.87	U	ND		ND		Y	0.00	0.00
0.22	1.69	1.10	8.44	U	ND		ND		Y	0.00	0.00
0.22	0.69	4.40	13.79	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.10	3.82	U	ND		ND		Y	0.00	0.00
0.44	1.37	1.10	3.43	U	ND		ND		Y	0.00	0.00
0.22	0.87	0.88	3.49	U	ND		ND		Y	0.00	0.00
0.44	1.59	0.88	3.18	U	ND		ND		Y	0.00	0.00
1.10	2.48	1.76	3.97	U	ND		ND		Y	0.00	0.00
0.22	0.89	1.10	4.46	U	ND		ND		Y	0.00	0.00
0.44	1.84	1.10	4.60	U	ND		ND		Y	0.00	0.00
0.22	0.78	4.40	15.52	U	ND		ND		Y	0.00	0.00
0.44	1.30	1.32	3.90	U	ND		ND		Y	0.00	0.00
0.44	1.84	2.64	11.05	U	ND		ND		Y	0.00	0.00
0.44	1.55	1.10	3.88	U	ND		ND		Y	0.00	0.00
0.44	1.21	1.10	3.02	U	ND		ND		Y	0.00	0.00
0.44	1.59	1.10	3.97	U	ND		ND		Y	0.00	0.00
0.22	1.17	1.10	5.83	U	ND		ND		Y	0.00	0.00

0.44	1.55	2.20	7.76	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.32	3.90	U	ND	ND	Y	0.00	0.00
0.88	2.67	3.52	10.68	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.10	4.37	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.10	5.09	U	ND	ND	Y	0.00	0.00
0.22	1.08	1.10	5.38	U	ND	ND	Y	0.00	0.00
0.22	1.20	1.10	6.01	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.10	4.46	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.22	0.76	1.10	3.79	U	ND	ND	Y	0.00	0.00
1.54	4.93	2.20	7.04	U	ND	ND	Y	0.00	0.00
0.22	1.39	1.10	6.93	U	ND	ND	Y	0.00	0.00
0.44	1.84	2.20	9.21	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	1.81	1.10	4.51	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.10	5.09	U	ND	ND	Y	0.00	0.00
0.44	1.59	2.20	7.94	U	ND	ND	Y	0.00	0.00
0.22	1.57	1.10	7.83	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.10	5.92	U	ND	ND	Y	0.00	0.00
0.22	1.48	1.10	7.38	U	ND	ND	Y	0.00	0.00
0.44	1.80	1.10	4.51	U	ND	ND	Y	0.00	0.00
0.44	1.81	3.52	14.44	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.88	3.32	1.10	4.15	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.22	1.20	1.10	6.01	U	ND	ND	Y	0.00	0.00
0.44	2.06	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	1.81	3.52	14.44	U	ND	ND	Y	0.00	0.00
0.22	1.02	3.08	14.25	U	ND	ND	Y	0.00	0.00
0.44	2.06	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	3.75	1.10	9.38	U	ND	ND	Y	0.00	0.00
0.44	3.39	1.10	8.46	U	ND	ND	Y	0.00	0.00
0.11	0.75	1.10	7.47	U	ND	ND	Y	0.00	0.00
0.44	2.03	1.10	5.07	U	ND	ND	Y	0.00	0.00
0.44	3.02	1.10	7.56	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.44	2.31	1.10	5.78	U	ND	ND	Y	0.00	0.00
0.66	2.82	1.10	4.69	U	ND	ND	Y	0.00	0.00
0.44	4.55	1.10	11.38	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.88	6.05	2.20	15.12	U	ND	ND	Y	0.00	0.00
0.88	5.31	2.64	15.94	U	ND	ND	Y	0.00	0.00
0.88	4.51	2.64	13.52	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.08	15.16	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.08	15.16	U	ND	ND	Y	0.00	0.00
0.88	4.33	7.04	34.66	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.96	19.49	U	ND	ND	Y	0.00	0.00
0.88	5.13	2.64	15.39	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.96	19.49	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00

0.88	4.84	3.08	16.93	U	ND	ND	Y	0.00	0.00
0.88	5.30	3.52	21.19	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	4.56	2.20	11.41	U	ND	ND	Y	0.00	0.00
0.88	5.30	2.20	13.24	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	5.30	3.08	18.54	U	ND	ND	Y	0.00	0.00
1.32	12.77	3.08	29.81	U	ND	ND	Y	0.00	0.00
1.32	9.81	2.20	16.34	U	ND	ND	Y	0.00	0.00
2.20	11.55	0.44	2.31	U	ND	ND	Y	0.00	0.00
1.32	9.81	2.20	16.34	U	ND	ND	Y	0.00	0.00
1.10	11.75	1.32	14.10	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 12
Sample ID: T-412

Can Factor: 1.32
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**12**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.32	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ Note: 1 i

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}$ $\frac{(Cistdi)}{(Aistdi)}$ **= Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	37095	20.0	8738590	0.432	1.90	3.28
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	8738590	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	153682	20.0	8738590	1.625	7.15	9.37
5	Chloromethane	PFB	TRG	50.5	0.234	71627	20.0	8738590	0.700	3.08	6.37
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	8738590	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	8738590	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	8738590	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	81416	20.0	8738590	0.763	3.36	13.05
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	8738590	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	8738590	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	8738590	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	8738590	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	58802	20.0	8738590	0.662	2.91	6.93
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	8738590	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	8738590	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	8738590	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	8738590	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	8738590	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	8738590	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	8738590	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	8738590	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	15829	20.0	8738590	0.055	0.24	0.76
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	8738590	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	8738590	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	8738590	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	8738590	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	8738590	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	8738590	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	8738590	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	8738590	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	8738590	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	8738590	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	8738590	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	8738590	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	8738590	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	8738590	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	8738590	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	8738590	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	8738590	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	8738590	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	9667860	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	9667860	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	9667860	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	9667860	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	47935	20.0	9667860	0.125	0.55	1.76
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	9667860	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	9667860	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	9667860	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	9667860	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	9667860	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	9667860	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	9667860	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	9667860	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	9667860	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	9667860	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	9667860	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	9667860	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	36583	20.0	9667860	0.068	0.30	1.13
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	9667860	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	9667860	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	9667860	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	9667860	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	9667860	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	9667860	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	9667860	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	9667860	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	9667860	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	16626879	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	16626879	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	13287	20.0	16626879	0.011	0.05	0.21
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	19135	20.0	16626879	0.019	0.08	0.36
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	16626879	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	26994	20.0	16626879	0.033	0.15	0.62
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	16626879	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	16626879	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	16626879	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	16626879	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	16626879	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	16626879	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	16626879	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	59436	20.0	16626879	0.038	0.17	0.83
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	37172	20.0	16626879	0.023	0.10	0.50
87	Decane	d5CB	TRG	142.3	1.250	19643	20.0	16626879	0.019	0.08	0.48
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	16626879	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	61206	20.0	16626879	0.048	0.21	1.05
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	16626879	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	16626879	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	71185	20.0	16626879	0.070	0.31	1.85
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	52915	20.0	16626879	0.027	0.12	0.65
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	16626879	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	16626879	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	74184	20.0	16626879	0.040	0.18	0.96
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	16626879	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	16626879	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	16626879	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	16626879	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	16626879	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	16626879	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	8738590	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	9667860	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	16626879	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6498480	10.0		11.322	113.22	113

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443512A.D
Acq Time : 11 Dec 124 5:06 pm
Sample : T-412
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 16:03 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	8738590	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.75	114	9667860	20.00	ppbV		-0.25
71) Chlorobenzene-d5	15.23	117	16626879	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	6498480	11.32	ppbV		113.22
Target Compounds							Qvalue
2) Propylene	4.36	42	37095	0.43	ppbV		91
4) Methanol	4.81	31	153682	1.62	ppbV	#	88
5) Chloromethane	4.70	50	71627	0.70	ppbV		93
9) Bromomethane	5.47	94	81416	0.76	ppbV		96
14) Acetone	6.31	58	58802	0.66	ppbV	#	1
23) Carbon disulfide	7.44	76	15829	0.06	ppbV	#	57
47) Benzene	10.45	78	47935	0.12	ppbV	m	79
61) Toluene	13.21	91	36583	0.07	ppbV	#	80
74) Ethylbenzene	15.57	91	13287	0.01	ppbV	m	42
75) m,p-Xylenes	15.74	91	19135	0.02	ppbV	#	74
77) Styrene	16.29	104	26994	0.03	ppbV	#	71
85) 4-Ethyltoluene	17.87	105	59436	0.04	ppbV	m	86
86) 1,3,5-Trimethylbenzene	17.97	105	37172	0.02	ppbV	m	82
87) Decane	18.26	57	19643	0.02	ppbV	#	76
89) 1,2,4-Trimethylbenzene	18.59	105	61206	0.05	ppbV	#	91
92) 1,3-Dichlorobenzene	19.01	146	71185	0.07	ppbV		91
93) Isopropyltoluene	19.17	119	52915	0.03	ppbV	#	72
96) n-Butylbenzene	19.83	91	74184	0.04	ppbV	#	96

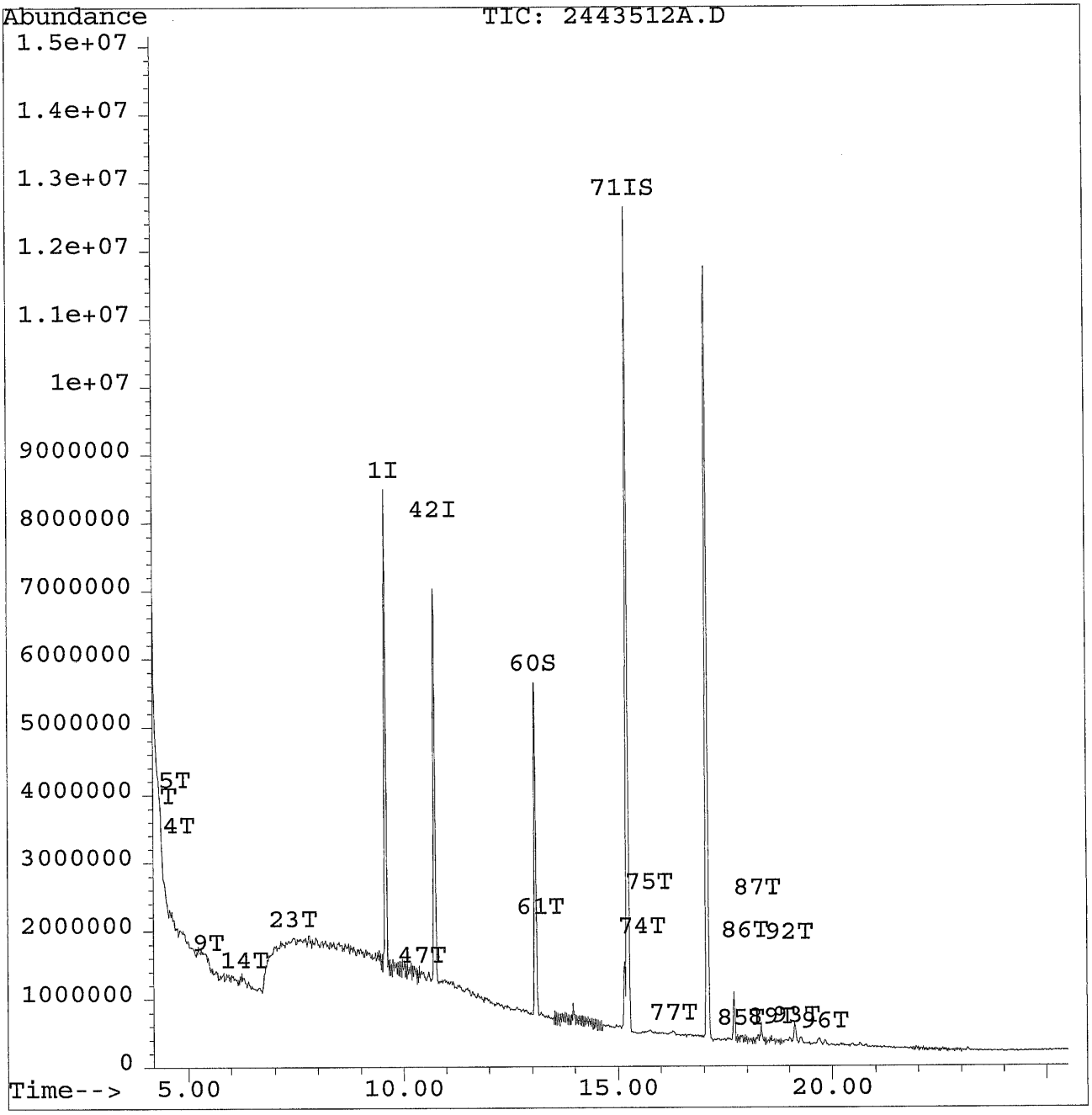
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443512A.D
Acq Time : 11 Dec 124 5:06 pm
Sample : T-412
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 16:03 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443512A.D
Acq Time : 11 Dec 124 5:06 pm
Sample : T-412
Misc : SCHMIDT, 300 ML

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	18.64 ppbV	37300338	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	91
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	90
3	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	50
4	4(1H)-Pyrimidinone, 5-bromo-	13697	019808-30-1	39

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
17.70	0.98 ppbV	1970044	Chlorobenzene-d5	15

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	35637	000556-67-2	43

Sample Data Packages

SDG Number 224435

Lab Id Number 13

Client ID T-413

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 13**

File Name: 2443513A.D
Description: T-413
Canister: 766
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/11/24 **Time:** 17:56
Can Dilution Factor: 1.34
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.12	0.70	0.77	1.92	1.21	J
75-71-8	Dichlorodifluoromethane	0.67	1.12	ND	3.32	5.53	ND	
67-56-1	Methanol	2.23	2.68	ND	2.93	3.51	ND	
74-87-3	Chloromethane	0.67	1.12	1.91	1.39	2.31	3.95	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.12	ND	3.13	7.82	ND	
75-01-4	Vinyl chloride	0.22	1.12	ND	0.58	2.86	ND	
106-99-0	1,3-Butadiene	0.22	1.12	ND	0.50	2.47	ND	
74-83-9	Bromomethane	0.45	1.12	ND	1.74	4.34	ND	
75-00-3	Chloroethane	0.45	1.12	ND	1.18	2.95	ND	
64-17-5	Ethanol	2.23	14.34	ND	4.22	27.07	ND	
107-02-8	Acrolein	0.45	1.34	ND	1.03	3.08	ND	
75-69-4	Trichlorofluoromethane	0.45	1.12	ND	2.51	6.28	ND	
67-64-1	Acetone	2.23	2.68	2.60	5.31	6.38	6.18	J
67-63-0	2-propanol (isopropylalcohol)	0.89	5.58	ND	2.20	13.74	ND	
75-65-0	t-Butyl alcohol	0.45	4.47	ND	1.36	13.56	ND	
4227-95-6	Methyl iodide	0.45	1.34	ND	2.61	7.84	ND	
75-35-4	1,1-Dichloroethene	0.22	1.12	ND	0.89	4.43	ND	
107-13-1	Acrylonitrile	0.89	1.34	ND	1.94	2.91	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.12	ND	1.71	8.57	ND	
107-05-1	Allyl chloride	0.22	4.47	ND	0.70	13.99	ND	
75-09-2	Methylene chloride	0.22	1.12	ND	0.78	3.88	ND	
75-15-0	Carbon disulfide	0.45	1.12	ND	1.39	3.48	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.89	ND	0.89	3.55	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.89	ND	1.61	3.22	ND	
107-12-0	Propionitrile	1.12	1.79	ND	2.52	4.03	ND	
75-34-3	1,1-Dichloroethane	0.22	1.12	ND	0.90	4.53	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.12	ND	1.87	4.67	ND	
108-05-4	Vinyl acetate	0.22	4.47	ND	0.79	15.75	ND	
78-93-3	2-Butanone (MEK)	0.45	1.34	ND	1.32	3.96	ND	
108-20-3	Diisopropyl ether	0.45	2.68	ND	1.87	11.22	ND	
110-54-3	Hexane	0.45	1.12	ND	1.58	3.94	ND	
126-98-7	Methacrylonitrile	0.45	1.12	ND	1.23	3.07	ND	
141-78-6	Ethyl acetate	0.45	1.12	ND	1.61	4.03	ND	
74-97-5	Bromochloromethane	0.22	1.12	ND	1.18	5.92	ND	
96-33-3	Methyl acrylate	0.45	2.23	ND	1.58	7.88	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.34	ND	0.66	3.96	ND	
78-83-1	Isobutyl alcohol	0.89	3.57	ND	2.71	10.84	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.12	ND	0.89	4.43	ND	
594-20-7	2,2-Dichloropropane	0.22	1.12	ND	1.03	5.17	ND	
67-66-3	Chloroform	0.22	1.12	ND	1.10	5.46	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.12	ND	1.22	6.10	ND	
107-06-2	1,2-Dichloroethane	0.22	1.12	ND	0.91	4.53	ND	
563-58-6	1,1-Dichloropropene	0.22	1.12	ND	1.02	5.08	ND	
110-82-7	Cyclohexane	0.22	1.12	ND	0.77	3.85	ND	
71-43-2	Benzene	1.56	2.23	ND	5.00	7.14	ND	
56-23-5	Carbon tetrachloride	0.22	1.12	ND	1.41	7.03	ND	
994-05-8	t-Amyl methyl ether	0.45	2.23	ND	1.87	9.35	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.12	ND	1.04	5.22	ND	
142-82-5	n-Heptane	0.45	1.12	ND	1.83	4.58	ND	
78-87-5	1,2-Dichloropropane	0.22	1.12	ND	1.03	5.17	ND	
123-91-1	1,4 Dioxane	0.45	2.23	ND	1.61	8.06	ND	
74-95-3	Dibromomethane	0.22	1.12	ND	1.59	7.95	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.12	ND	0.60	6.01	ND	
75-27-4	Bromodichloromethane	0.22	1.12	ND	1.50	7.49	ND	
80-62-6	Methyl methacrylate	0.45	1.12	ND	1.83	4.58	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.57	ND	1.83	14.66	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.12	ND	1.02	5.08	ND	
108-88-3	Toluene	0.89	1.12	ND	3.37	4.21	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.12	ND	1.02	5.08	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.12	ND	1.22	6.10	ND	
97-63-2	Ethyl methacrylate	0.45	1.12	ND	2.09	5.22	ND	
591-78-6	2-Hexanone	0.45	3.57	ND	1.83	14.66	ND	
142-28-9	1,3-Dichloropropane	0.22	3.13	ND	1.03	14.47	ND	
111-65-9	Octane	0.45	1.12	ND	2.09	5.22	ND	
124-48-1	Dibromochloromethane	0.45	1.12	ND	3.81	9.53	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.12	ND	3.44	8.59	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.12	ND	0.76	7.58	ND	
108-90-7	Chlorobenzene	0.45	1.12	ND	2.06	5.15	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.12	ND	3.07	7.67	ND	
100-41-4	Ethylbenzene	0.45	1.12	ND	1.94	4.86	ND	
1330-20-7	m,p-Xylenes	0.45	1.12	ND	1.94	4.86	ND	
111-84-2	Nonane	0.45	1.12	ND	2.35	5.87	ND	
100-42-5	Styrene	0.67	1.12	ND	2.86	4.77	ND	
75-25-2	Bromoform	0.45	1.12	ND	4.62	11.56	ND	
95-47-6	o-Xylene	0.45	1.12	ND	1.94	4.86	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.89	2.23	ND	6.14	15.35	ND	
96-18-4	1,2,3-Trichloropropane	0.89	2.68	ND	5.39	16.18	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.89	2.68	ND	4.57	13.72	ND	
103-65-1	n-Propylbenzene	0.89	3.13	ND	4.40	15.39	ND	
98-82-8	Isopropylbenzene	0.89	3.13	ND	4.40	15.39	ND	
622-96-8	4-Ethyltoluene	0.89	7.15	ND	4.40	35.18	ND	
108-67-8	1,3,5-Trimethylbenzene	0.89	4.02	ND	4.40	19.79	ND	
124-18-5	Decane	0.89	2.68	ND	5.21	15.62	ND	
98-06-6	tert-butyl benzene	0.89	2.68	ND	4.91	14.73	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.89	4.02	ND	4.40	19.79	ND	
538-93-2	i-Butylbenzene	0.89	2.68	ND	4.91	14.73	ND	
135-98-8	sec-butylbenzene	0.89	3.13	ND	4.91	17.18	ND	
541-73-1	1,3-Dichlorobenzene	0.89	3.57	ND	5.38	21.51	ND	
99-87-6	Isopropyltoluene	0.89	2.68	ND	4.91	14.73	ND	
100-44-7	Benzyl chloride	0.89	2.23	ND	4.63	11.58	ND	
106-46-7	1,4-Dichlorobenzene	0.89	2.23	ND	5.38	13.45	ND	
104-51-8	n-Butylbenzene	0.89	2.68	ND	4.91	14.73	ND	
95-50-1	1,2-Dichlorobenzene	0.89	3.13	ND	5.38	18.82	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.34	3.13	ND	12.97	30.26	ND	
120-82-1	1,2,4-Trichlorobenzene	1.34	2.23	ND	9.96	16.59	ND	
91-20-3	Naphthalene	2.23	0.45	ND	11.73	2.35	ND	
87-61-6	1,2,3-Trichlorobenzene	1.34	2.23	ND	9.96	16.59	ND	
87-68-3	Hexachlorobutadiene	1.12	1.34	ND	11.93	14.31	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 13
Canister: 766
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/11/24 **Time:** 17:56
Can Dilution Factor: 1.34
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.13	6.70	ND	12.81	27.44	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**13**		
File Name:	2443513A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**13:37**
Sample ID:	T-413	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**17:56**
Anal Date:	11 Dec 124 5:45 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**766**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.34**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.158	4.41	42.00	17934
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.320	4.86	31.00	39992
74-87-3	Chloromethane	5	TRG	0.428	4.77	50.00	57913
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.581	6.42	58.00	68289
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.111	10.70	78.00	50949
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.070	13.50	91.00	45045
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.029	15.90	106	38968
1330-20-7	m,p-Xylenes	75	TRG	0.035	16.06	91.00	39247
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.056	16.61	104.00	50024
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.035	16.36	91.00	42967
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.142	18.23	105.00	242033
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.070	18.31	105.00	123703
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.127	18.95	105.00	177696
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.39	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11562187**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11570728**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18314425**
2037-26-5	Toluene-d8	60	SURR	11.898	13.40	98.00	**8173555**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 13
File Name: 2443513A.D
Run Method: A1563_L.M
Can Factor: 1.34
Air Volume: 300.0 ml
Can/Tube Number: 766
Dilution Factor: 0.4020
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4020
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.16	0.70	1.21	0.70	1.21	1.21	1.21	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.32	1.43	1.87	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.43	1.91	3.95	1.91	3.95	3.95	3.95	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.58	2.60	6.18	2.60	6.18	6.18	6.18	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.11	0.50	1.58	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.07	0.31	1.18	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.13	0.55	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.04	0.16	0.68	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.06	0.25	1.06	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.04	0.16	0.69	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.14	0.64	3.13	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.07	0.31	1.55	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.13	0.57	2.80	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.90	119	119	119	119	119	119	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.77	1.12	1.92	J	J		=		Y	0.70	1.21
0.67	3.32	1.12	5.53	U	ND		ND		Y	0.00	0.00
2.23	2.93	2.68	3.51	U	ND		ND		Y	0.00	0.00
0.67	1.39	1.12	2.31				=		Y	1.91	3.95
0.45	3.13	1.12	7.82	U	ND		ND		Y	0.00	0.00
0.22	0.58	1.12	2.86	U	ND		ND		Y	0.00	0.00
0.22	0.50	1.12	2.47	U	ND		ND		Y	0.00	0.00
0.45	1.74	1.12	4.34	U	ND		ND		Y	0.00	0.00
0.45	1.18	1.12	2.95	U	ND		ND		Y	0.00	0.00
2.23	4.22	14.34	27.07	U	ND		ND		Y	0.00	0.00
0.45	1.03	1.34	3.08	U	ND		ND		Y	0.00	0.00
0.45	2.51	1.12	6.28	U	ND		ND		Y	0.00	0.00
2.23	5.31	2.68	6.38	J	J		=		Y	2.60	6.18
0.89	2.20	5.58	13.74	U	ND		ND		Y	0.00	0.00
0.45	1.36	4.47	13.56	U	ND		ND		Y	0.00	0.00
0.45	2.61	1.34	7.84	U	ND		ND		Y	0.00	0.00
0.22	0.89	1.12	4.43	U	ND		ND		Y	0.00	0.00
0.89	1.94	1.34	2.91	U	ND		ND		Y	0.00	0.00
0.22	1.71	1.12	8.57	U	ND		ND		Y	0.00	0.00
0.22	0.70	4.47	13.99	U	ND		ND		Y	0.00	0.00
0.22	0.78	1.12	3.88	U	ND		ND		Y	0.00	0.00
0.45	1.39	1.12	3.48	U	ND		ND		Y	0.00	0.00
0.22	0.89	0.89	3.55	U	ND		ND		Y	0.00	0.00
0.45	1.61	0.89	3.22	U	ND		ND		Y	0.00	0.00
1.12	2.52	1.79	4.03	U	ND		ND		Y	0.00	0.00
0.22	0.90	1.12	4.53	U	ND		ND		Y	0.00	0.00
0.45	1.87	1.12	4.67	U	ND		ND		Y	0.00	0.00
0.22	0.79	4.47	15.75	U	ND		ND		Y	0.00	0.00
0.45	1.32	1.34	3.96	U	ND		ND		Y	0.00	0.00
0.45	1.87	2.68	11.22	U	ND		ND		Y	0.00	0.00
0.45	1.58	1.12	3.94	U	ND		ND		Y	0.00	0.00
0.45	1.23	1.12	3.07	U	ND		ND		Y	0.00	0.00
0.45	1.61	1.12	4.03	U	ND		ND		Y	0.00	0.00
0.22	1.18	1.12	5.92	U	ND		ND		Y	0.00	0.00

0.45	1.58	2.23	7.88	U	ND	ND	Y	0.00	0.00
0.22	0.66	1.34	3.96	U	ND	ND	Y	0.00	0.00
0.89	2.71	3.57	10.84	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.12	4.43	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.12	5.17	U	ND	ND	Y	0.00	0.00
0.22	1.10	1.12	5.46	U	ND	ND	Y	0.00	0.00
0.22	1.22	1.12	6.10	U	ND	ND	Y	0.00	0.00
0.22	0.91	1.12	4.53	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.12	5.08	U	ND	ND	Y	0.00	0.00
0.22	0.77	1.12	3.85	U	ND	ND	Y	0.00	0.00
1.56	5.00	2.23	7.14	U	ND	ND	Y	0.00	0.00
0.22	1.41	1.12	7.03	U	ND	ND	Y	0.00	0.00
0.45	1.87	2.23	9.35	U	ND	ND	Y	0.00	0.00
0.22	1.04	1.12	5.22	U	ND	ND	Y	0.00	0.00
0.45	1.83	1.12	4.58	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.12	5.17	U	ND	ND	Y	0.00	0.00
0.45	1.61	2.23	8.06	U	ND	ND	Y	0.00	0.00
0.22	1.59	1.12	7.95	U	ND	ND	Y	0.00	0.00
0.11	0.60	1.12	6.01	U	ND	ND	Y	0.00	0.00
0.22	1.50	1.12	7.49	U	ND	ND	Y	0.00	0.00
0.45	1.83	1.12	4.58	U	ND	ND	Y	0.00	0.00
0.45	1.83	3.57	14.66	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.12	5.08	U	ND	ND	Y	0.00	0.00
0.89	3.37	1.12	4.21	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.12	5.08	U	ND	ND	Y	0.00	0.00
0.22	1.22	1.12	6.10	U	ND	ND	Y	0.00	0.00
0.45	2.09	1.12	5.22	U	ND	ND	Y	0.00	0.00
0.45	1.83	3.57	14.66	U	ND	ND	Y	0.00	0.00
0.22	1.03	3.13	14.47	U	ND	ND	Y	0.00	0.00
0.45	2.09	1.12	5.22	U	ND	ND	Y	0.00	0.00
0.45	3.81	1.12	9.53	U	ND	ND	Y	0.00	0.00
0.45	3.44	1.12	8.59	U	ND	ND	Y	0.00	0.00
0.11	0.76	1.12	7.58	U	ND	ND	Y	0.00	0.00
0.45	2.06	1.12	5.15	U	ND	ND	Y	0.00	0.00
0.45	3.07	1.12	7.67	U	ND	ND	Y	0.00	0.00
0.45	1.94	1.12	4.86	U	ND	ND	Y	0.00	0.00
0.45	1.94	1.12	4.86	U	ND	ND	Y	0.00	0.00
0.45	2.35	1.12	5.87	U	ND	ND	Y	0.00	0.00
0.67	2.86	1.12	4.77	U	ND	ND	Y	0.00	0.00
0.45	4.62	1.12	11.56	U	ND	ND	Y	0.00	0.00
0.45	1.94	1.12	4.86	U	ND	ND	Y	0.00	0.00
0.89	6.14	2.23	15.35	U	ND	ND	Y	0.00	0.00
0.89	5.39	2.68	16.18	U	ND	ND	Y	0.00	0.00
0.89	4.57	2.68	13.72	U	ND	ND	Y	0.00	0.00
0.89	4.40	3.13	15.39	U	ND	ND	Y	0.00	0.00
0.89	4.40	3.13	15.39	U	ND	ND	Y	0.00	0.00
0.89	4.40	7.15	35.18	U	ND	ND	Y	0.00	0.00
0.89	4.40	4.02	19.79	U	ND	ND	Y	0.00	0.00
0.89	5.21	2.68	15.62	U	ND	ND	Y	0.00	0.00
0.89	4.91	2.68	14.73	U	ND	ND	Y	0.00	0.00
0.89	4.40	4.02	19.79	U	ND	ND	Y	0.00	0.00
0.89	4.91	2.68	14.73	U	ND	ND	Y	0.00	0.00

0.89	4.91	3.13	17.18	U	ND	ND	Y	0.00	0.00
0.89	5.38	3.57	21.51	U	ND	ND	Y	0.00	0.00
0.89	4.91	2.68	14.73	U	ND	ND	Y	0.00	0.00
0.89	4.63	2.23	11.58	U	ND	ND	Y	0.00	0.00
0.89	5.38	2.23	13.45	U	ND	ND	Y	0.00	0.00
0.89	4.91	2.68	14.73	U	ND	ND	Y	0.00	0.00
0.89	5.38	3.13	18.82	U	ND	ND	Y	0.00	0.00
1.34	12.97	3.13	30.26	U	ND	ND	Y	0.00	0.00
1.34	9.96	2.23	16.59	U	ND	ND	Y	0.00	0.00
2.23	11.73	0.45	2.35	U	ND	ND	Y	0.00	0.00
1.34	9.96	2.23	16.59	U	ND	ND	Y	0.00	0.00
1.12	11.93	1.34	14.31	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 13
Sample ID: T-413

Can Factor: 1.34
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	
ND	**0.7**	**1.5**	3.1	6.70	3.13	12.81	6.70	27.44	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**13**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.34
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	17934	20.0	11562187	0.158	0.70	1.21
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11562187	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	39992	20.0	11562187	0.320	1.43	1.87
5	Chloromethane	PFB	TRG	50.5	0.234	57913	20.0	11562187	0.428	1.91	3.95
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11562187	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11562187	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11562187	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11562187	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11562187	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11562187	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11562187	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11562187	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	68289	20.0	11562187	0.581	2.60	6.18
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11562187	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11562187	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11562187	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11562187	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11562187	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11562187	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11562187	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11562187	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11562187	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11562187	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11562187	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11562187	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11562187	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11562187	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11562187	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11562187	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11562187	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11562187	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11562187	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11562187	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11562187	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11562187	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11562187	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11562187	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11562187	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11562187	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11562187	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11570728	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11570728	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11570728	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11570728	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	50949	20.0	11570728	0.111	0.50	1.58
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11570728	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	11570728	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11570728	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11570728	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11570728	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11570728	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11570728	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11570728	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11570728	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11570728	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11570728	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11570728	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	45045	20.0	11570728	0.070	0.31	1.18
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11570728	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11570728	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11570728	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11570728	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11570728	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11570728	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11570728	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11570728	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11570728	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18314425	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18314425	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	38968	20.0	18314425	0.029	0.13	0.55
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	39247	20.0	18314425	0.035	0.16	0.68
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18314425	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	50024	20.0	18314425	0.056	0.25	1.06
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18314425	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	42967	20.0	18314425	0.035	0.16	0.69
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18314425	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18314425	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18314425	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18314425	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18314425	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	242033	20.0	18314425	0.142	0.64	3.13
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	123703	20.0	18314425	0.070	0.31	1.55
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18314425	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18314425	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	177696	20.0	18314425	0.127	0.57	2.80
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18314425	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18314425	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18314425	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	18314425	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18314425	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18314425	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18314425	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18314425	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18314425	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18314425	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18314425	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18314425	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18314425	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11562187	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11570728	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18314425	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8173555	10.0		11.898	118.98	119

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443513A.D
Acq Time : 11 Dec 124 5:45 pm
Sample : T-413
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 16:11 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.58	168	11562187	20.00	ppbV	-0.25
42) 1,4-Difluorobenzene	10.74	114	11570728	20.00	ppbV	-0.26
71) Chlorobenzene-d5	15.23	117	18314425	20.00	ppbV	-0.34
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.08	98	8173555	11.90	ppbV	118.98
Target Compounds						Qvalue
2) Propylene	4.31	42	17934	0.16	ppbV #	83
4) Methanol	5.03	31	39992	0.32	ppbV #	90
5) Chloromethane	4.65	50	57913	0.43	ppbV	94
14) Acetone	6.31	58	68289	0.58	ppbV #	1
47) Benzene	10.43	78	50949	0.11	ppbV m	76
61) Toluene	13.20	91	45045	0.07	ppbV	86
74) Ethylbenzene	15.57	91	38968	0.03	ppbV m	95
75) m,p-Xylenes	15.74	91	39247	0.04	ppbV #	81
77) Styrene	16.29	104	50024	0.06	ppbV #	76
79) o-Xylene	16.36	91	42967	0.04	ppbV #	85
85) 4-Ethyltoluene	17.88	105	242033	0.14	ppbV m	88
86) 1,3,5-Trimethylbenzene	17.96	105	123703	0.07	ppbV m	79
89) 1,2,4-Trimethylbenzene	18.59	105	177696	0.13	ppbV #	82

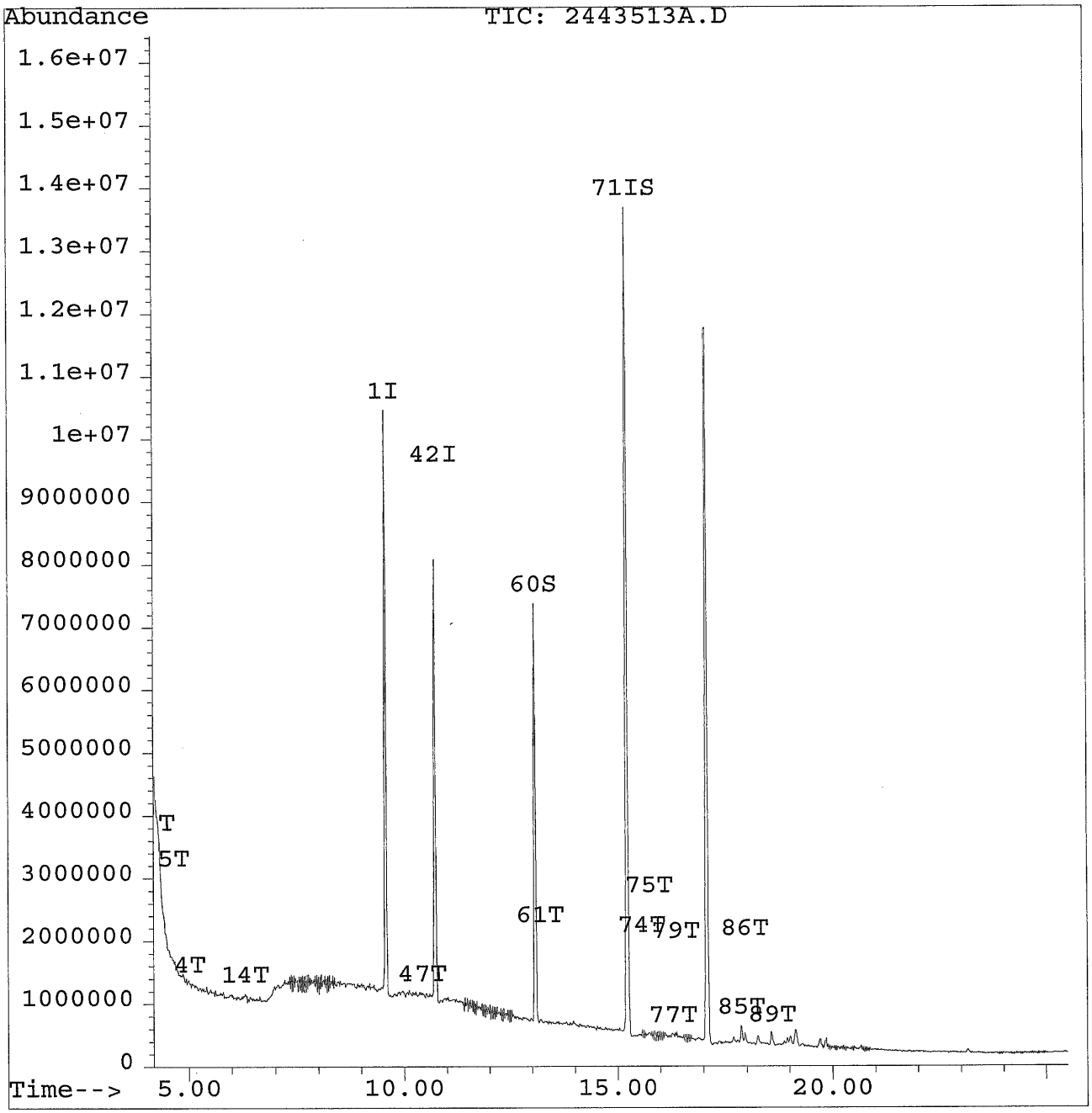
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443513A.D
Acq Time : 11 Dec 124 5:45 pm
Sample : T-413
Misc : SCHMIDT, 300 ML
Quant Time: Dec 12 16:11 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443513A.D
Acq Time : 11 Dec 124 5:45 pm Operator: LR
Sample : T-413 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	18.19 ppbV	38238283	Chlorobenzene-d5	15

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	4(1H)-Pyrimidinone, 5-bromo-	13697	019808-30-1	39
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	38
4	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	38
5	4-(4-Fluorophenyl)pyrimidine	13873	068049-19-4	10

Sample Data Packages

SDG Number **224435**

Lab Id Number **14**

Client ID T-414

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 14**

File Name: 2443514A.D **Date Sampled:** 11/19/24 **Time:** 13:37
Description: T-414 **Date Analyzed:** 12/11/24 **Time:** 18:23
Canister: 725 **Can Dilution Factor:** 1.32
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.10	0.66	0.76	1.90	1.14	J
75-71-8	Dichlorodifluoromethane	0.66	1.10	ND	3.27	5.45	ND	
67-56-1	Methanol	2.20	2.64	ND	2.88	3.46	ND	
74-87-3	Chloromethane	0.66	1.10	1.42	1.37	2.28	2.94	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.10	ND	3.08	7.70	ND	
75-01-4	Vinyl chloride	0.22	1.10	ND	0.57	2.82	ND	
106-99-0	1,3-Butadiene	0.22	1.10	ND	0.49	2.44	ND	
74-83-9	Bromomethane	0.44	1.10	1.79	1.71	4.28	6.95	
75-00-3	Chloroethane	0.44	1.10	ND	1.16	2.91	ND	
64-17-5	Ethanol	2.20	14.12	ND	4.15	26.67	ND	
107-02-8	Acrolein	0.44	1.32	ND	1.01	3.03	ND	
75-69-4	Trichlorofluoromethane	0.44	1.10	ND	2.48	6.19	ND	
67-64-1	Acetone	2.20	2.64	ND	5.23	6.28	ND	
67-63-0	2-propanol (isopropylalcohol)	0.88	5.50	ND	2.17	13.54	ND	
75-65-0	t-Butyl alcohol	0.44	4.40	ND	1.34	13.35	ND	
4227-95-6	Methyl iodide	0.44	1.32	ND	2.58	7.73	ND	
75-35-4	1,1-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
107-13-1	Acrylonitrile	0.88	1.32	ND	1.91	2.87	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.10	ND	1.69	8.44	ND	
107-05-1	Allyl chloride	0.22	4.40	ND	0.69	13.79	ND	
75-09-2	Methylene chloride	0.22	1.10	ND	0.76	3.82	ND	
75-15-0	Carbon disulfide	0.44	1.10	ND	1.37	3.43	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.88	ND	0.87	3.49	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.88	ND	1.59	3.18	ND	
107-12-0	Propionitrile	1.10	1.76	ND	2.48	3.97	ND	
75-34-3	1,1-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.10	ND	1.84	4.60	ND	
108-05-4	Vinyl acetate	0.22	4.40	ND	0.78	15.52	ND	
78-93-3	2-Butanone (MEK)	0.44	1.32	ND	1.30	3.90	ND	
108-20-3	Diisopropyl ether	0.44	2.64	ND	1.84	11.05	ND	
110-54-3	Hexane	0.44	1.10	ND	1.55	3.88	ND	
126-98-7	Methacrylonitrile	0.44	1.10	ND	1.21	3.02	ND	
141-78-6	Ethyl acetate	0.44	1.10	ND	1.59	3.97	ND	
74-97-5	Bromochloromethane	0.22	1.10	ND	1.17	5.83	ND	
96-33-3	Methyl acrylate	0.44	2.20	ND	1.55	7.76	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.32	ND	0.65	3.90	ND	
78-83-1	Isobutyl alcohol	0.88	3.52	ND	2.67	10.68	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.10	ND	0.87	4.37	ND	
594-20-7	2,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
67-66-3	Chloroform	0.22	1.10	ND	1.08	5.38	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
107-06-2	1,2-Dichloroethane	0.22	1.10	ND	0.89	4.46	ND	
563-58-6	1,1-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
110-82-7	Cyclohexane	0.22	1.10	ND	0.76	3.79	ND	
71-43-2	Benzene	1.54	2.20	ND	4.93	7.04	ND	
56-23-5	Carbon tetrachloride	0.22	1.10	ND	1.39	6.93	ND	
994-05-8	t-Amyl methyl ether	0.44	2.20	ND	1.84	9.21	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.10	ND	1.03	5.14	ND	
142-82-5	n-Heptane	0.44	1.10	ND	1.81	4.51	ND	
78-87-5	1,2-Dichloropropane	0.22	1.10	ND	1.02	5.09	ND	
123-91-1	1,4 Dioxane	0.44	2.20	ND	1.59	7.94	ND	
74-95-3	Dibromomethane	0.22	1.10	ND	1.57	7.83	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.10	ND	0.59	5.92	ND	
75-27-4	Bromodichloromethane	0.22	1.10	ND	1.48	7.38	ND	
80-62-6	Methyl methacrylate	0.44	1.10	ND	1.80	4.51	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.52	ND	1.81	14.44	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
108-88-3	Toluene	0.88	1.10	ND	3.32	4.15	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.10	ND	1.00	5.00	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.10	ND	1.20	6.01	ND	
97-63-2	Ethyl methacrylate	0.44	1.10	ND	2.06	5.14	ND	
591-78-6	2-Hexanone	0.44	3.52	ND	1.81	14.44	ND	
142-28-9	1,3-Dichloropropane	0.22	3.08	ND	1.02	14.25	ND	
111-65-9	Octane	0.44	1.10	ND	2.06	5.14	ND	
124-48-1	Dibromochloromethane	0.44	1.10	ND	3.75	9.38	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.10	ND	3.39	8.46	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.10	ND	0.75	7.47	ND	
108-90-7	Chlorobenzene	0.44	1.10	ND	2.03	5.07	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.10	ND	3.02	7.56	ND	
100-41-4	Ethylbenzene	0.44	1.10	ND	1.91	4.78	ND	
1330-20-7	m,p-Xylenes	0.44	1.10	ND	1.91	4.78	ND	
111-84-2	Nonane	0.44	1.10	ND	2.31	5.78	ND	
100-42-5	Styrene	0.66	1.10	ND	2.82	4.69	ND	
75-25-2	Bromoform	0.44	1.10	ND	4.55	11.38	ND	
95-47-6	o-Xylene	0.44	1.10	ND	1.91	4.78	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.88	2.20	ND	6.05	15.12	ND	
96-18-4	1,2,3-Trichloropropane	0.88	2.64	ND	5.31	15.94	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.88	2.64	ND	4.51	13.52	ND	
103-65-1	n-Propylbenzene	0.88	3.08	ND	4.33	15.16	ND	
98-82-8	Isopropylbenzene	0.88	3.08	ND	4.33	15.16	ND	
622-96-8	4-Ethyltoluene	0.88	7.04	ND	4.33	34.66	ND	
108-67-8	1,3,5-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
124-18-5	Decane	0.88	2.64	ND	5.13	15.39	ND	
98-06-6	tert-butyl benzene	0.88	2.64	ND	4.84	14.51	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.88	3.96	ND	4.33	19.49	ND	
538-93-2	i-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
135-98-8	sec-butylbenzene	0.88	3.08	ND	4.84	16.93	ND	
541-73-1	1,3-Dichlorobenzene	0.88	3.52	ND	5.30	21.19	ND	
99-87-6	Isopropyltoluene	0.88	2.64	ND	4.84	14.51	ND	
100-44-7	Benzyl chloride	0.88	2.20	ND	4.56	11.41	ND	
106-46-7	1,4-Dichlorobenzene	0.88	2.20	ND	5.30	13.24	ND	
104-51-8	n-Butylbenzene	0.88	2.64	ND	4.84	14.51	ND	
95-50-1	1,2-Dichlorobenzene	0.88	3.08	ND	5.30	18.54	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.32	3.08	ND	12.77	29.81	ND	
120-82-1	1,2,4-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
91-20-3	Naphthalene	2.20	0.44	ND	11.55	2.31	ND	
87-61-6	1,2,3-Trichlorobenzene	1.32	2.20	ND	9.81	16.34	ND	
87-68-3	Hexachlorobutadiene	1.10	1.32	ND	11.75	14.10	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	118	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 14
Canister: 725
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/11/24 **Time:** 18:23
Can Dilution Factor: 1.32
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.08	6.60	ND	12.61	27.03	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**14**		
File Name:	2443514A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**13:37**
Sample ID:	T-414	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**18:23**
Anal Date:	11 Dec 124 6:23 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**725**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.32**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.151	4.41	42.00	16371
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.323	4.77	50.00	41801
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.407	5.56	94.00	54824
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.418	6.42	58.00	46843
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.103	10.70	78.00	46768
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.070	13.50	91.00	45014
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.026	15.90	106	34451
1330-20-7	m,p-Xylenes	75	TRG	0.033	16.06	91.00	35797
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.041	16.61	104.00	36130
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.032	16.36	91.00	38229
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.086	18.23	105.00	143490
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.061	18.31	105.00	105241
124-18-5	Decane	87	TRG	0.033	18.60	57.00	37108
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.090	18.95	105.00	123158
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.063	19.53	119.00	132219
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.019	23.16	225.00	18614
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11041454**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11481082**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17895688**
2037-26-5	Toluene-d8	60	SURR	11.813	13.40	98.00	**8052469**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 14
File Name: 2443514A.D
Run Method: A1563_L.M
Can Factor: 1.32
Air Volume: 300.0 ml
Can/Tube Number: 725
Dilution Factor: 0.3960
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3960
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.15	0.66	1.14	0.66	1.14	1.14	1.14	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.32	1.42	2.94	1.42	2.94	2.94	2.94	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.41	1.79	6.95	1.79	6.95	6.95	6.95	**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.42	1.84	4.37	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.10	0.45	1.44	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.07	0.31	1.17	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.11	0.49	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.03	0.14	0.63	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.04	0.18	0.78	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.03	0.14	0.62	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.09	0.38	1.87	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.06	0.27	1.33	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.03	0.15	0.85	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.09	0.40	1.96	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.06	0.28	1.52	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.02	0.08	0.90	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.81	118	118	118	118	118	118	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.44	0.76	1.10	1.90	J	J		=		**Y**	0.66	1.14
0.66	3.27	1.10	5.45	U	ND		ND		**Y**	0.00	0.00
2.20	2.88	2.64	3.46	U	ND		ND		**Y**	0.00	0.00
0.66	1.37	1.10	2.28				=		**Y**	1.42	2.94
0.44	3.08	1.10	7.70	U	ND		ND		**Y**	0.00	0.00
0.22	0.57	1.10	2.82	U	ND		ND		**Y**	0.00	0.00
0.22	0.49	1.10	2.44	U	ND		ND		**Y**	0.00	0.00
0.44	1.71	1.10	4.28				=		**Y**	1.79	6.95
0.44	1.16	1.10	2.91	U	ND		ND		**Y**	0.00	0.00
2.20	4.15	14.12	26.67	U	ND		ND		**Y**	0.00	0.00
0.44	1.01	1.32	3.03	U	ND		ND		**Y**	0.00	0.00
0.44	2.48	1.10	6.19	U	ND		ND		**Y**	0.00	0.00
2.20	5.23	2.64	6.28	U	ND		ND		**Y**	0.00	0.00
0.88	2.17	5.50	13.54	U	ND		ND		**Y**	0.00	0.00
0.44	1.34	4.40	13.35	U	ND		ND		**Y**	0.00	0.00
0.44	2.58	1.32	7.73	U	ND		ND		**Y**	0.00	0.00
0.22	0.87	1.10	4.37	U	ND		ND		**Y**	0.00	0.00
0.88	1.91	1.32	2.87	U	ND		ND		**Y**	0.00	0.00
0.22	1.69	1.10	8.44	U	ND		ND		**Y**	0.00	0.00
0.22	0.69	4.40	13.79	U	ND		ND		**Y**	0.00	0.00
0.22	0.76	1.10	3.82	U	ND		ND		**Y**	0.00	0.00
0.44	1.37	1.10	3.43	U	ND		ND		**Y**	0.00	0.00
0.22	0.87	0.88	3.49	U	ND		ND		**Y**	0.00	0.00
0.44	1.59	0.88	3.18	U	ND		ND		**Y**	0.00	0.00
1.10	2.48	1.76	3.97	U	ND		ND		**Y**	0.00	0.00
0.22	0.89	1.10	4.46	U	ND		ND		**Y**	0.00	0.00
0.44	1.84	1.10	4.60	U	ND		ND		**Y**	0.00	0.00
0.22	0.78	4.40	15.52	U	ND		ND		**Y**	0.00	0.00
0.44	1.30	1.32	3.90	U	ND		ND		**Y**	0.00	0.00
0.44	1.84	2.64	11.05	U	ND		ND		**Y**	0.00	0.00
0.44	1.55	1.10	3.88	U	ND		ND		**Y**	0.00	0.00
0.44	1.21	1.10	3.02	U	ND		ND		**Y**	0.00	0.00
0.44	1.59	1.10	3.97	U	ND		ND		**Y**	0.00	0.00
0.22	1.17	1.10	5.83	U	ND		ND		**Y**	0.00	0.00

0.44	1.55	2.20	7.76	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.32	3.90	U	ND	ND	Y	0.00	0.00
0.88	2.67	3.52	10.68	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.10	4.37	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.10	5.09	U	ND	ND	Y	0.00	0.00
0.22	1.08	1.10	5.38	U	ND	ND	Y	0.00	0.00
0.22	1.20	1.10	6.01	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.10	4.46	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.22	0.76	1.10	3.79	U	ND	ND	Y	0.00	0.00
1.54	4.93	2.20	7.04	U	ND	ND	Y	0.00	0.00
0.22	1.39	1.10	6.93	U	ND	ND	Y	0.00	0.00
0.44	1.84	2.20	9.21	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	1.81	1.10	4.51	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.10	5.09	U	ND	ND	Y	0.00	0.00
0.44	1.59	2.20	7.94	U	ND	ND	Y	0.00	0.00
0.22	1.57	1.10	7.83	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.10	5.92	U	ND	ND	Y	0.00	0.00
0.22	1.48	1.10	7.38	U	ND	ND	Y	0.00	0.00
0.44	1.80	1.10	4.51	U	ND	ND	Y	0.00	0.00
0.44	1.81	3.52	14.44	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.88	3.32	1.10	4.15	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.10	5.00	U	ND	ND	Y	0.00	0.00
0.22	1.20	1.10	6.01	U	ND	ND	Y	0.00	0.00
0.44	2.06	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	1.81	3.52	14.44	U	ND	ND	Y	0.00	0.00
0.22	1.02	3.08	14.25	U	ND	ND	Y	0.00	0.00
0.44	2.06	1.10	5.14	U	ND	ND	Y	0.00	0.00
0.44	3.75	1.10	9.38	U	ND	ND	Y	0.00	0.00
0.44	3.39	1.10	8.46	U	ND	ND	Y	0.00	0.00
0.11	0.75	1.10	7.47	U	ND	ND	Y	0.00	0.00
0.44	2.03	1.10	5.07	U	ND	ND	Y	0.00	0.00
0.44	3.02	1.10	7.56	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.44	2.31	1.10	5.78	U	ND	ND	Y	0.00	0.00
0.66	2.82	1.10	4.69	U	ND	ND	Y	0.00	0.00
0.44	4.55	1.10	11.38	U	ND	ND	Y	0.00	0.00
0.44	1.91	1.10	4.78	U	ND	ND	Y	0.00	0.00
0.88	6.05	2.20	15.12	U	ND	ND	Y	0.00	0.00
0.88	5.31	2.64	15.94	U	ND	ND	Y	0.00	0.00
0.88	4.51	2.64	13.52	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.08	15.16	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.08	15.16	U	ND	ND	Y	0.00	0.00
0.88	4.33	7.04	34.66	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.96	19.49	U	ND	ND	Y	0.00	0.00
0.88	5.13	2.64	15.39	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	4.33	3.96	19.49	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00

0.88	4.84	3.08	16.93	U	ND	ND	Y	0.00	0.00
0.88	5.30	3.52	21.19	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	4.56	2.20	11.41	U	ND	ND	Y	0.00	0.00
0.88	5.30	2.20	13.24	U	ND	ND	Y	0.00	0.00
0.88	4.84	2.64	14.51	U	ND	ND	Y	0.00	0.00
0.88	5.30	3.08	18.54	U	ND	ND	Y	0.00	0.00
1.32	12.77	3.08	29.81	U	ND	ND	Y	0.00	0.00
1.32	9.81	2.20	16.34	U	ND	ND	Y	0.00	0.00
2.20	11.55	0.44	2.31	U	ND	ND	Y	0.00	0.00
1.32	9.81	2.20	16.34	U	ND	ND	Y	0.00	0.00
1.10	11.75	1.32	14.10	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435 **Can Factor:** 1.32
EASID: 14 **Gas Constant** 24.417049
Sample ID: T-414 **Volume:** 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	
ND	**0.7**	**1.5**	3.1	6.60	3.08	12.61	6.60	27.03	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**14**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.32	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdl ppmv	Aistdl Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	16371	20.0	11041454	0.151	0.66	1.14
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11041454	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11041454	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	41801	20.0	11041454	0.323	1.42	2.94
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11041454	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11041454	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11041454	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	54824	20.0	11041454	0.407	1.79	6.95
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11041454	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11041454	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11041454	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11041454	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	46843	20.0	11041454	0.418	1.84	4.37
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11041454	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11041454	0.000	0.00	0.00
17	Methyl Iodide	PFB	TRG	142.9	0.700	0	20.0	11041454	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11041454	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11041454	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11041454	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11041454	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11041454	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11041454	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11041454	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11041454	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11041454	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11041454	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11041454	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11041454	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11041454	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11041454	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11041454	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11041454	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11041454	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11041454	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11041454	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11041454	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11041454	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11041454	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11041454	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11041454	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11481082	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11481082	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11481082	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11481082	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	46768	20.0	11481082	0.103	0.45	1.44
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11481082	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	11481082	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11481082	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11481082	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11481082	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11481082	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11481082	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11481082	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11481082	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11481082	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11481082	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11481082	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	45014	20.0	11481082	0.070	0.31	1.17
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11481082	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11481082	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11481082	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11481082	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11481082	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11481082	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11481082	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11481082	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11481082	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	17895688	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	17895688	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	34451	20.0	17895688	0.026	0.11	0.49
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	35797	20.0	17895688	0.033	0.14	0.63
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	17895688	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	36130	20.0	17895688	0.041	0.18	0.78
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	17895688	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	38229	20.0	17895688	0.032	0.14	0.62
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	17895688	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	17895688	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	17895688	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	17895688	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	17895688	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	143490	20.0	17895688	0.086	0.38	1.87
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	105241	20.0	17895688	0.061	0.27	1.33
87	Decane	d5CB	TRG	142.3	1.250	37108	20.0	17895688	0.033	0.15	0.85
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	17895688	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	123158	20.0	17895688	0.090	0.40	1.96
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	17895688	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	17895688	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	17895688	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	132219	20.0	17895688	0.063	0.28	1.52
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	17895688	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	17895688	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	17895688	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	17895688	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	17895688	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	17895688	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	17895688	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	17895688	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	18614	20.0	17895688	0.019	0.08	0.90
1	Pentafluorobenzene	0	IS	0.0	0.000	11041454	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11481082	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17895688	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8052469	10.0		11.813	118.13	118

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443514A.D
Acq Time : 11 Dec 124 6:23 pm Operator: LR
Sample : T-414 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00
Quant Time: Dec 13 9:17 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	11041454	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	11481082	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.23	117	17895688	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8052469	11.81	ppbV		118.13
Target Compounds							Qvalue
2) Propylene	4.33	42	16371	0.15	ppbV	#	81
5) Chloromethane	4.67	50	41801	0.32	ppbV		98
9) Bromomethane	5.44	94	54824	0.41	ppbV		94
14) Acetone	6.29	58	46843	0.42	ppbV	#	1
47) Benzene	10.45	78	46768	0.10	ppbV	m	74
61) Toluene	13.20	91	45014	0.07	ppbV		100
74) Ethylbenzene	15.57	91	34451	0.03	ppbV		98
75) m,p-Xylenes	15.74	91	35797	0.03	ppbV	#	56
77) Styrene	16.29	104	36130	0.04	ppbV	#	76
79) o-Xylene	16.36	91	38229	0.03	ppbV		97
85) 4-Ethyltoluene	17.89	105	143490	0.09	ppbV	m	84
86) 1,3,5-Trimethylbenzene	17.98	105	105241	0.06	ppbV	m	83
87) Decane	18.27	57	37108	0.03	ppbV	#	64
89) 1,2,4-Trimethylbenzene	18.59	105	123158	0.09	ppbV	#	84
93) Isopropyltoluene	19.17	119	132219	0.06	ppbV	#	89
102) Hexachlorobutadiene	23.16	225	18614	0.02	ppbV		90

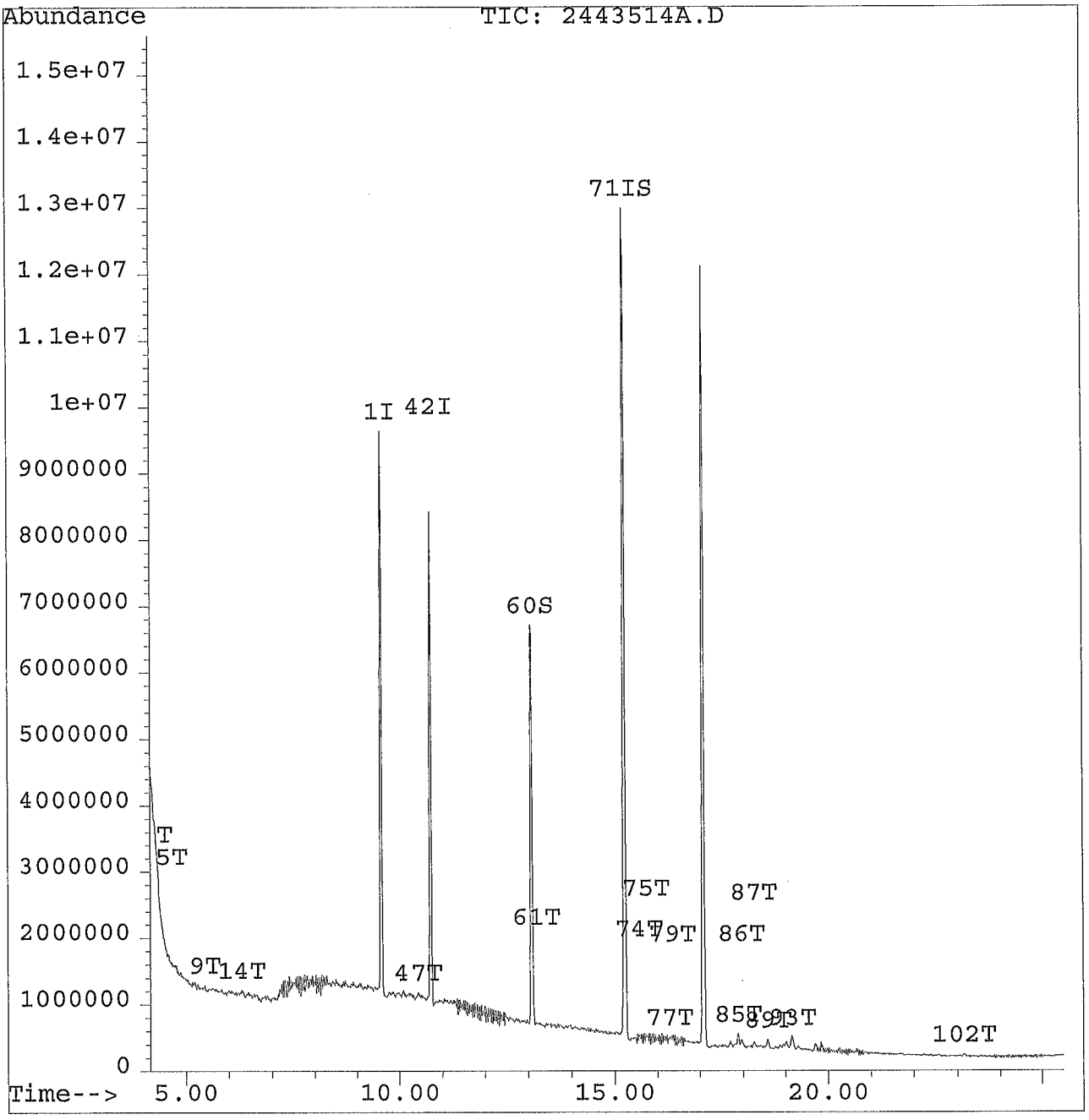
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443514A.D
Acq Time : 11 Dec 124 6:23 pm
Sample : T-414
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 9:17 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443514A.D
Acq Time : 11 Dec 124 6:23 pm
Sample : T-414
Misc : SCHMIDT, 300 ML

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	17.83 ppbV	36496580	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	86
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	43
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	37
4	4-(4-Fluorophenyl)pyrimidine	13873	068049-19-4	8
5	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 15

Client ID T-415

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 15**

File Name: 2443515A.D **Date Sampled:** 11/19/24 **Time:** 13:38
Description: T-415 **Date Analyzed:** 12/11/24 **Time:** 19:00
Canister: 896 **Can Dilution Factor:** 1.31
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	0.82	0.75	1.88	1.41	J
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	ND	2.86	3.43	ND	
74-87-3	Chloromethane	0.66	1.09	1.14	1.35	2.26	2.37	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	ND	4.12	26.46	ND	
107-02-8	Acrolein	0.44	1.31	ND	1.00	3.01	ND	
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	2.30	5.20	6.23	5.47	J
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	ND	2.15	13.44	ND	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	ND	1.29	3.87	ND	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.31	ND	0.65	3.87	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	117	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 15
Canister: 896
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 12/11/24 **Time:** 19:00
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**15**		
File Name:	2443515A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**13:38**
Sample ID:	T-415	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**19:00**
Anal Date:	11 Dec 124 7:00 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**896**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.31**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.188	4.41	42.00	21461
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.262	4.77	50.00	35691
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.527	6.42	58.00	62300
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.107	10.70	78.00	52204
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.082	13.50	91.00	56630
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.025	15.90	106	34242
1330-20-7	m,p-Xylenes	75	TRG	0.032	16.06	91.00	36035
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.055	16.61	104.00	49417
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.034	16.37	91.00	41653
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.096	18.23	105.00	163014
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.053	18.31	105.00	92455
124-18-5	Decane	87	TRG	0.030	18.60	57.00	34562
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.093	18.95	105.00	130441
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.048	19.53	119.00	103375
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11638761**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12314089**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18304577**
2037-26-5	Toluene-d8	60	SURR	11.662	13.40	98.00	**8525807**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 15
File Name: 2443515A.D
Run Method: A1563_L.M
Can Factor: 1.31
Air Volume: 300.0 ml
Can/Tube Number: 896
Dilution Factor: 0.3930
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3930
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.19	0.82	1.41	0.82	1.41	1.41	1.41	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.26	1.14	2.37	1.14	2.37	2.37	2.37	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.53	2.30	5.47	2.30	5.47	5.47	5.47	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl Iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.11	0.47	1.49	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.08	0.36	1.36	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.11	0.48	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.03	0.14	0.61	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.06	0.24	1.03	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.03	0.15	0.65	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.10	0.42	2.06	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.05	0.23	1.13	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.03	0.13	0.77	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.09	0.41	2.01	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.05	0.21	1.15	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.66	117	117	117	117	117	117	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.75	1.09	1.88	J	J		=		Y	0.82	1.41
0.66	3.24	1.09	5.41	U	ND		ND		Y	0.00	0.00
2.18	2.86	2.62	3.43	U	ND		ND		Y	0.00	0.00
0.66	1.35	1.09	2.26				=		Y	1.14	2.37
0.44	3.06	1.09	7.64	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.09	2.79	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.09	2.42	U	ND		ND		Y	0.00	0.00
0.44	1.70	1.09	4.24	U	ND		ND		Y	0.00	0.00
0.44	1.15	1.09	2.88	U	ND		ND		Y	0.00	0.00
2.18	4.12	14.02	26.46	U	ND		ND		Y	0.00	0.00
0.44	1.00	1.31	3.01	U	ND		ND		Y	0.00	0.00
0.44	2.46	1.09	6.14	U	ND		ND		Y	0.00	0.00
2.18	5.20	2.62	6.23	J	J		=		Y	2.30	5.47
0.87	2.15	5.46	13.44	U	ND		ND		Y	0.00	0.00
0.44	1.33	4.37	13.25	U	ND		ND		Y	0.00	0.00
0.44	2.56	1.31	7.67	U	ND		ND		Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND		ND		Y	0.00	0.00
0.87	1.90	1.31	2.85	U	ND		ND		Y	0.00	0.00
0.22	1.68	1.09	8.38	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.37	13.68	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.09	3.80	U	ND		ND		Y	0.00	0.00
0.44	1.36	1.09	3.40	U	ND		ND		Y	0.00	0.00
0.22	0.87	0.87	3.47	U	ND		ND		Y	0.00	0.00
0.44	1.58	0.87	3.15	U	ND		ND		Y	0.00	0.00
1.09	2.46	1.75	3.94	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.09	4.43	U	ND		ND		Y	0.00	0.00
0.44	1.83	1.09	4.57	U	ND		ND		Y	0.00	0.00
0.22	0.77	4.37	15.40	U	ND		ND		Y	0.00	0.00
0.44	1.29	1.31	3.87	U	ND		ND		Y	0.00	0.00
0.44	1.83	2.62	10.97	U	ND		ND		Y	0.00	0.00
0.44	1.54	1.09	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.20	1.09	3.00	U	ND		ND		Y	0.00	0.00
0.44	1.58	1.09	3.94	U	ND		ND		Y	0.00	0.00
0.22	1.16	1.09	5.79	U	ND		ND		Y	0.00	0.00

0.44	1.54	2.18	7.70	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.31	3.87	U	ND	ND	Y	0.00	0.00
0.87	2.65	3.49	10.60	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.22	1.07	1.09	5.34	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.09	4.43	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	0.75	1.09	3.76	U	ND	ND	Y	0.00	0.00
1.53	4.89	2.18	6.98	U	ND	ND	Y	0.00	0.00
0.22	1.38	1.09	6.88	U	ND	ND	Y	0.00	0.00
0.44	1.83	2.18	9.14	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.44	1.58	2.18	7.88	U	ND	ND	Y	0.00	0.00
0.22	1.55	1.09	7.77	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.09	5.87	U	ND	ND	Y	0.00	0.00
0.22	1.46	1.09	7.32	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.87	3.29	1.09	4.12	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	1.01	3.06	14.15	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	3.73	1.09	9.31	U	ND	ND	Y	0.00	0.00
0.44	3.36	1.09	8.40	U	ND	ND	Y	0.00	0.00
0.11	0.74	1.09	7.41	U	ND	ND	Y	0.00	0.00
0.44	2.01	1.09	5.03	U	ND	ND	Y	0.00	0.00
0.44	3.00	1.09	7.50	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	2.29	1.09	5.74	U	ND	ND	Y	0.00	0.00
0.66	2.80	1.09	4.66	U	ND	ND	Y	0.00	0.00
0.44	4.52	1.09	11.30	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.87	6.00	2.18	15.00	U	ND	ND	Y	0.00	0.00
0.87	5.27	2.62	15.82	U	ND	ND	Y	0.00	0.00
0.87	4.47	2.62	13.41	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	6.99	34.39	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	5.09	2.62	15.27	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00

0.87	4.80	3.06	16.80	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.49	21.03	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.53	2.18	11.32	U	ND	ND	Y	0.00	0.00
0.87	5.26	2.18	13.14	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.06	18.40	U	ND	ND	Y	0.00	0.00
1.31	12.68	3.06	29.58	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
2.18	11.46	0.44	2.29	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
1.09	11.66	1.31	13.99	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 15
Sample ID: T-415

Can Factor: 1.31
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**15**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.31
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|\left|\frac{(Cistdi)}{(Aistdi)}\right|_i$ Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}\frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000}{(SV)}$ (CDF)

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	21461	20.0	11638761	0.188	0.82	1.41
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11638761	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11638761	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	35691	20.0	11638761	0.262	1.14	2.37
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11638761	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11638761	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11638761	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11638761	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11638761	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11638761	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11638761	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11638761	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	62300	20.0	11638761	0.527	2.30	5.47
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11638761	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11638761	0.000	0.00	0.00
17	Methyl Iodide	PFB	TRG	142.9	0.700	0	20.0	11638761	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11638761	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11638761	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11638761	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11638761	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11638761	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11638761	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11638761	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11638761	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11638761	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11638761	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11638761	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11638761	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11638761	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11638761	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11638761	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11638761	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11638761	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11638761	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11638761	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11638761	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11638761	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11638761	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11638761	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11638761	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12314089	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12314089	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12314089	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12314089	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	52204	20.0	12314089	0.107	0.47	1.49
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12314089	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12314089	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12314089	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12314089	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12314089	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12314089	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12314089	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12314089	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12314089	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12314089	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12314089	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12314089	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	56630	20.0	12314089	0.082	0.36	1.36
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12314089	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12314089	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12314089	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12314089	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12314089	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12314089	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12314089	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12314089	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12314089	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18304577	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18304577	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	34242	20.0	18304577	0.025	0.11	0.48
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	36035	20.0	18304577	0.032	0.14	0.61
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18304577	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	49417	20.0	18304577	0.055	0.24	1.03
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18304577	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	41653	20.0	18304577	0.034	0.15	0.65
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18304577	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18304577	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18304577	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18304577	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18304577	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	163014	20.0	18304577	0.096	0.42	2.06
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	92455	20.0	18304577	0.053	0.23	1.13
87	Decane	d5CB	TRG	142.3	1.250	34562	20.0	18304577	0.030	0.13	0.77
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18304577	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	130441	20.0	18304577	0.093	0.41	2.01
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18304577	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18304577	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18304577	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	103375	20.0	18304577	0.048	0.21	1.15
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18304577	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18304577	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18304577	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18304577	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18304577	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18304577	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18304577	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18304577	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18304577	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11638761	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12314089	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18304577	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8525807	10.0		11.662	116.62	117

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443515A.D
Acq Time : 11 Dec 124 7:00 pm
Sample : T-415
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 11:59 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	11638761	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.73	114	12314089	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.24	117	18304577	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	8525807	11.66	ppbV		116.62
Target Compounds							Qvalue
2) Propylene	4.33	42	21461	0.19	ppbV		91
5) Chloromethane	4.65	50	35691	0.26	ppbV		97
14) Acetone	6.31	58	62300	0.53	ppbV	#	1
47) Benzene	10.44	78	52204	0.11	ppbV	m	71
61) Toluene	13.21	91	56630	0.08	ppbV		98
74) Ethylbenzene	15.57	91	34242	0.03	ppbV		96
75) m,p-Xylenes	15.74	91	36035	0.03	ppbV	#	85
77) Styrene	16.28	104	49417	0.06	ppbV	#	86
79) o-Xylene	16.37	91	41653	0.03	ppbV	#	70
85) 4-Ethyltoluene	17.89	105	163014	0.10	ppbV	m	85
86) 1,3,5-Trimethylbenzene	17.97	105	92455	0.05	ppbV	m	81
87) Decane	18.26	57	34562	0.03	ppbV	#	82
89) 1,2,4-Trimethylbenzene	18.59	105	130441	0.09	ppbV	#	88
93) Isopropyltoluene	19.17	119	103375	0.05	ppbV	m	90

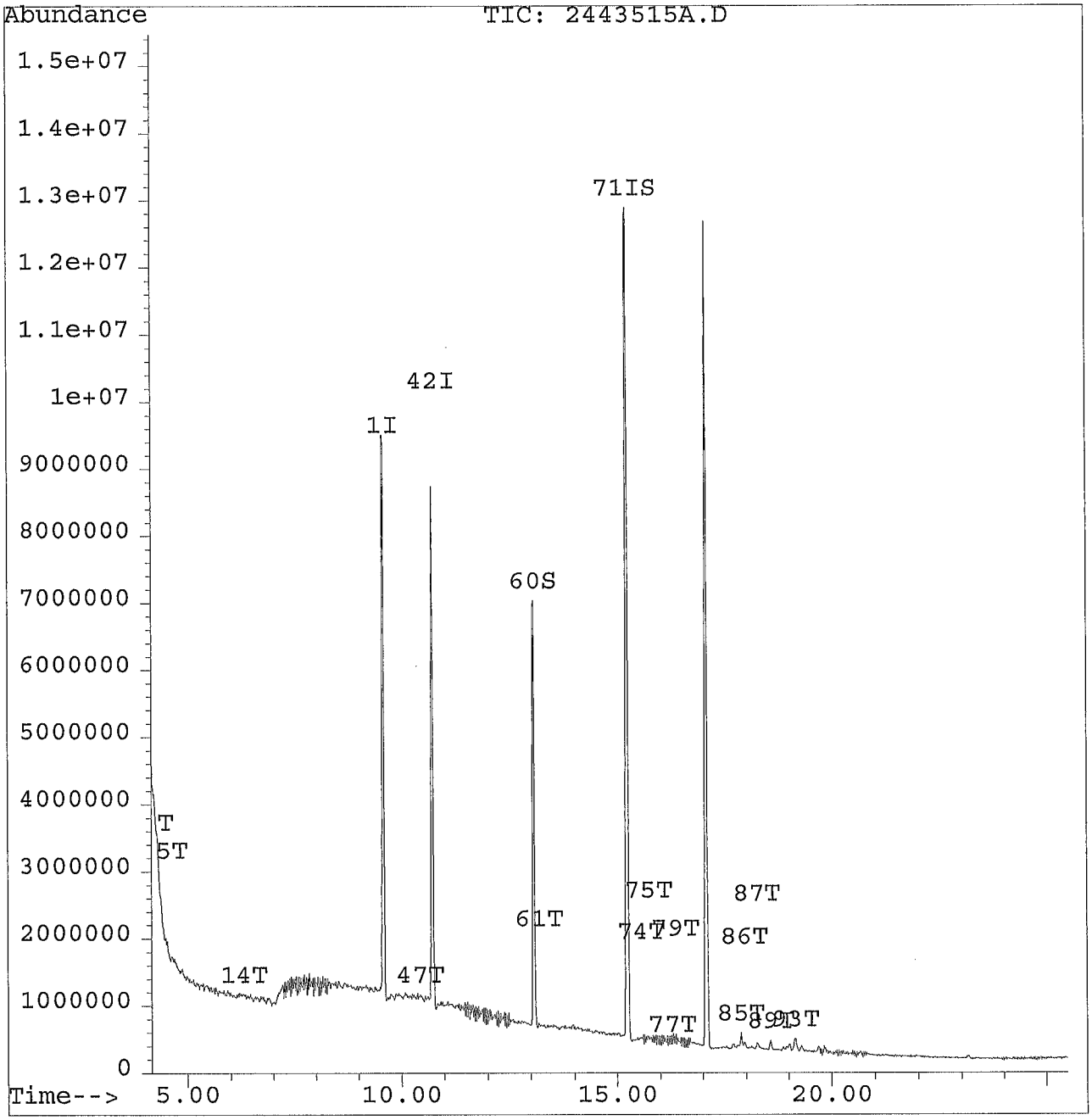
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443515A.D
Acq Time : 11 Dec 124 7:00 pm
Sample : T-415
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 11:59 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443515A.D
Acq Time : 11 Dec 124 7:00 pm Operator: LR
Sample : T-415 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.08	18.03 ppbV	37771677	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	91
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	90
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 16

Client ID T-416

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 16**

File Name: 2443516A.D **Date Sampled:** 11/19/24 **Time:** 13:24
Description: T-416 **Date Analyzed:** 12/11/24 **Time:** 19:38
Canister: 659 **Can Dilution Factor:** 1.42
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.47	1.18	0.83	0.82	2.04	1.43	J
75-71-8	Dichlorodifluoromethane	0.71	1.18	ND	3.52	5.86	ND	
67-56-1	Methanol	2.37	2.84	ND	3.10	3.72	ND	
74-87-3	Chloromethane	0.71	1.18	1.98	1.47	2.45	4.10	
76-14-2	1,2-Dichlorotetrafluoroethane	0.47	1.18	ND	3.31	8.28	ND	
75-01-4	Vinyl chloride	0.24	1.18	ND	0.61	3.03	ND	
106-99-0	1,3-Butadiene	0.24	1.18	ND	0.53	2.62	ND	
74-83-9	Bromomethane	0.47	1.18	ND	1.84	4.60	ND	
75-00-3	Chloroethane	0.47	1.18	ND	1.25	3.13	ND	
64-17-5	Ethanol	2.37	15.19	ND	4.47	28.69	ND	
107-02-8	Acrolein	0.47	1.42	ND	1.09	3.26	ND	
75-69-4	Trichlorofluoromethane	0.47	1.18	ND	2.66	6.66	ND	
67-64-1	Acetone	2.37	2.84	ND	5.63	6.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.95	5.92	ND	2.33	14.56	ND	
75-65-0	t-Butyl alcohol	0.47	4.73	ND	1.44	14.36	ND	
4227-95-6	Methyl iodide	0.47	1.42	ND	2.77	8.31	ND	
75-35-4	1,1-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	
107-13-1	Acrylonitrile	0.95	1.42	ND	2.06	3.09	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.24	1.18	ND	1.82	9.08	ND	
107-05-1	Allyl chloride	0.24	4.73	ND	0.74	14.83	ND	
75-09-2	Methylene chloride	0.24	1.18	ND	0.82	4.11	ND	
75-15-0	Carbon disulfide	0.47	1.18	ND	1.48	3.69	ND	
156-60-5	trans-1,2-Dichloroethene	0.24	0.95	ND	0.94	3.76	ND	
1634-04-4	Methyl tert butyl ether	0.47	0.95	ND	1.71	3.42	ND	
107-12-0	Propionitrile	1.18	1.89	ND	2.67	4.27	ND	
75-34-3	1,1-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
637-92-3	Ethyl tert butyl ether	0.47	1.18	ND	1.98	4.95	ND	
108-05-4	Vinyl acetate	0.24	4.73	ND	0.83	16.69	ND	
78-93-3	2-Butanone (MEK)	0.47	1.42	ND	1.40	4.19	ND	
108-20-3	Diisopropyl ether	0.47	2.84	ND	1.98	11.89	ND	
110-54-3	Hexane	0.47	1.18	ND	1.67	4.18	ND	
126-98-7	Methacrylonitrile	0.47	1.18	ND	1.30	3.25	ND	
141-78-6	Ethyl acetate	0.47	1.18	ND	1.71	4.27	ND	
74-97-5	Bromochloromethane	0.24	1.18	ND	1.25	6.27	ND	
96-33-3	Methyl acrylate	0.47	2.37	ND	1.67	8.35	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.24	1.42	ND	0.70	4.19	ND	
78-83-1	Isobutyl alcohol	0.95	3.79	ND	2.87	11.49	ND	
156-59-2	cis-1,2-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	
594-20-7	2,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
67-66-3	Chloroform	0.24	1.18	ND	1.16	5.79	ND	
71-55-6	1,1,1-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
107-06-2	1,2-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
563-58-6	1,1-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
110-82-7	Cyclohexane	0.24	1.18	ND	0.82	4.08	ND	
71-43-2	Benzene	1.66	2.37	ND	5.30	7.57	ND	
56-23-5	Carbon tetrachloride	0.24	1.18	ND	1.49	7.45	ND	
994-05-8	t-Amyl methyl ether	0.47	2.37	ND	1.98	9.91	ND	
540-84-1	2,2,4-Trimethylpentane	0.24	1.18	ND	1.11	5.53	ND	
142-82-5	n-Heptane	0.47	1.18	ND	1.94	4.86	ND	
78-87-5	1,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
123-91-1	1,4 Dioxane	0.47	2.37	ND	1.71	8.54	ND	
74-95-3	Dibromomethane	0.24	1.18	ND	1.68	8.42	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.18	ND	0.64	6.37	ND	
75-27-4	Bromodichloromethane	0.24	1.18	ND	1.59	7.94	ND	
80-62-6	Methyl methacrylate	0.47	1.18	ND	1.94	4.85	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.47	3.79	ND	1.94	15.54	ND	
10061-01-5	cis-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
108-88-3	Toluene	0.95	1.18	ND	3.57	4.46	ND	
10061-02-6	trans-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
79-00-5	1,1,2-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
97-63-2	Ethyl methacrylate	0.47	1.18	ND	2.21	5.53	ND	
591-78-6	2-Hexanone	0.47	3.79	ND	1.94	15.54	ND	
142-28-9	1,3-Dichloropropane	0.24	3.31	ND	1.10	15.33	ND	
111-65-9	Octane	0.47	1.18	ND	2.21	5.53	ND	
124-48-1	Dibromochloromethane	0.47	1.18	ND	4.04	10.09	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.47	1.18	ND	3.64	9.11	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.18	ND	0.80	8.04	ND	
108-90-7	Chlorobenzene	0.47	1.18	ND	2.18	5.46	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.47	1.18	ND	3.25	8.13	ND	
100-41-4	Ethylbenzene	0.47	1.18	ND	2.06	5.15	ND	
1330-20-7	m,p-Xylenes	0.47	1.18	ND	2.06	5.15	ND	
111-84-2	Nonane	0.47	1.18	ND	2.49	6.22	ND	
100-42-5	Styrene	0.71	1.18	ND	3.03	5.05	ND	
75-25-2	Bromoform	0.47	1.18	ND	4.90	12.25	ND	
95-47-6	o-Xylene	0.47	1.18	ND	2.06	5.15	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.95	2.37	ND	6.51	16.26	ND	
96-18-4	1,2,3-Trichloropropane	0.95	2.84	ND	5.71	17.14	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.95	2.84	ND	4.85	14.54	ND	
103-65-1	n-Propylbenzene	0.95	3.31	ND	4.66	16.31	ND	
98-82-8	Isopropylbenzene	0.95	3.31	ND	4.66	16.31	ND	
622-96-8	4-Ethyltoluene	0.95	7.57	ND	4.66	37.28	ND	
108-67-8	1,3,5-Trimethylbenzene	0.95	4.26	ND	4.66	20.97	ND	
124-18-5	Decane	0.95	2.84	ND	5.52	16.55	ND	
98-06-6	tert-butyl benzene	0.95	2.84	ND	5.20	15.61	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.95	4.26	ND	4.66	20.97	ND	
538-93-2	i-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
135-98-8	sec-butylbenzene	0.95	3.31	ND	5.20	18.21	ND	
541-73-1	1,3-Dichlorobenzene	0.95	3.79	ND	5.70	22.80	ND	
99-87-6	Isopropyltoluene	0.95	2.84	ND	5.20	15.61	ND	
100-44-7	Benzyl chloride	0.95	2.37	ND	4.91	12.27	ND	
106-46-7	1,4-Dichlorobenzene	0.95	2.37	ND	5.70	14.25	ND	
104-51-8	n-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
95-50-1	1,2-Dichlorobenzene	0.95	3.31	ND	5.70	19.95	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.42	3.31	ND	13.74	32.07	ND	
120-82-1	1,2,4-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
91-20-3	Naphthalene	2.37	0.47	ND	12.43	2.49	ND	
87-61-6	1,2,3-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
87-68-3	Hexachlorobutadiene	1.18	1.42	ND	12.64	15.17	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 16
Canister: 659
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/11/24 **Time:** 19:38
Can Dilution Factor: 1.42
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.31	7.10	ND	13.57	29.08	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**16**		
File Name:	2443516A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**13:24**
Sample ID:	T-416	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**19:38**
Anal Date:	11 Dec 124 7:38 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**659**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.42**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.176	4.41	42.00	19634
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.419	4.77	50.00	55748
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.422	6.42	58.00	48820
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.122	10.70	78.00	57184
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.071	13.50	91.00	46880
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.023	15.90	106	31464
1330-20-7	m,p-Xylenes	75	TRG	0.031	16.06	91.00	34490
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.039	16.61	104.00	35878
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.025	16.36	91.00	30382
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.083	18.23	105.00	142558
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.058	18.31	105.00	103450
124-18-5	Decane	87	TRG	0.040	18.60	57.00	46547
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.083	18.95	105.00	117342
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.41	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11381661**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11823987**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18581405**
2037-26-5	Toluene-d8	60	SURR	12.076	13.40	98.00	**8477075**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 16
File Name: 2443516A.D
Run Method: A1563_L.M
Can Factor: 1.42
Air Volume: 300.0 ml
Can/Tube Number: 659
Dilution Factor: 0.4260
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4260
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.18	0.83	1.43	0.83	1.43	1.43	1.43	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.42	1.98	4.10	1.98	4.10	4.10	4.10	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.42	2.00	4.76	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.12	0.58	1.84	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.07	0.34	1.27	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.02	0.11	0.47	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.03	0.14	0.63	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.04	0.19	0.80	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.02	0.12	0.51	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.08	0.39	1.92	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.06	0.27	1.35	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.04	0.19	1.11	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.08	0.39	1.93	ND	ND	0	**0.200**	**0.900**
I-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.08	121	121	121	121	121	121	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.47	0.82	1.18	2.04	J	J		=		Y	0.83	1.43
0.71	3.52	1.18	5.86	U	ND		ND		Y	0.00	0.00
2.37	3.10	2.84	3.72	U	ND		ND		Y	0.00	0.00
0.71	1.47	1.18	2.45				=		Y	1.98	4.10
0.47	3.31	1.18	8.28	U	ND		ND		Y	0.00	0.00
0.24	0.61	1.18	3.03	U	ND		ND		Y	0.00	0.00
0.24	0.53	1.18	2.62	U	ND		ND		Y	0.00	0.00
0.47	1.84	1.18	4.60	U	ND		ND		Y	0.00	0.00
0.47	1.25	1.18	3.13	U	ND		ND		Y	0.00	0.00
2.37	4.47	15.19	28.69	U	ND		ND		Y	0.00	0.00
0.47	1.09	1.42	3.26	U	ND		ND		Y	0.00	0.00
0.47	2.66	1.18	6.66	U	ND		ND		Y	0.00	0.00
2.37	5.63	2.84	6.76	U	ND		ND		Y	0.00	0.00
0.95	2.33	5.92	14.56	U	ND		ND		Y	0.00	0.00
0.47	1.44	4.73	14.36	U	ND		ND		Y	0.00	0.00
0.47	2.77	1.42	8.31	U	ND		ND		Y	0.00	0.00
0.24	0.94	1.18	4.70	U	ND		ND		Y	0.00	0.00
0.95	2.06	1.42	3.09	U	ND		ND		Y	0.00	0.00
0.24	1.82	1.18	9.08	U	ND		ND		Y	0.00	0.00
0.24	0.74	4.73	14.83	U	ND		ND		Y	0.00	0.00
0.24	0.82	1.18	4.11	U	ND		ND		Y	0.00	0.00
0.47	1.48	1.18	3.69	U	ND		ND		Y	0.00	0.00
0.24	0.94	0.95	3.76	U	ND		ND		Y	0.00	0.00
0.47	1.71	0.95	3.42	U	ND		ND		Y	0.00	0.00
1.18	2.67	1.89	4.27	U	ND		ND		Y	0.00	0.00
0.24	0.96	1.18	4.80	U	ND		ND		Y	0.00	0.00
0.47	1.98	1.18	4.95	U	ND		ND		Y	0.00	0.00
0.24	0.83	4.73	16.69	U	ND		ND		Y	0.00	0.00
0.47	1.40	1.42	4.19	U	ND		ND		Y	0.00	0.00
0.47	1.98	2.84	11.89	U	ND		ND		Y	0.00	0.00
0.47	1.67	1.18	4.18	U	ND		ND		Y	0.00	0.00
0.47	1.30	1.18	3.25	U	ND		ND		Y	0.00	0.00
0.47	1.71	1.18	4.27	U	ND		ND		Y	0.00	0.00
0.24	1.25	1.18	6.27	U	ND		ND		Y	0.00	0.00

0.47	1.67	2.37	8.35	U	ND	ND	Y	0.00	0.00
0.24	0.70	1.42	4.19	U	ND	ND	Y	0.00	0.00
0.95	2.87	3.79	11.49	U	ND	ND	Y	0.00	0.00
0.24	0.94	1.18	4.70	U	ND	ND	Y	0.00	0.00
0.24	1.10	1.18	5.48	U	ND	ND	Y	0.00	0.00
0.24	1.16	1.18	5.79	U	ND	ND	Y	0.00	0.00
0.24	1.29	1.18	6.47	U	ND	ND	Y	0.00	0.00
0.24	0.96	1.18	4.80	U	ND	ND	Y	0.00	0.00
0.24	1.08	1.18	5.38	U	ND	ND	Y	0.00	0.00
0.24	0.82	1.18	4.08	U	ND	ND	Y	0.00	0.00
1.66	5.30	2.37	7.57	U	ND	ND	Y	0.00	0.00
0.24	1.49	1.18	7.45	U	ND	ND	Y	0.00	0.00
0.47	1.98	2.37	9.91	U	ND	ND	Y	0.00	0.00
0.24	1.11	1.18	5.53	U	ND	ND	Y	0.00	0.00
0.47	1.94	1.18	4.86	U	ND	ND	Y	0.00	0.00
0.24	1.10	1.18	5.48	U	ND	ND	Y	0.00	0.00
0.47	1.71	2.37	8.54	U	ND	ND	Y	0.00	0.00
0.24	1.68	1.18	8.42	U	ND	ND	Y	0.00	0.00
0.12	0.64	1.18	6.37	U	ND	ND	Y	0.00	0.00
0.24	1.59	1.18	7.94	U	ND	ND	Y	0.00	0.00
0.47	1.94	1.18	4.85	U	ND	ND	Y	0.00	0.00
0.47	1.94	3.79	15.54	U	ND	ND	Y	0.00	0.00
0.24	1.08	1.18	5.38	U	ND	ND	Y	0.00	0.00
0.95	3.57	1.18	4.46	U	ND	ND	Y	0.00	0.00
0.24	1.08	1.18	5.38	U	ND	ND	Y	0.00	0.00
0.24	1.29	1.18	6.47	U	ND	ND	Y	0.00	0.00
0.47	2.21	1.18	5.53	U	ND	ND	Y	0.00	0.00
0.47	1.94	3.79	15.54	U	ND	ND	Y	0.00	0.00
0.24	1.10	3.31	15.33	U	ND	ND	Y	0.00	0.00
0.47	2.21	1.18	5.53	U	ND	ND	Y	0.00	0.00
0.47	4.04	1.18	10.09	U	ND	ND	Y	0.00	0.00
0.47	3.64	1.18	9.11	U	ND	ND	Y	0.00	0.00
0.12	0.80	1.18	8.04	U	ND	ND	Y	0.00	0.00
0.47	2.18	1.18	5.46	U	ND	ND	Y	0.00	0.00
0.47	3.25	1.18	8.13	U	ND	ND	Y	0.00	0.00
0.47	2.06	1.18	5.15	U	ND	ND	Y	0.00	0.00
0.47	2.06	1.18	5.15	U	ND	ND	Y	0.00	0.00
0.47	2.49	1.18	6.22	U	ND	ND	Y	0.00	0.00
0.71	3.03	1.18	5.05	U	ND	ND	Y	0.00	0.00
0.47	4.90	1.18	12.25	U	ND	ND	Y	0.00	0.00
0.47	2.06	1.18	5.15	U	ND	ND	Y	0.00	0.00
0.95	6.51	2.37	16.26	U	ND	ND	Y	0.00	0.00
0.95	5.71	2.84	17.14	U	ND	ND	Y	0.00	0.00
0.95	4.85	2.84	14.54	U	ND	ND	Y	0.00	0.00
0.95	4.66	3.31	16.31	U	ND	ND	Y	0.00	0.00
0.95	4.66	3.31	16.31	U	ND	ND	Y	0.00	0.00
0.95	4.66	7.57	37.28	U	ND	ND	Y	0.00	0.00
0.95	4.66	4.26	20.97	U	ND	ND	Y	0.00	0.00
0.95	5.52	2.84	16.55	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00
0.95	4.66	4.26	20.97	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00

0.95	5.20	3.31	18.21	U	ND	ND	Y	0.00	0.00
0.95	5.70	3.79	22.80	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00
0.95	4.91	2.37	12.27	U	ND	ND	Y	0.00	0.00
0.95	5.70	2.37	14.25	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00
0.95	5.70	3.31	19.95	U	ND	ND	Y	0.00	0.00
1.42	13.74	3.31	32.07	U	ND	ND	Y	0.00	0.00
1.42	10.55	2.37	17.58	U	ND	ND	Y	0.00	0.00
2.37	12.43	0.47	2.49	U	ND	ND	Y	0.00	0.00
1.42	10.55	2.37	17.58	U	ND	ND	Y	0.00	0.00
1.18	12.64	1.42	15.17	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 16
Sample ID: T-416

Can Factor: 1.42
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**16**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.42
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}\right|_i$ Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	19634	20.0	11381661	0.176	0.83	1.43
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11381661	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11381661	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	55748	20.0	11381661	0.419	1.98	4.10
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11381661	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11381661	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11381661	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11381661	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11381661	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11381661	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11381661	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11381661	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	48820	20.0	11381661	0.422	2.00	4.76
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11381661	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11381661	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11381661	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11381661	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11381661	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11381661	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11381661	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11381661	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11381661	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11381661	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11381661	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11381661	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11381661	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11381661	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11381661	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11381661	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11381661	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11381661	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11381661	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11381661	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11381661	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11381661	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11381661	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11381661	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11381661	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11381661	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11381661	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11823987	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11823987	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11823987	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11823987	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	57184	20.0	11823987	0.122	0.58	1.84
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11823987	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	11823987	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11823987	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11823987	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11823987	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11823987	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11823987	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11823987	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11823987	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11823987	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11823987	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11823987	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	46880	20.0	11823987	0.071	0.34	1.27
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11823987	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11823987	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11823987	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11823987	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11823987	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11823987	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11823987	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11823987	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11823987	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18581405	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18581405	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	31464	20.0	18581405	0.023	0.11	0.47
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	34490	20.0	18581405	0.031	0.14	0.63
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18581405	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	35878	20.0	18581405	0.039	0.19	0.80
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18581405	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	30382	20.0	18581405	0.025	0.12	0.51
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18581405	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18581405	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18581405	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18581405	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18581405	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	142558	20.0	18581405	0.083	0.39	1.92
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	103450	20.0	18581405	0.058	0.27	1.35
87	Decane	d5CB	TRG	142.3	1.250	46547	20.0	18581405	0.040	0.19	1.11
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18581405	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	117342	20.0	18581405	0.083	0.39	1.93
90	I-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18581405	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18581405	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18581405	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	18581405	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18581405	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18581405	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18581405	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18581405	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18581405	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18581405	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18581405	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18581405	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18581405	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11381661	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11823987	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18581405	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8477075	10.0		12.076	120.76	121

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443516A.D
Acq Time : 11 Dec 124 7:38 pm
Sample : T-416
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 13:54 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	11381661	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.74	114	11823987	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	18581405	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	8477075	12.08	ppbV		120.76
Target Compounds							Qvalue
2) Propylene	4.33	42	19634	0.18	ppbV		82
5) Chloromethane	4.67	50	55748	0.42	ppbV	#	87
14) Acetone	6.31	58	48820	0.42	ppbV	#	1
47) Benzene	10.45	78	57184	0.12	ppbV	m	76
61) Toluene	13.21	91	46880	0.07	ppbV		88
74) Ethylbenzene	15.57	91	31464	0.02	ppbV		90
75) m,p-Xylenes	15.74	91	34490	0.03	ppbV	#	81
77) Styrene	16.29	104	35878	0.04	ppbV	#	80
79) o-Xylene	16.36	91	30382	0.02	ppbV	#	73
85) 4-Ethyltoluene	17.87	105	142558	0.08	ppbV	m	92
86) 1,3,5-Trimethylbenzene	17.96	105	103450	0.06	ppbV	m	76
87) Decane	18.27	57	46547	0.04	ppbV	#	76
89) 1,2,4-Trimethylbenzene	18.59	105	117342	0.08	ppbV	#	85

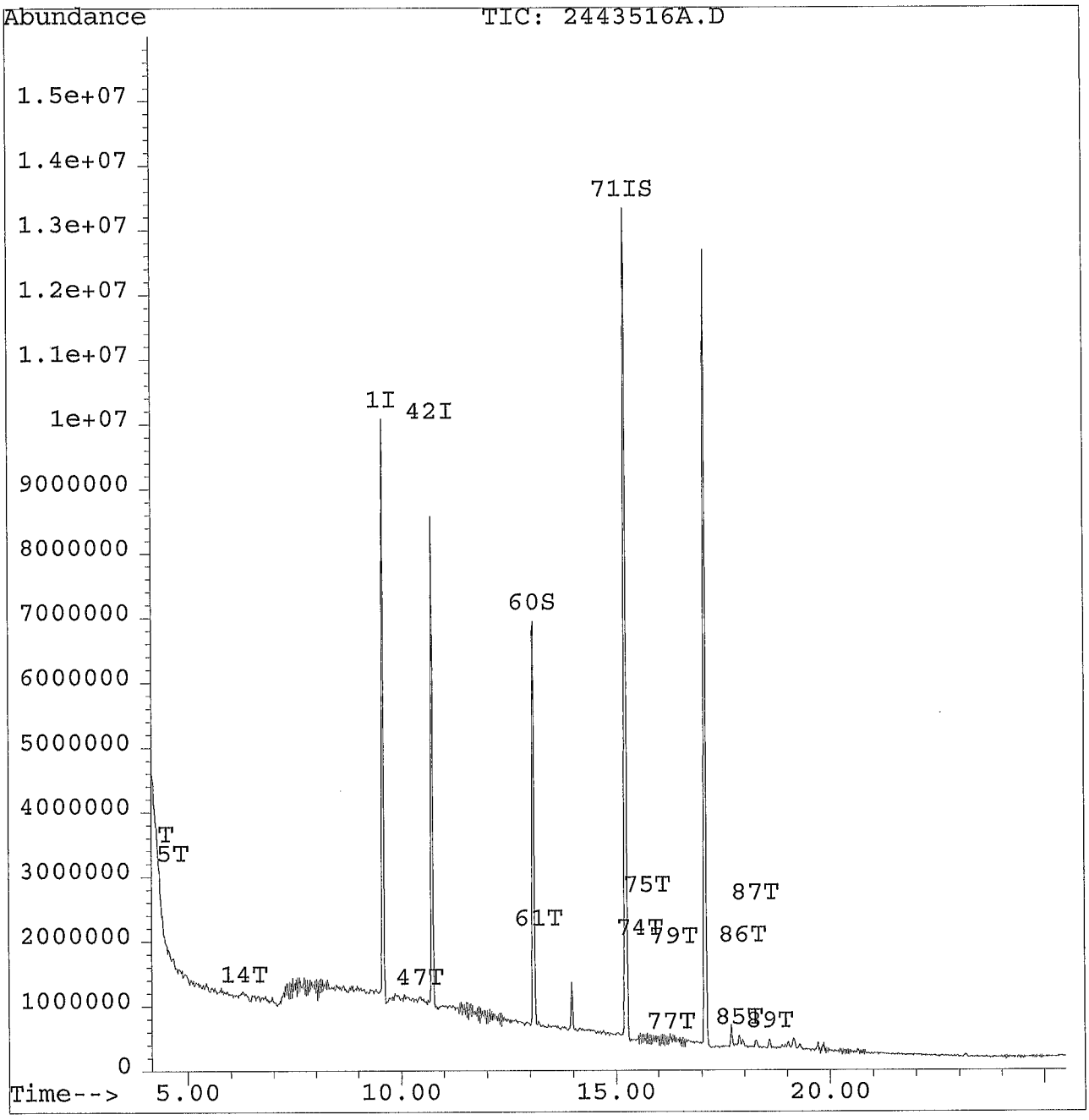
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443516A.D
Acq Time : 11 Dec 124 7:38 pm
Sample : T-416
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 13:54 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



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Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443516A.D
Acq Time : 11 Dec 124 7:38 pm
Sample : T-416
Misc : SCHMIDT, 300 ML

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	18.21 ppbV	39041154	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	90
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	83
4	4-(4-Fluorophenyl)pyrimidine	13873	068049-19-4	8
5	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 17

Client ID T-417

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 17**

File Name: 2443517A.D
Description: T-417
Canister: 899
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/11/24 **Time:** 20:16
Can Dilution Factor: 1.30
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.08	0.80	0.75	1.87	1.37	J
75-71-8	Dichlorodifluoromethane	0.65	1.08	ND	3.22	5.36	ND	
67-56-1	Methanol	2.17	2.60	ND	2.84	3.41	ND	
74-87-3	Chloromethane	0.65	1.08	1.52	1.34	2.24	3.13	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.08	ND	3.03	7.58	ND	
75-01-4	Vinyl chloride	0.22	1.08	ND	0.56	2.77	ND	
106-99-0	1,3-Butadiene	0.22	1.08	ND	0.48	2.40	ND	
74-83-9	Bromomethane	0.43	1.08	ND	1.68	4.21	ND	
75-00-3	Chloroethane	0.43	1.08	ND	1.14	2.86	ND	
64-17-5	Ethanol	2.17	13.91	ND	4.09	26.26	ND	
107-02-8	Acrolein	0.43	1.30	ND	1.00	2.99	ND	
75-69-4	Trichlorofluoromethane	0.43	1.08	ND	2.44	6.10	ND	
67-64-1	Acetone	2.17	2.60	ND	5.16	6.19	ND	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.42	ND	2.13	13.33	ND	
75-65-0	t-Butyl alcohol	0.43	4.33	ND	1.32	13.15	ND	
4227-95-6	Methyl iodide	0.43	1.30	ND	2.54	7.61	ND	
75-35-4	1,1-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	
107-13-1	Acrylonitrile	0.87	1.30	ND	1.88	2.83	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.08	ND	1.66	8.31	ND	
107-05-1	Allyl chloride	0.22	4.33	ND	0.68	13.58	ND	
75-09-2	Methylene chloride	0.22	1.08	ND	0.75	3.77	ND	
75-15-0	Carbon disulfide	0.43	1.08	ND	1.35	3.38	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.86	3.44	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.87	ND	1.56	3.13	ND	
107-12-0	Propionitrile	1.08	1.73	ND	2.44	3.91	ND	
75-34-3	1,1-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.08	ND	1.81	4.53	ND	
108-05-4	Vinyl acetate	0.22	4.33	ND	0.76	15.28	ND	
78-93-3	2-Butanone (MEK)	0.43	1.30	ND	1.28	3.84	ND	
108-20-3	Diisopropyl ether	0.43	2.60	ND	1.81	10.88	ND	
110-54-3	Hexane	0.43	1.08	ND	1.53	3.82	ND	
126-98-7	Methacrylonitrile	0.43	1.08	ND	1.19	2.98	ND	
141-78-6	Ethyl acetate	0.43	1.08	ND	1.56	3.91	ND	
74-97-5	Bromochloromethane	0.22	1.08	ND	1.15	5.74	ND	
96-33-3	Methyl acrylate	0.43	2.17	ND	1.53	7.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.30	ND	0.64	3.84	ND	
78-83-1	Isobutyl alcohol	0.87	3.47	ND	2.63	10.52	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	
594-20-7	2,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
67-66-3	Chloroform	0.22	1.08	ND	1.06	5.30	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
107-06-2	1,2-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
563-58-6	1,1-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
110-82-7	Cyclohexane	0.22	1.08	ND	0.75	3.74	ND	
71-43-2	Benzene	1.52	2.17	ND	4.85	6.93	ND	
56-23-5	Carbon tetrachloride	0.22	1.08	ND	1.36	6.82	ND	
994-05-8	t-Amyl methyl ether	0.43	2.17	ND	1.81	9.07	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.08	ND	1.01	5.07	ND	
142-82-5	n-Heptane	0.43	1.08	ND	1.78	4.45	ND	
78-87-5	1,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
123-91-1	1,4 Dioxane	0.43	2.17	ND	1.56	7.82	ND	
74-95-3	Dibromomethane	0.22	1.08	ND	1.54	7.71	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.08	ND	0.58	5.83	ND	
75-27-4	Bromodichloromethane	0.22	1.08	ND	1.45	7.27	ND	
80-62-6	Methyl methacrylate	0.43	1.08	ND	1.78	4.44	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.47	ND	1.78	14.23	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
108-88-3	Toluene	0.87	1.08	ND	3.27	4.09	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
97-63-2	Ethyl methacrylate	0.43	1.08	ND	2.03	5.07	ND	
591-78-6	2-Hexanone	0.43	3.47	ND	1.78	14.23	ND	
142-28-9	1,3-Dichloropropane	0.22	3.03	ND	1.00	14.04	ND	
111-65-9	Octane	0.43	1.08	ND	2.03	5.07	ND	
124-48-1	Dibromochloromethane	0.43	1.08	ND	3.70	9.24	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.08	ND	3.33	8.34	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.08	ND	0.74	7.36	ND	
108-90-7	Chlorobenzene	0.43	1.08	ND	2.00	5.00	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.08	ND	2.98	7.44	ND	
100-41-4	Ethylbenzene	0.43	1.08	ND	1.88	4.71	ND	
1330-20-7	m,p-Xylenes	0.43	1.08	ND	1.88	4.71	ND	
111-84-2	Nonane	0.43	1.08	ND	2.28	5.69	ND	
100-42-5	Styrene	0.65	1.08	ND	2.77	4.62	ND	
75-25-2	Bromoform	0.43	1.08	ND	4.48	11.21	ND	
95-47-6	o-Xylene	0.43	1.08	ND	1.88	4.71	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.17	ND	5.96	14.89	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.60	ND	5.23	15.70	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.60	ND	4.44	13.31	ND	
103-65-1	n-Propylbenzene	0.87	3.03	ND	4.27	14.93	ND	
98-82-8	Isopropylbenzene	0.87	3.03	ND	4.27	14.93	ND	
622-96-8	4-Ethyltoluene	0.87	6.93	ND	4.27	34.13	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
124-18-5	Decane	0.87	2.60	ND	5.05	15.15	ND	
98-06-6	tert-butyl benzene	0.87	2.60	ND	4.76	14.29	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
538-93-2	i-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
135-98-8	sec-butylbenzene	0.87	3.03	ND	4.76	16.67	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.47	ND	5.22	20.87	ND	
99-87-6	Isopropyltoluene	0.87	2.60	ND	4.76	14.29	ND	
100-44-7	Benzyl chloride	0.87	2.17	ND	4.49	11.23	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.17	ND	5.22	13.04	ND	
104-51-8	n-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.03	ND	5.22	18.26	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.30	3.03	ND	12.58	29.36	ND	
120-82-1	1,2,4-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
91-20-3	Naphthalene	2.17	0.43	ND	11.38	2.28	ND	
87-61-6	1,2,3-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
87-68-3	Hexachlorobutadiene	1.08	1.30	ND	11.57	13.89	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 17

File Name: 224435
Descriptio 17
Canister: 899
QC_Batch: 121124-MA1

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/11/24 **Time:** 20:16
Can Dilution Factor: 1.30
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.03	6.50	ND	12.42	26.62	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**17**		
File Name:	2443517A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**13:29**
Sample ID:	T-417	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**20:16**
Anal Date:	11 Dec 124 8:16 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**899**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.30**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.184	4.41	42.00	20499
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.350	4.77	50.00	46445
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.378	6.42	58.00	43635
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.106	10.70	78.00	50496
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.071	13.50	91.00	47184
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.018	15.90	106	24144
1330-20-7	m,p-Xylenes	75	TRG	0.019	16.06	91.00	21493
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.032	16.61	104.00	28598
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.019	16.37	91.00	23009
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.056	18.23	105.00	95241
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.039	18.31	105.00	68022
124-18-5	Decane	87	TRG	0.016	18.60	57.00	18826
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.051	18.95	105.00	71890
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.023	19.53	119.00	49507
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.030	20.20	91.00	61276
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11351441**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11980599**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18369069**
2037-26-5	Toluene-d8	60	SURR	11.966	13.40	98.00	**8511176**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 17
File Name: 2443517A.D
Run Method: A1563_L.M
Can Factor: 1.30
Air Volume: 300.0 ml
Can/Tube Number: 899
Dilution Factor: 0.3900
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3900
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.18	0.80	1.37	0.80	1.37	1.37	1.37	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.35	1.52	3.13	1.52	3.13	3.13	3.13	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.38	1.64	3.90	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl Iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.11	0.46	1.47	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.07	0.31	1.15	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.02	0.08	0.33	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.02	0.08	0.36	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.03	0.14	0.59	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.02	0.08	0.36	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.06	0.24	1.19	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.04	0.17	0.82	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.02	0.07	0.41	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.05	0.22	1.10	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.02	0.10	0.55	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.03	0.13	0.71	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.97	120	120	120	120	120	120	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.75	1.08	1.87	J	J		=		Y	0.80	1.37
0.65	3.22	1.08	5.36	U	ND		ND		Y	0.00	0.00
2.17	2.84	2.60	3.41	U	ND		ND		Y	0.00	0.00
0.65	1.34	1.08	2.24				=		Y	1.52	3.13
0.43	3.03	1.08	7.58	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.08	2.77	U	ND		ND		Y	0.00	0.00
0.22	0.48	1.08	2.40	U	ND		ND		Y	0.00	0.00
0.43	1.68	1.08	4.21	U	ND		ND		Y	0.00	0.00
0.43	1.14	1.08	2.86	U	ND		ND		Y	0.00	0.00
2.17	4.09	13.91	26.26	U	ND		ND		Y	0.00	0.00
0.43	1.00	1.30	2.99	U	ND		ND		Y	0.00	0.00
0.43	2.44	1.08	6.10	U	ND		ND		Y	0.00	0.00
2.17	5.16	2.60	6.19	U	ND		ND		Y	0.00	0.00
0.87	2.13	5.42	13.33	U	ND		ND		Y	0.00	0.00
0.43	1.32	4.33	13.15	U	ND		ND		Y	0.00	0.00
0.43	2.54	1.30	7.61	U	ND		ND		Y	0.00	0.00
0.22	0.86	1.08	4.30	U	ND		ND		Y	0.00	0.00
0.87	1.88	1.30	2.83	U	ND		ND		Y	0.00	0.00
0.22	1.66	1.08	8.31	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.33	13.58	U	ND		ND		Y	0.00	0.00
0.22	0.75	1.08	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.35	1.08	3.38	U	ND		ND		Y	0.00	0.00
0.22	0.86	0.87	3.44	U	ND		ND		Y	0.00	0.00
0.43	1.56	0.87	3.13	U	ND		ND		Y	0.00	0.00
1.08	2.44	1.73	3.91	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.08	4.39	U	ND		ND		Y	0.00	0.00
0.43	1.81	1.08	4.53	U	ND		ND		Y	0.00	0.00
0.22	0.76	4.33	15.28	U	ND		ND		Y	0.00	0.00
0.43	1.28	1.30	3.84	U	ND		ND		Y	0.00	0.00
0.43	1.81	2.60	10.88	U	ND		ND		Y	0.00	0.00
0.43	1.53	1.08	3.82	U	ND		ND		Y	0.00	0.00
0.43	1.19	1.08	2.98	U	ND		ND		Y	0.00	0.00
0.43	1.56	1.08	3.91	U	ND		ND		Y	0.00	0.00
0.22	1.15	1.08	5.74	U	ND		ND		Y	0.00	0.00

0.43	1.53	2.17	7.64	U	ND	ND	Y	0.00	0.00
0.22	0.64	1.30	3.84	U	ND	ND	Y	0.00	0.00
0.87	2.63	3.47	10.52	U	ND	ND	Y	0.00	0.00
0.22	0.86	1.08	4.30	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.08	5.01	U	ND	ND	Y	0.00	0.00
0.22	1.06	1.08	5.30	U	ND	ND	Y	0.00	0.00
0.22	1.18	1.08	5.92	U	ND	ND	Y	0.00	0.00
0.22	0.88	1.08	4.39	U	ND	ND	Y	0.00	0.00
0.22	0.98	1.08	4.92	U	ND	ND	Y	0.00	0.00
0.22	0.75	1.08	3.74	U	ND	ND	Y	0.00	0.00
1.52	4.85	2.17	6.93	U	ND	ND	Y	0.00	0.00
0.22	1.36	1.08	6.82	U	ND	ND	Y	0.00	0.00
0.43	1.81	2.17	9.07	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.08	5.07	U	ND	ND	Y	0.00	0.00
0.43	1.78	1.08	4.45	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.08	5.01	U	ND	ND	Y	0.00	0.00
0.43	1.56	2.17	7.82	U	ND	ND	Y	0.00	0.00
0.22	1.54	1.08	7.71	U	ND	ND	Y	0.00	0.00
0.11	0.58	1.08	5.83	U	ND	ND	Y	0.00	0.00
0.22	1.45	1.08	7.27	U	ND	ND	Y	0.00	0.00
0.43	1.78	1.08	4.44	U	ND	ND	Y	0.00	0.00
0.43	1.78	3.47	14.23	U	ND	ND	Y	0.00	0.00
0.22	0.98	1.08	4.92	U	ND	ND	Y	0.00	0.00
0.87	3.27	1.08	4.09	U	ND	ND	Y	0.00	0.00
0.22	0.98	1.08	4.92	U	ND	ND	Y	0.00	0.00
0.22	1.18	1.08	5.92	U	ND	ND	Y	0.00	0.00
0.43	2.03	1.08	5.07	U	ND	ND	Y	0.00	0.00
0.43	1.78	3.47	14.23	U	ND	ND	Y	0.00	0.00
0.22	1.00	3.03	14.04	U	ND	ND	Y	0.00	0.00
0.43	2.03	1.08	5.07	U	ND	ND	Y	0.00	0.00
0.43	3.70	1.08	9.24	U	ND	ND	Y	0.00	0.00
0.43	3.33	1.08	8.34	U	ND	ND	Y	0.00	0.00
0.11	0.74	1.08	7.36	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.08	5.00	U	ND	ND	Y	0.00	0.00
0.43	2.98	1.08	7.44	U	ND	ND	Y	0.00	0.00
0.43	1.88	1.08	4.71	U	ND	ND	Y	0.00	0.00
0.43	1.88	1.08	4.71	U	ND	ND	Y	0.00	0.00
0.43	2.28	1.08	5.69	U	ND	ND	Y	0.00	0.00
0.65	2.77	1.08	4.62	U	ND	ND	Y	0.00	0.00
0.43	4.48	1.08	11.21	U	ND	ND	Y	0.00	0.00
0.43	1.88	1.08	4.71	U	ND	ND	Y	0.00	0.00
0.87	5.96	2.17	14.89	U	ND	ND	Y	0.00	0.00
0.87	5.23	2.60	15.70	U	ND	ND	Y	0.00	0.00
0.87	4.44	2.60	13.31	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.03	14.93	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.03	14.93	U	ND	ND	Y	0.00	0.00
0.87	4.27	6.93	34.13	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.90	19.20	U	ND	ND	Y	0.00	0.00
0.87	5.05	2.60	15.15	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.90	19.20	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00

0.87	4.76	3.03	16.67	U	ND	ND	Y	0.00	0.00
0.87	5.22	3.47	20.87	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00
0.87	4.49	2.17	11.23	U	ND	ND	Y	0.00	0.00
0.87	5.22	2.17	13.04	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00
0.87	5.22	3.03	18.26	U	ND	ND	Y	0.00	0.00
1.30	12.58	3.03	29.36	U	ND	ND	Y	0.00	0.00
1.30	9.66	2.17	16.10	U	ND	ND	Y	0.00	0.00
2.17	11.38	0.43	2.28	U	ND	ND	Y	0.00	0.00
1.30	9.66	2.17	16.10	U	ND	ND	Y	0.00	0.00
1.08	11.57	1.30	13.89	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 17
Sample ID: T-417

Can Factor: 1.30
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**17**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.30
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	20499	20.0	11351441	0.184	0.80	1.37
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11351441	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11351441	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	46445	20.0	11351441	0.350	1.52	3.13
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11351441	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11351441	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11351441	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11351441	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11351441	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11351441	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11351441	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11351441	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	43635	20.0	11351441	0.378	1.64	3.90
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11351441	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11351441	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11351441	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11351441	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11351441	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11351441	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11351441	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11351441	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11351441	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11351441	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11351441	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11351441	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11351441	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11351441	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11351441	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11351441	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11351441	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11351441	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11351441	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11351441	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11351441	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11351441	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11351441	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11351441	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11351441	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11351441	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11351441	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11980599	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11980599	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11980599	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11980599	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	50496	20.0	11980599	0.106	0.46	1.47
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11980599	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	11980599	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11980599	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11980599	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11980599	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11980599	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11980599	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11980599	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11980599	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11980599	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11980599	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11980599	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	47184	20.0	11980599	0.071	0.31	1.15
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11980599	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11980599	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11980599	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11980599	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11980599	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11980599	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11980599	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11980599	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11980599	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18369069	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18369069	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	24144	20.0	18369069	0.018	0.08	0.33
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	21493	20.0	18369069	0.019	0.08	0.36
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18369069	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	28598	20.0	18369069	0.032	0.14	0.59
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18369069	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	23009	20.0	18369069	0.019	0.08	0.36
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18369069	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18369069	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18369069	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18369069	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18369069	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	95241	20.0	18369069	0.056	0.24	1.19
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	68022	20.0	18369069	0.039	0.17	0.82
87	Decane	d5CB	TRG	142.3	1.250	18826	20.0	18369069	0.016	0.07	0.41
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18369069	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	71890	20.0	18369069	0.051	0.22	1.10
90	I-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18369069	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18369069	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18369069	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	49507	20.0	18369069	0.023	0.10	0.55
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18369069	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18369069	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	61276	20.0	18369069	0.030	0.13	0.71
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18369069	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18369069	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18369069	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18369069	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18369069	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18369069	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11351441	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11980599	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18369069	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8511176	10.0		11.966	119.66	120

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443517A.D
Acq Time : 11 Dec 124 8:16 pm
Sample : T-417
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:17 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.58	168	11351441	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	11980599	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.24	117	18369069	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8511176	11.97	ppbV		119.66
Target Compounds							Qvalue
2) Propylene	4.33	42	20499	0.18	ppbV		91
5) Chloromethane	4.67	50	46445	0.35	ppbV	#	80
14) Acetone	6.28	58	43635	0.38	ppbV	#	1
47) Benzene	10.43	78	50496	0.11	ppbV	m	73
61) Toluene	13.21	91	47184	0.07	ppbV		97
74) Ethylbenzene	15.59	91	24144	0.02	ppbV		95
75) m,p-Xylenes	15.74	91	21493	0.02	ppbV	#	56
77) Styrene	16.29	104	28598	0.03	ppbV	#	67
79) o-Xylene	16.37	91	23009	0.02	ppbV	#	79
85) 4-Ethyltoluene	17.89	105	95241	0.06	ppbV	m	87
86) 1,3,5-Trimethylbenzene	17.98	105	68022	0.04	ppbV	m	82
87) Decane	18.27	57	18826	0.02	ppbV	m	66
89) 1,2,4-Trimethylbenzene	18.59	105	71890	0.05	ppbV	#	92
93) Isopropyltoluene	19.17	119	49507	0.02	ppbV	#	85
96) n-Butylbenzene	19.85	91	61276	0.03	ppbV	m	95

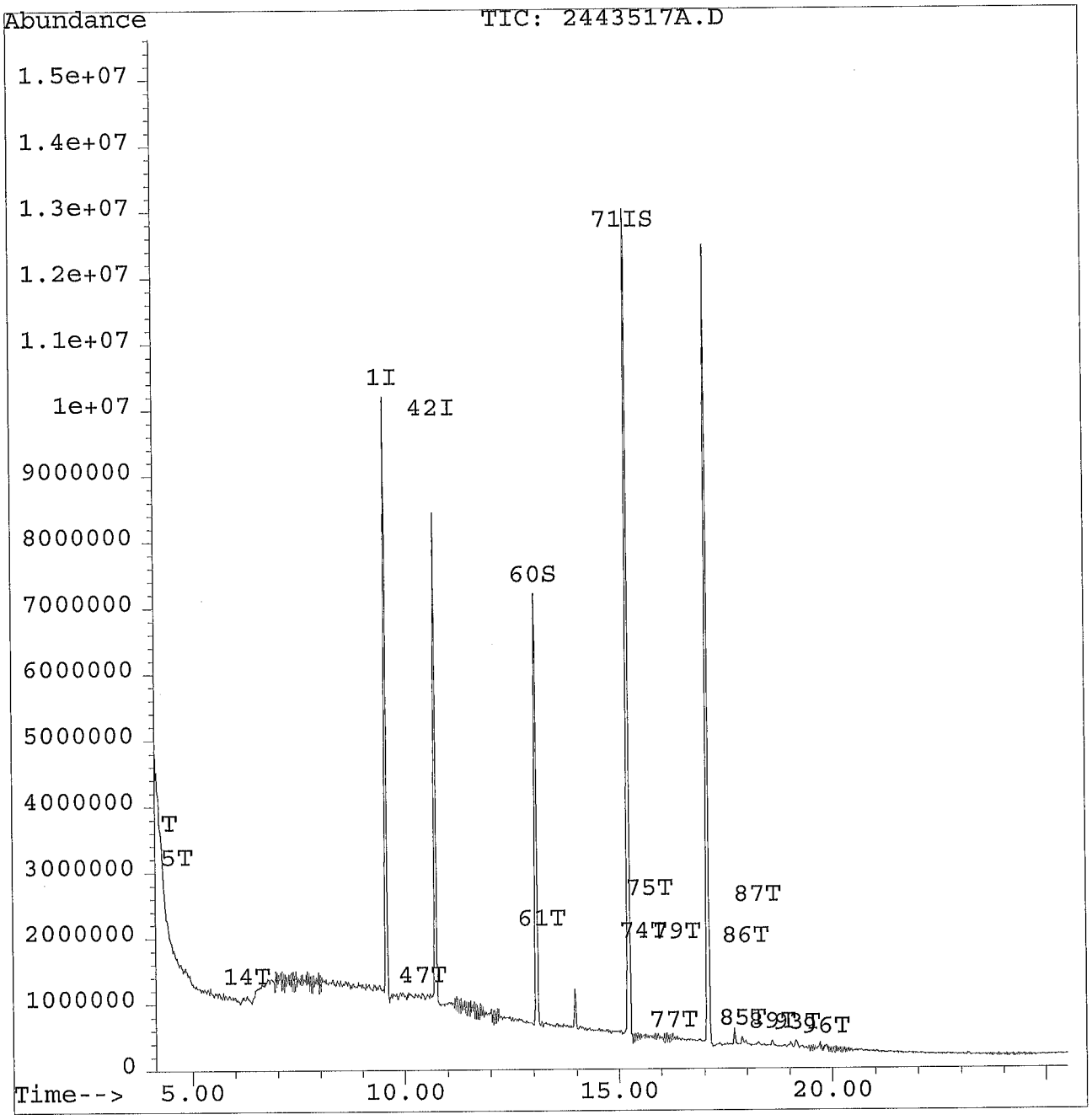
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443517A.D
Acq Time : 11 Dec 124 8:16 pm
Sample : T-417
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:17 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443517A.D
Acq Time : 11 Dec 124 8:16 pm
Sample : T-417
Misc : SCHMIDT, 300 ML

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	17.44 ppbV	37173645	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	78
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	37
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	37
4	4-(4-Fluorophenyl)pyrimidine	13873	068049-19-4	8
5	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 18

Client ID T-418

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 18**

File Name:	2443518A.D	**Date Sampled:**	11/19/24	**Time:**	13:40
Description:	T-418	**Date Analyzed:**	12/10/24	**Time:**	15:15
Canister:	522	**Can Dilution Factor:**	1.25		
QC_Batch:	121024-MA1	**Air Volume:**	300 ml		

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.42	1.04	ND	0.72	1.80	ND	
75-71-8	Dichlorodifluoromethane	0.63	1.04	ND	3.09	5.16	ND	
67-56-1	Methanol	2.08	2.50	ND	2.73	3.28	ND	
74-87-3	Chloromethane	0.63	1.04	ND	1.29	2.15	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.42	1.04	ND	2.92	7.29	ND	
75-01-4	Vinyl chloride	0.21	1.04	ND	0.54	2.67	ND	
106-99-0	1,3-Butadiene	0.21	1.04	ND	0.46	2.31	ND	
74-83-9	Bromomethane	0.42	1.04	ND	1.62	4.05	ND	
75-00-3	Chloroethane	0.42	1.04	ND	1.10	2.75	ND	
64-17-5	Ethanol	2.08	13.38	ND	3.93	25.25	ND	
107-02-8	Acrolein	0.42	1.25	ND	0.96	2.87	ND	
75-69-4	Trichlorofluoromethane	0.42	1.04	ND	2.34	5.86	ND	
67-64-1	Acetone	2.08	2.50	ND	4.96	5.95	ND	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.21	ND	2.05	12.82	ND	
75-65-0	t-Butyl alcohol	0.42	4.17	ND	1.26	12.64	ND	
4227-95-6	Methyl Iodide	0.42	1.25	ND	2.44	7.32	ND	
75-35-4	1,1-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
107-13-1	Acrylonitrile	0.83	1.25	ND	1.81	2.72	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.04	ND	1.60	7.99	ND	
107-05-1	Allyl chloride	0.21	4.17	ND	0.65	13.05	ND	
75-09-2	Methylene chloride	0.21	1.04	ND	0.72	3.62	ND	
75-15-0	Carbon disulfide	0.42	1.04	ND	1.30	3.25	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.83	3.31	ND	
1634-04-4	Methyl tert butyl ether	0.42	0.83	ND	1.50	3.01	ND	
107-12-0	Propionitrile	1.04	1.67	ND	2.35	3.76	ND	
75-34-3	1,1-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
637-92-3	Ethyl tert butyl ether	0.42	1.04	ND	1.74	4.36	ND	
108-05-4	Vinyl acetate	0.21	4.17	ND	0.73	14.69	ND	
78-93-3	2-Butanone (MEK)	0.42	1.25	ND	1.23	3.69	ND	
108-20-3	Diisopropyl ether	0.42	2.50	ND	1.74	10.46	ND	
110-54-3	Hexane	0.42	1.04	ND	1.47	3.68	ND	
126-98-7	Methacrylonitrile	0.42	1.04	ND	1.15	2.86	ND	
141-78-6	Ethyl acetate	0.42	1.04	ND	1.50	3.76	ND	
74-97-5	Bromochloromethane	0.21	1.04	ND	1.10	5.52	ND	
96-33-3	Methyl acrylate	0.42	2.08	ND	1.47	7.35	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.25	ND	0.62	3.69	ND	
78-83-1	Isobutyl alcohol	0.83	3.33	ND	2.53	10.12	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.04	ND	0.83	4.13	ND	
594-20-7	2,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
67-66-3	Chloroform	0.21	1.04	ND	1.02	5.09	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
107-06-2	1,2-Dichloroethane	0.21	1.04	ND	0.84	4.22	ND	
563-58-6	1,1-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
110-82-7	Cyclohexane	0.21	1.04	ND	0.72	3.59	ND	
71-43-2	Benzene	1.46	2.08	ND	4.66	6.66	ND	
56-23-5	Carbon tetrachloride	0.21	1.04	ND	1.31	6.56	ND	
994-05-8	t-Amyl methyl ether	0.42	2.08	ND	1.74	8.72	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.04	ND	0.97	4.87	ND	
142-82-5	n-Heptane	0.42	1.04	ND	1.71	4.27	ND	
78-87-5	1,2-Dichloropropane	0.21	1.04	ND	0.96	4.82	ND	
123-91-1	1,4 Dioxane	0.42	2.08	ND	1.50	7.52	ND	
74-95-3	Dibromomethane	0.21	1.04	ND	1.48	7.42	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.04	ND	0.56	5.61	ND	
75-27-4	Bromodichloromethane	0.21	1.04	ND	1.40	6.99	ND	
80-62-6	Methyl methacrylate	0.42	1.04	ND	1.71	4.27	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	3.33	ND	1.71	13.68	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
108-88-3	Toluene	0.83	1.04	ND	3.14	3.93	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.04	ND	0.95	4.74	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.04	ND	1.14	5.69	ND	
97-63-2	Ethyl methacrylate	0.42	1.04	ND	1.95	4.87	ND	
591-78-6	2-Hexanone	0.42	3.33	ND	1.71	13.68	ND	
142-28-9	1,3-Dichloropropane	0.21	2.92	ND	0.96	13.50	ND	
111-65-9	Octane	0.42	1.04	ND	1.95	4.87	ND	
124-48-1	Dibromochloromethane	0.42	1.04	ND	3.55	8.89	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.42	1.04	ND	3.21	8.02	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.04	ND	0.71	7.07	ND	
108-90-7	Chlorobenzene	0.42	1.04	ND	1.92	4.80	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.42	1.04	ND	2.86	7.16	ND	
100-41-4	Ethylbenzene	0.42	1.04	ND	1.81	4.53	ND	
1330-20-7	m,p-Xylenes	0.42	1.04	ND	1.81	4.53	ND	
111-84-2	Nonane	0.42	1.04	ND	2.19	5.47	ND	
100-42-5	Styrene	0.63	1.04	ND	2.67	4.45	ND	
75-25-2	Bromoform	0.42	1.04	ND	4.31	10.78	ND	
95-47-6	o-Xylene	0.42	1.04	ND	1.81	4.53	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.08	ND	5.73	14.32	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.50	ND	5.03	15.09	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.50	ND	4.27	12.80	ND	
103-65-1	n-Propylbenzene	0.83	2.92	ND	4.10	14.36	ND	
98-82-8	Isopropylbenzene	0.83	2.92	ND	4.10	14.36	ND	
622-96-8	4-Ethyltoluene	0.83	6.67	ND	4.10	32.82	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
124-18-5	Decane	0.83	2.50	ND	4.86	14.57	ND	
98-06-6	tert-butyl benzene	0.83	2.50	ND	4.58	13.74	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.83	3.75	ND	4.10	18.46	ND	
538-93-2	i-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
135-98-8	sec-butylbenzene	0.83	2.92	ND	4.58	16.03	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.33	ND	5.02	20.07	ND	
99-87-6	Isopropyltoluene	0.83	2.50	ND	4.58	13.74	ND	
100-44-7	Benzyl chloride	0.83	2.08	ND	4.32	10.80	ND	
106-46-7	1,4-Dichlorobenzene	0.83	2.08	ND	5.02	12.54	ND	
104-51-8	n-Butylbenzene	0.83	2.50	ND	4.58	13.74	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.92	ND	5.02	17.56	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.25	2.92	ND	12.10	28.23	ND	
120-82-1	1,2,4-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
91-20-3	Naphthalene	2.08	0.42	ND	10.94	2.19	ND	
87-61-6	1,2,3-Trichlorobenzene	1.25	2.08	ND	9.29	15.48	ND	
87-68-3	Hexachlorobutadiene	1.04	1.25	ND	11.13	13.35	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	110	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 18
Canister: 522
QC_Batch: 121024-MA1

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/10/24 **Time:** 15:15
Can Dilution Factor: 1.25
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.92	6.25	ND	11.95	25.60	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**18**		
File Name:	2443518A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/19/24**	**Time:**	**13:40**
Sample ID:	T-418	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**15:15**
Anal Date:	10 Dec 124 3:15 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**522**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.25**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.336	4.86	31.00	51834
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.452	6.42	58.00	65507
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.001	11.25	57.00	965
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.57	91.00	503
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.40	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**14254928**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**14844380**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**20168950**
2037-26-5	Toluene-d8	60	SURR	10.980	13.40	98.00	**9676667**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 18
File Name: 2443518A.D
Run Method: A1563_L.M
Can Factor: 1.25
Air Volume: 300.0 ml
Can/Tube Number: 522
Dilution Factor: 0.3750
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3750
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.34	1.40	1.83	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.45	1.88	4.48	ND	ND	0		0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.02	ND	ND	0	0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	0.100	0.250
o-Xylene	106.2	0.00	0.00	0.01	ND	ND	0	0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.900
Decane	142.3	0.00	0.00	0.00	ND	ND	0	0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.900
l-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		10.98	110	110	110	110	110	110	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.42	0.72	1.04	1.80	U	ND		ND		Y	0.00	0.00
0.63	3.09	1.04	5.16	U	ND		ND		Y	0.00	0.00
2.08	2.73	2.50	3.28	U	ND		ND		Y	0.00	0.00
0.63	1.29	1.04	2.15	U	ND		ND		Y	0.00	0.00
0.42	2.92	1.04	7.29	U	ND		ND		Y	0.00	0.00
0.21	0.54	1.04	2.67	U	ND		ND		Y	0.00	0.00
0.21	0.46	1.04	2.31	U	ND		ND		Y	0.00	0.00
0.42	1.62	1.04	4.05	U	ND		ND		Y	0.00	0.00
0.42	1.10	1.04	2.75	U	ND		ND		Y	0.00	0.00
2.08	3.93	13.38	25.25	U	ND		ND		Y	0.00	0.00
0.42	0.96	1.25	2.87	U	ND		ND		Y	0.00	0.00
0.42	2.34	1.04	5.86	U	ND		ND		Y	0.00	0.00
2.08	4.96	2.50	5.95	U	ND		ND		Y	0.00	0.00
0.83	2.05	5.21	12.82	U	ND		ND		Y	0.00	0.00
0.42	1.26	4.17	12.64	U	ND		ND		Y	0.00	0.00
0.42	2.44	1.25	7.32	U	ND		ND		Y	0.00	0.00
0.21	0.83	1.04	4.13	U	ND		ND		Y	0.00	0.00
0.83	1.81	1.25	2.72	U	ND		ND		Y	0.00	0.00
0.21	1.60	1.04	7.99	U	ND		ND		Y	0.00	0.00
0.21	0.65	4.17	13.05	U	ND		ND		Y	0.00	0.00
0.21	0.72	1.04	3.62	U	ND		ND		Y	0.00	0.00
0.42	1.30	1.04	3.25	U	ND		ND		Y	0.00	0.00
0.21	0.83	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.42	1.50	0.83	3.01	U	ND		ND		Y	0.00	0.00
1.04	2.35	1.67	3.76	U	ND		ND		Y	0.00	0.00
0.21	0.84	1.04	4.22	U	ND		ND		Y	0.00	0.00
0.42	1.74	1.04	4.36	U	ND		ND		Y	0.00	0.00
0.21	0.73	4.17	14.69	U	ND		ND		Y	0.00	0.00
0.42	1.23	1.25	3.69	U	ND		ND		Y	0.00	0.00
0.42	1.74	2.50	10.46	U	ND		ND		Y	0.00	0.00
0.42	1.47	1.04	3.68	U	ND		ND		Y	0.00	0.00
0.42	1.15	1.04	2.86	U	ND		ND		Y	0.00	0.00
0.42	1.50	1.04	3.76	U	ND		ND		Y	0.00	0.00
0.21	1.10	1.04	5.52	U	ND		ND		Y	0.00	0.00

0.42	1.47	2.08	7.35	U	ND	ND	Y	0.00	0.00
0.21	0.62	1.25	3.69	U	ND	ND	Y	0.00	0.00
0.83	2.53	3.33	10.12	U	ND	ND	Y	0.00	0.00
0.21	0.83	1.04	4.13	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.04	4.82	U	ND	ND	Y	0.00	0.00
0.21	1.02	1.04	5.09	U	ND	ND	Y	0.00	0.00
0.21	1.14	1.04	5.69	U	ND	ND	Y	0.00	0.00
0.21	0.84	1.04	4.22	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.21	0.72	1.04	3.59	U	ND	ND	Y	0.00	0.00
1.46	4.66	2.08	6.66	U	ND	ND	Y	0.00	0.00
0.21	1.31	1.04	6.56	U	ND	ND	Y	0.00	0.00
0.42	1.74	2.08	8.72	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	1.71	1.04	4.27	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.04	4.82	U	ND	ND	Y	0.00	0.00
0.42	1.50	2.08	7.52	U	ND	ND	Y	0.00	0.00
0.21	1.48	1.04	7.42	U	ND	ND	Y	0.00	0.00
0.10	0.56	1.04	5.61	U	ND	ND	Y	0.00	0.00
0.21	1.40	1.04	6.99	U	ND	ND	Y	0.00	0.00
0.42	1.71	1.04	4.27	U	ND	ND	Y	0.00	0.00
0.42	1.71	3.33	13.68	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.83	3.14	1.04	3.93	U	ND	ND	Y	0.00	0.00
0.21	0.95	1.04	4.74	U	ND	ND	Y	0.00	0.00
0.21	1.14	1.04	5.69	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	1.71	3.33	13.68	U	ND	ND	Y	0.00	0.00
0.21	0.96	2.92	13.50	U	ND	ND	Y	0.00	0.00
0.42	1.95	1.04	4.87	U	ND	ND	Y	0.00	0.00
0.42	3.55	1.04	8.89	U	ND	ND	Y	0.00	0.00
0.42	3.21	1.04	8.02	U	ND	ND	Y	0.00	0.00
0.10	0.71	1.04	7.07	U	ND	ND	Y	0.00	0.00
0.42	1.92	1.04	4.80	U	ND	ND	Y	0.00	0.00
0.42	2.86	1.04	7.16	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53	U	ND	ND	Y	0.00	0.00
0.42	2.19	1.04	5.47	U	ND	ND	Y	0.00	0.00
0.63	2.67	1.04	4.45	U	ND	ND	Y	0.00	0.00
0.42	4.31	1.04	10.78	U	ND	ND	Y	0.00	0.00
0.42	1.81	1.04	4.53	U	ND	ND	Y	0.00	0.00
0.83	5.73	2.08	14.32	U	ND	ND	Y	0.00	0.00
0.83	5.03	2.50	15.09	U	ND	ND	Y	0.00	0.00
0.83	4.27	2.50	12.80	U	ND	ND	Y	0.00	0.00
0.83	4.10	2.92	14.36	U	ND	ND	Y	0.00	0.00
0.83	4.10	2.92	14.36	U	ND	ND	Y	0.00	0.00
0.83	4.10	6.67	32.82	U	ND	ND	Y	0.00	0.00
0.83	4.10	3.75	18.46	U	ND	ND	Y	0.00	0.00
0.83	4.86	2.50	14.57	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	4.10	3.75	18.46	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00

0.83	4.58	2.92	16.03	U	ND	ND	Y	0.00	0.00
0.83	5.02	3.33	20.07	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	4.32	2.08	10.80	U	ND	ND	Y	0.00	0.00
0.83	5.02	2.08	12.54	U	ND	ND	Y	0.00	0.00
0.83	4.58	2.50	13.74	U	ND	ND	Y	0.00	0.00
0.83	5.02	2.92	17.56	U	ND	ND	Y	0.00	0.00
1.25	12.10	2.92	28.23	U	ND	ND	Y	0.00	0.00
1.25	9.29	2.08	15.48	U	ND	ND	Y	0.00	0.00
2.08	10.94	0.42	2.19	U	ND	ND	Y	0.00	0.00
1.25	9.29	2.08	15.48	U	ND	ND	Y	0.00	0.00
1.04	11.13	1.25	13.35	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 18
Sample ID: T-418

Can Factor: 1.25
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	
ND	**0.7**	**1.5**	2.9	6.25	2.92	11.95	6.25	25.60	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**18**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.25
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|\left|\frac{(Cistdi)}{(Aistdi)}\right|$ Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}\frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	Cn ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	14254928	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	14254928	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	51834	20.0	14254928	0.336	1.40	1.83
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	14254928	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	14254928	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	14254928	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	14254928	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	14254928	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	14254928	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	14254928	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	14254928	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	14254928	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	65507	20.0	14254928	0.452	1.88	4.48
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	14254928	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	14254928	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	14254928	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	14254928	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	14254928	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	14254928	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	14254928	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	14254928	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	14254928	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	14254928	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	14254928	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	14254928	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	14254928	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	14254928	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	14254928	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	14254928	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	14254928	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	14254928	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	14254928	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	14254928	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	14254928	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	14254928	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	14254928	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	14254928	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	14254928	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	14254928	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	14254928	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	14844380	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	14844380	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	14844380	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	14844380	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	0	20.0	14844380	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	14844380	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	14844380	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	965	20.0	14844380	0.001	0.00	0.02
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	14844380	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	14844380	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	14844380	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	14844380	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	14844380	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	14844380	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	14844380	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	14844380	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	14844380	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	0	20.0	14844380	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	14844380	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	14844380	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	14844380	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	14844380	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	14844380	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	14844380	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	14844380	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	14844380	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	14844380	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	20168950	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	20168950	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	20168950	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	20168950	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	20168950	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	20168950	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	20168950	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	503	20.0	20168950	0.000	0.00	0.01
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	20168950	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	20168950	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	20168950	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	20168950	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	20168950	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	20168950	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	20168950	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	20168950	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	20168950	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	20168950	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	20168950	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	20168950	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	20168950	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	20168950	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	20168950	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	20168950	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	20168950	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	20168950	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	20168950	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	20168950	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	20168950	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	20168950	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	20168950	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	14254928	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	14844380	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	20168950	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	9676667	10.0		10.980	109.80	110

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443518A.D
Acq Time : 10 Dec 124 3:15 pm
Sample : T-418
Misc : SCHMIDT, 300 ML
Quant Time: Dec 11 15:42 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.58	168	14254928	20.00	ppbV	-0.25
42) 1,4-Difluorobenzene	10.72	114	14844380	20.00	ppbV	-0.28
71) Chlorobenzene-d5	15.20	117	20168950	20.00	ppbV	-0.37
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	9676667	10.98	ppbV	109.80
Target Compounds						Qvalue
4) Methanol	4.77	31	51834	0.34	ppbV #	76
14) Acetone	6.28	58	65507	0.45	ppbV m	1
50) 2,2,4-Trimethylpentane	10.99	57	965	0.00	ppbV m	78
79) o-Xylene	16.57	91	503	0.00	ppbV m	71

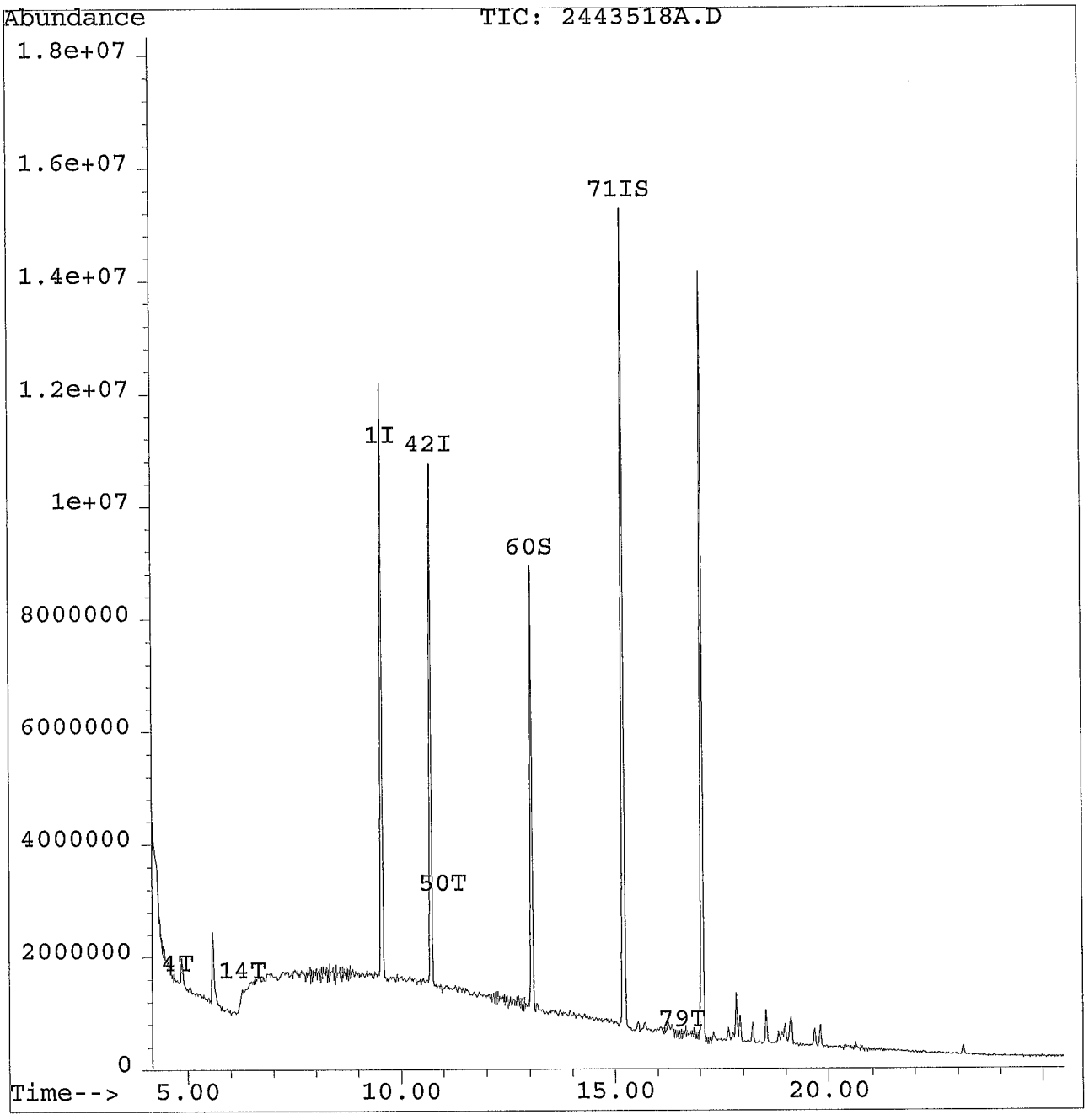
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443518A.D
Acq Time : 10 Dec 124 3:15 pm
Sample : T-418
Misc : SCHMIDT, 300 ML
Quant Time: Dec 11 15:42 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Sample Data Packages

SDG Number 224435

Lab Id Number 19

Client ID T-501

Analytical Method TO-15

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Analytical Report
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Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 19**

File Name: 2443519A.D
Description: T-501
Canister: 664
QC_Batch: 121124-MA1

Date Sampled: 11/20/24 **Time:** 08:30
Date Analyzed: 12/11/24 **Time:** 20:53
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	1.36	0.74	1.84	2.35	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	2.85	5.08	6.09	6.78	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	3.52	2.10	13.13	8.67	J
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 19

File Name: 224435
Descriptio 19
Canister: 664
QC_Batch: 121124-MA1

Date Sampled: 11/20/24 **Time:** 08:30
Date Analyzed: 12/11/24 **Time:** 20:53
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**19**		
File Name:	2443519A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**8:30**
Sample ID:	T-501	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**20:53**
Anal Date:	11 Dec 124 8:53 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**664**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.28**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.319	4.41	42.00	35674
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.668	6.42	58.00	77130
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.826	6.45	45.00	184633
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.260	10.70	78.00	123936
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.001	10.95	73.00	368
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.109	13.50	91.00	73149
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.021	15.90	106	29277
1330-20-7	m,p-Xylenes	75	TRG	0.028	16.06	91.00	31506
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.031	16.61	104.00	28121
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.022	16.37	91.00	27041
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.055	18.23	105.00	96574
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.039	18.31	105.00	69541
124-18-5	Decane	87	TRG	0.022	18.60	57.00	26117
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.060	18.95	105.00	85497
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.033	20.20	91.00	69417
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11362060**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11988798**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18745606**
2037-26-5	Toluene-d8	60	SURR	12.307	13.40	98.00	**8759973**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 19
File Name: 2443519A.D
Run Method: A1563_L.M
Can Factor: 1.28
Air Volume: 300.0 ml
Can/Tube Number: 664
Dilution Factor: 0.3840
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3840
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.32	1.36	2.35	1.36	2.35	2.35	2.35	0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.67	2.85	6.78	2.85	6.78	6.78	6.78	0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.83	3.52	8.67	3.52	8.67	8.67	8.67	0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Benzene	78.1	0.26	1.11	3.55	ND	ND	0	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.02	ND	ND	0	0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Toluene	92.1	0.11	0.47	1.76	ND	ND	0	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Ethylbenzene	106.2	0.02	0.09	0.39	ND	ND	0	0.100	0.250
m,p-Xylenes	106.2	0.03	0.12	0.51	ND	ND	0	0.100	0.250
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Styrene	104.2	0.03	0.13	0.56	ND	ND	0	0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	0.100	0.250
o-Xylene	106.2	0.02	0.09	0.40	ND	ND	0	0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
4-Ethyltoluene	120.2	0.06	0.24	1.16	ND	ND	0	0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.04	0.16	0.81	ND	ND	0	0.200	0.900
Decane	142.3	0.02	0.10	0.55	ND	ND	0	0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.06	0.26	1.26	ND	ND	0	0.200	0.900
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.03	0.14	0.78	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.31	123	123	123	123	123	123	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.74	1.07	1.84				=		Y	1.36	2.35
0.64	3.17	1.07	5.28	U	ND		ND		Y	0.00	0.00
2.13	2.80	2.56	3.36	U	ND		ND		Y	0.00	0.00
0.64	1.32	1.07	2.21	U	ND		ND		Y	0.00	0.00
0.43	2.99	1.07	7.47	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.07	2.73	U	ND		ND		Y	0.00	0.00
0.21	0.48	1.07	2.36	U	ND		ND		Y	0.00	0.00
0.43	1.66	1.07	4.15	U	ND		ND		Y	0.00	0.00
0.43	1.13	1.07	2.82	U	ND		ND		Y	0.00	0.00
2.13	4.03	13.70	25.86	U	ND		ND		Y	0.00	0.00
0.43	0.98	1.28	2.94	U	ND		ND		Y	0.00	0.00
0.43	2.40	1.07	6.00	U	ND		ND		Y	0.00	0.00
2.13	5.08	2.56	6.09				=		Y	2.85	6.78
0.85	2.10	5.33	13.13	J	J		=		Y	3.52	8.67
0.43	1.29	4.27	12.95	U	ND		ND		Y	0.00	0.00
0.43	2.50	1.28	7.49	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND		ND		Y	0.00	0.00
0.85	1.86	1.28	2.78	U	ND		ND		Y	0.00	0.00
0.21	1.64	1.07	8.19	U	ND		ND		Y	0.00	0.00
0.21	0.67	4.27	13.37	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.07	3.71	U	ND		ND		Y	0.00	0.00
0.43	1.33	1.07	3.32	U	ND		ND		Y	0.00	0.00
0.21	0.85	0.85	3.39	U	ND		ND		Y	0.00	0.00
0.43	1.54	0.85	3.08	U	ND		ND		Y	0.00	0.00
1.07	2.41	1.71	3.85	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND		ND		Y	0.00	0.00
0.43	1.79	1.07	4.46	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.27	15.05	U	ND		ND		Y	0.00	0.00
0.43	1.26	1.28	3.78	U	ND		ND		Y	0.00	0.00
0.43	1.79	2.56	10.72	U	ND		ND		Y	0.00	0.00
0.43	1.51	1.07	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.17	1.07	2.93	U	ND		ND		Y	0.00	0.00
0.43	1.54	1.07	3.85	U	ND		ND		Y	0.00	0.00
0.21	1.13	1.07	5.65	U	ND		ND		Y	0.00	0.00

0.43	1.50	2.13	7.52	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.28	3.78	U	ND	ND	Y	0.00	0.00
0.85	2.59	3.41	10.36	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.21	1.05	1.07	5.22	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	0.74	1.07	3.68	U	ND	ND	Y	0.00	0.00
1.49	4.78	2.13	6.82	U	ND	ND	Y	0.00	0.00
0.21	1.34	1.07	6.72	U	ND	ND	Y	0.00	0.00
0.43	1.79	2.13	8.93	U	ND	ND	Y	0.00	0.00
0.21	1.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.38	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.43	1.54	2.13	7.70	U	ND	ND	Y	0.00	0.00
0.21	1.52	1.07	7.59	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.07	5.74	U	ND	ND	Y	0.00	0.00
0.21	1.43	1.07	7.16	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.37	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.85	3.22	1.07	4.02	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.99	2.99	13.82	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	3.64	1.07	9.10	U	ND	ND	Y	0.00	0.00
0.43	3.28	1.07	8.21	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.07	7.24	U	ND	ND	Y	0.00	0.00
0.43	1.97	1.07	4.92	U	ND	ND	Y	0.00	0.00
0.43	2.93	1.07	7.33	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	2.24	1.07	5.60	U	ND	ND	Y	0.00	0.00
0.64	2.73	1.07	4.55	U	ND	ND	Y	0.00	0.00
0.43	4.42	1.07	11.04	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.85	5.86	2.13	14.66	U	ND	ND	Y	0.00	0.00
0.85	5.15	2.56	15.45	U	ND	ND	Y	0.00	0.00
0.85	4.37	2.56	13.11	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	6.83	33.61	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.97	2.56	14.92	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00

0.85	4.69	2.99	16.42	U	ND	ND	Y	0.00	0.00
0.85	5.14	3.41	20.55	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.42	2.13	11.06	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.13	12.84	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.99	17.98	U	ND	ND	Y	0.00	0.00
1.28	12.39	2.99	28.90	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
2.13	11.20	0.43	2.24	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
1.07	11.39	1.28	13.67	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 19
Sample ID: T-501

Can Factor: 1.28
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**19**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.28
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdl) / (Cstdni) (Aistdl)]i Note: 1

2) Raw Amt = (Ansamp) (Cistdl) / (Avg RFn) (Aistdl) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdl ppmv	Aistdl Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	35674	20.0	11362060	0.319	1.36	2.35
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11362060	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11362060	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	11362060	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11362060	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11362060	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11362060	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11362060	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11362060	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11362060	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11362060	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11362060	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	77130	20.0	11362060	0.668	2.85	6.78
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	184633	20.0	11362060	0.826	3.52	8.67
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11362060	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11362060	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11362060	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11362060	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11362060	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11362060	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11362060	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11362060	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11362060	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11362060	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11362060	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11362060	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11362060	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11362060	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11362060	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11362060	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11362060	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11362060	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11362060	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11362060	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11362060	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11362060	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11362060	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11362060	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11362060	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11362060	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11988798	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11988798	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11988798	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11988798	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	123936	20.0	11988798	0.260	1.11	3.55
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11988798	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	368	20.0	11988798	0.001	0.00	0.02
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11988798	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11988798	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11988798	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11988798	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11988798	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11988798	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11988798	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11988798	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11988798	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11988798	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	73149	20.0	11988798	0.109	0.47	1.76
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11988798	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11988798	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11988798	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11988798	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11988798	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11988798	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11988798	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11988798	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11988798	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18745606	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18745606	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	29277	20.0	18745606	0.021	0.09	0.39
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	31506	20.0	18745606	0.028	0.12	0.51
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18745606	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	28121	20.0	18745606	0.031	0.13	0.56
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18745606	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	27041	20.0	18745606	0.022	0.09	0.40
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18745606	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18745606	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18745606	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18745606	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18745606	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	96574	20.0	18745606	0.055	0.24	1.16
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	69541	20.0	18745606	0.039	0.16	0.81
87	Decane	d5CB	TRG	142.3	1.250	26117	20.0	18745606	0.022	0.10	0.55
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18745606	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	85497	20.0	18745606	0.060	0.26	1.26
90	I-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18745606	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18745606	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18745606	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	18745606	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18745606	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18745606	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	69417	20.0	18745606	0.033	0.14	0.78
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18745606	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18745606	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18745606	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18745606	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18745606	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18745606	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11362060	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11988798	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18745606	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8759973	10.0		12.307	123.07	123

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443519A.D
Acq Time : 11 Dec 124 8:53 pm
Sample : T-419
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:30 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	11362060	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	11988798	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	18745606	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8759973	12.31	ppbV		123.07
Target Compounds							Qvalue
2) Propylene	4.31	42	35674	0.32	ppbV		90
14) Acetone	6.29	58	77130	0.67	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.45	45	184633	0.83	ppbV	#	97
47) Benzene	10.43	78	123936	0.26	ppbV	m	71
49) t-Amyl methyl ether	11.06	73	368	0.00	ppbV	m	1
61) Toluene	13.19	91	73149	0.11	ppbV		88
74) Ethylbenzene	15.57	91	29277	0.02	ppbV	#	90
75) m,p-Xylenes	15.74	91	31506	0.03	ppbV	#	69
77) Styrene	16.28	104	28121	0.03	ppbV	#	80
79) o-Xylene	16.37	91	27041	0.02	ppbV	#	85
85) 4-Ethyltoluene	17.89	105	96574	0.06	ppbV	m	74
86) 1,3,5-Trimethylbenzene	17.97	105	69541	0.04	ppbV	m	91
87) Decane	18.26	57	26117	0.02	ppbV	#	68
89) 1,2,4-Trimethylbenzene	18.59	105	85497	0.06	ppbV	#	92
96) n-Butylbenzene	19.85	91	69417	0.03	ppbV	#	92

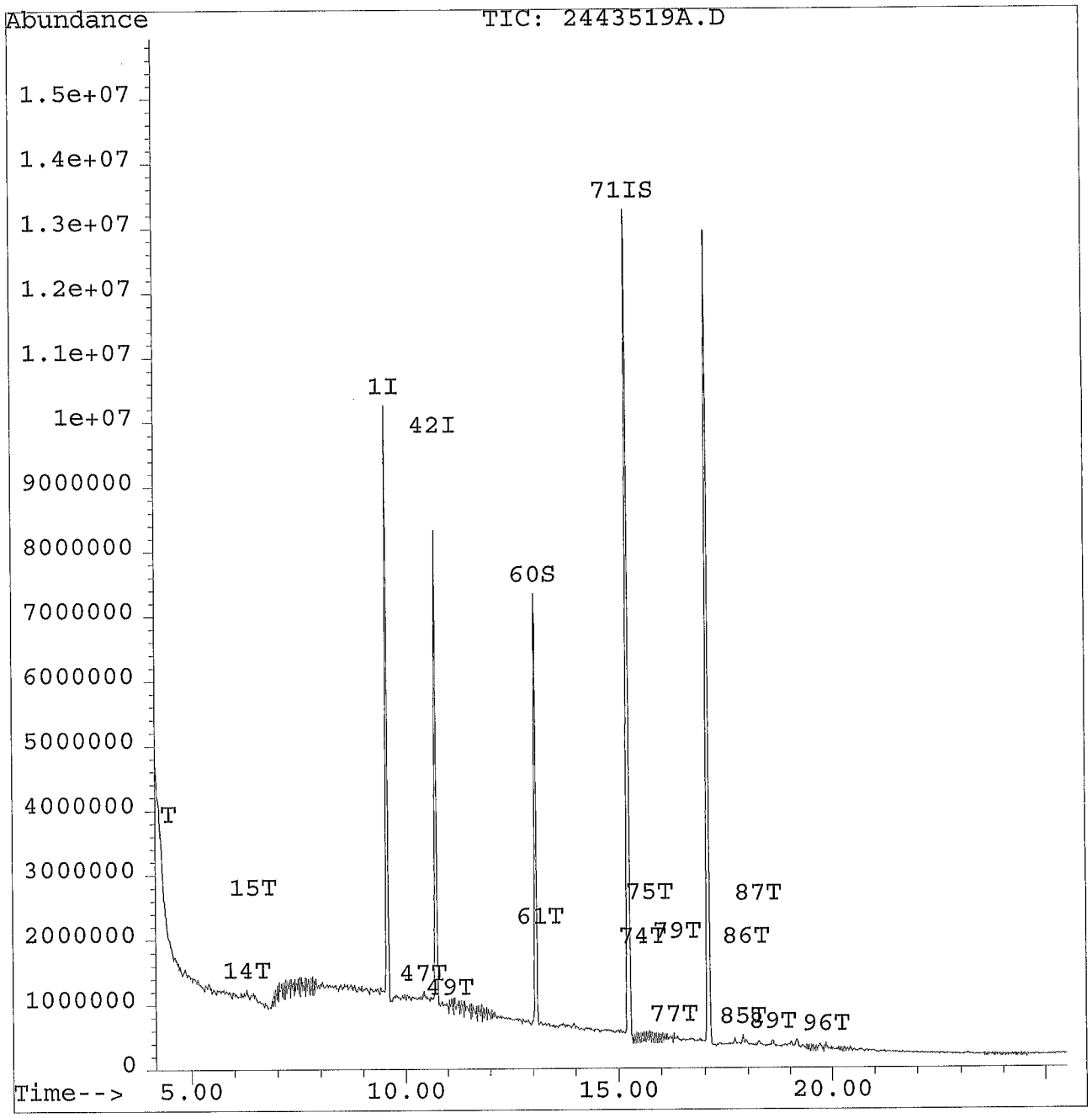
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443519A.D
Acq Time : 11 Dec 124 8:53 pm
Sample : T-419
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:30 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443519A.D
Acq Time : 11 Dec 124 8:53 pm
Sample : T-419
Misc : SCHMIDT, 300 ML

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	18.06 ppbV	39498538	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	90
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
4	4-(4-Fluorophenyl)pyrimidine	13873	068049-19-4	8
5	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 20

Client ID T-502

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 20

File Name: 2443520A.D
Description: T-502
Canister: 716
QC_Batch: 121124-MA1

Date Sampled: 11/20/24 **Time:** 08:37
Date Analyzed: 12/11/24 **Time:** 21:31
Can Dilution Factor: 1.33
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.11	0.91	0.76	1.91	1.57	J
75-71-8	Dichlorodifluoromethane	0.67	1.11	ND	3.29	5.49	ND	
67-56-1	Methanol	2.22	2.66	ND	2.91	3.49	ND	
74-87-3	Chloromethane	0.67	1.11	1.43	1.38	2.29	2.95	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.11	ND	3.10	7.76	ND	
75-01-4	Vinyl chloride	0.22	1.11	ND	0.57	2.84	ND	
106-99-0	1,3-Butadiene	0.22	1.11	ND	0.49	2.46	ND	
74-83-9	Bromomethane	0.44	1.11	ND	1.72	4.31	ND	
75-00-3	Chloroethane	0.44	1.11	ND	1.17	2.93	ND	
64-17-5	Ethanol	2.22	14.23	ND	4.19	26.87	ND	
107-02-8	Acrolein	0.44	1.33	ND	1.02	3.06	ND	
75-69-4	Trichlorofluoromethane	0.44	1.11	ND	2.49	6.24	ND	
67-64-1	Acetone	2.22	2.66	2.69	5.27	6.33	6.39	
67-63-0	2-propanol (isopropylalcohol)	0.89	5.54	ND	2.18	13.64	ND	
75-65-0	t-Butyl alcohol	0.44	4.43	ND	1.35	13.45	ND	
4227-95-6	Methyl iodide	0.44	1.33	ND	2.59	7.78	ND	
75-35-4	1,1-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	
107-13-1	Acrylonitrile	0.89	1.33	ND	1.93	2.89	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.11	ND	1.70	8.51	ND	
107-05-1	Allyl chloride	0.22	4.43	ND	0.69	13.89	ND	
75-09-2	Methylene chloride	0.22	1.11	ND	0.77	3.85	ND	
75-15-0	Carbon disulfide	0.44	1.11	ND	1.38	3.45	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.89	ND	0.88	3.52	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.89	ND	1.60	3.20	ND	
107-12-0	Propionitrile	1.11	1.77	ND	2.50	4.00	ND	
75-34-3	1,1-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.11	ND	1.86	4.64	ND	
108-05-4	Vinyl acetate	0.22	4.43	ND	0.78	15.63	ND	
78-93-3	2-Butanone (MEK)	0.44	1.33	ND	1.31	3.93	ND	
108-20-3	Diisopropyl ether	0.44	2.66	ND	1.86	11.13	ND	
110-54-3	Hexane	0.44	1.11	ND	1.57	3.91	ND	
126-98-7	Methacrylonitrile	0.44	1.11	ND	1.22	3.05	ND	
141-78-6	Ethyl acetate	0.44	1.11	ND	1.60	4.00	ND	
74-97-5	Bromochloromethane	0.22	1.11	ND	1.17	5.87	ND	
96-33-3	Methyl acrylate	0.44	2.22	ND	1.56	7.82	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.33	ND	0.66	3.93	ND	
78-83-1	Isobutyl alcohol	0.89	3.55	ND	2.69	10.76	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	
594-20-7	2,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
67-66-3	Chloroform	0.22	1.11	ND	1.09	5.42	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
107-06-2	1,2-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
563-58-6	1,1-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
110-82-7	Cyclohexane	0.22	1.11	ND	0.76	3.82	ND	
71-43-2	Benzene	1.55	2.22	10.89	4.96	7.09	34.83	
56-23-5	Carbon tetrachloride	0.22	1.11	ND	1.40	6.98	ND	
994-05-8	t-Amyl methyl ether	0.44	2.22	ND	1.86	9.28	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.11	ND	1.04	5.18	ND	
142-82-5	n-Heptane	0.44	1.11	ND	1.82	4.55	ND	
78-87-5	1,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
123-91-1	1,4 Dioxane	0.44	2.22	ND	1.60	8.00	ND	
74-95-3	Dibromomethane	0.22	1.11	ND	1.58	7.89	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.11	ND	0.60	5.96	ND	
75-27-4	Bromodichloromethane	0.22	1.11	ND	1.49	7.44	ND	
80-62-6	Methyl methacrylate	0.44	1.11	ND	1.82	4.54	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.55	ND	1.82	14.55	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
108-88-3	Toluene	0.89	1.11	5.03	3.34	4.18	18.98	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
97-63-2	Ethyl methacrylate	0.44	1.11	ND	2.07	5.18	ND	
591-78-6	2-Hexanone	0.44	3.55	ND	1.82	14.55	ND	
142-28-9	1,3-Dichloropropane	0.22	3.10	ND	1.03	14.36	ND	
111-65-9	Octane	0.44	1.11	0.45	2.07	5.18	2.10	J
124-48-1	Dibromochloromethane	0.44	1.11	ND	3.78	9.46	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.11	ND	3.41	8.53	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.11	ND	0.75	7.53	ND	
108-90-7	Chlorobenzene	0.44	1.11	ND	2.04	5.11	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.11	ND	3.05	7.62	ND	
100-41-4	Ethylbenzene	0.44	1.11	2.15	1.93	4.82	9.34	
1330-20-7	m,p-Xylenes	0.44	1.11	2.71	1.93	4.82	11.78	
111-84-2	Nonane	0.44	1.11	0.56	2.33	5.82	2.96	J
100-42-5	Styrene	0.67	1.11	ND	2.84	4.73	ND	
75-25-2	Bromoform	0.44	1.11	ND	4.59	11.47	ND	
95-47-6	o-Xylene	0.44	1.11	0.58	1.93	4.82	2.52	J
79-34-5	1,1,2,2-Tetrachloroethane	0.89	2.22	ND	6.09	15.23	ND	
96-18-4	1,2,3-Trichloropropane	0.89	2.66	ND	5.35	16.06	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.89	2.66	ND	4.54	13.62	ND	
103-65-1	n-Propylbenzene	0.89	3.10	ND	4.36	15.28	ND	
98-82-8	Isopropylbenzene	0.89	3.10	ND	4.36	15.28	ND	
622-96-8	4-Ethyltoluene	0.89	7.09	ND	4.36	34.92	ND	
108-67-8	1,3,5-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
124-18-5	Decane	0.89	2.66	ND	5.17	15.50	ND	
98-06-6	tert-butyl benzene	0.89	2.66	ND	4.87	14.62	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
538-93-2	I-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
135-98-8	sec-butylbenzene	0.89	3.10	ND	4.87	17.06	ND	
541-73-1	1,3-Dichlorobenzene	0.89	3.55	ND	5.34	21.35	ND	
99-87-6	Isopropyltoluene	0.89	2.66	9.35	4.87	14.62	51.39	
100-44-7	Benzyl chloride	0.89	2.22	ND	4.60	11.49	ND	
106-46-7	1,4-Dichlorobenzene	0.89	2.22	ND	5.34	13.35	ND	
104-51-8	n-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
95-50-1	1,2-Dichlorobenzene	0.89	3.10	ND	5.34	18.68	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.33	3.10	ND	12.87	30.03	ND	
120-82-1	1,2,4-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
91-20-3	Naphthalene	2.22	0.44	ND	11.64	2.33	ND	
87-61-6	1,2,3-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
87-68-3	Hexachlorobutadiene	1.11	1.33	ND	11.84	14.21	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 20

File Name: 224435
Descriptio 20
Canister: 716
QC_Batch: 121124-MA1

Date Sampled: 11/20/24 **Time:** 08:37
Date Analyzed: 12/11/24 **Time:** 21:31
Can Dilution Factor: 1.33
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.10	6.65	ND	12.71	27.24	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**20**		
File Name:	2443520A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**8:37**
Sample ID:	T-502	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**21:31**
Anal Date:	11 Dec 124 9:31 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**716**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.33**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.205	4.41	42.00	23949
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.322	4.77	50.00	44738
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.606	6.42	58.00	73068
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.139	6.45	45.00	32388
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.045	7.61	76.00	17519
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	2.456	10.70	78.00	1256688
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	1.135	13.50	91.00	816091
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.101	14.04	85.00	28290
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.484	15.90	106	699084
1330-20-7	m,p-Xylenes	75	TRG	0.611	16.06	91.00	719244
111-84-2	Nonane	76	TRG	0.127	16.43	57.00	87574
100-42-5	Styrene	77	TRG	0.048	16.61	104.00	45701
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.131	16.36	91.00	167406
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.159	18.23	105.00	286390
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.058	18.31	105.00	108057
124-18-5	Decane	87	TRG	0.153	18.60	57.00	185100
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.142	18.95	105.00	209948
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	2.109	19.53	119.00	4799676
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11870254**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12884842**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**19358129**
2037-26-5	Toluene-d8	60	SURR	11.880	13.40	98.00	**9088015**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 20
File Name: 2443520A.D
Run Method: A1563_L.M
Can Factor: 1.33
Air Volume: 300.0 ml
Can/Tube Number: 716
Dilution Factor: 0.3990
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3990
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.21	0.91	1.57	0.91	1.57	1.57	1.57	0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.32	1.43	2.95	1.43	2.95	2.95	2.95	0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.61	2.69	6.39	2.69	6.39	6.39	6.39	0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.14	0.61	1.51	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.04	0.20	0.62	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Benzene	78.1	2.46	10.89	34.83	10.89	34.83	34.83	34.83	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Toluene	92.1	1.13	5.03	18.98	5.03	18.98	18.98	18.98	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.700
Octane	114.2	0.10	0.45	2.10	0.45	2.10	2.10	2.10	0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethylbenzene	106.2	0.48	2.15	9.34	2.15	9.34	9.34	9.34	0.100	0.250
m,p-Xylenes	106.2	0.61	2.71	11.78	2.71	11.78	11.78	11.78	0.100	0.250
Nonane	128.3	0.13	0.56	2.96	0.56	2.96	2.96	2.96	0.100	0.250
Styrene	104.2	0.05	0.21	0.91	ND	ND	0		0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		0.100	0.250
o-Xylene	106.2	0.13	0.58	2.52	0.58	2.52	2.52	2.52	0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
4-Ethyltoluene	120.2	0.16	0.71	3.47	ND	ND	0		0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.06	0.26	1.27	ND	ND	0		0.200	0.900
Decane	142.3	0.15	0.68	3.95	ND	ND	0		0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.14	0.63	3.10	ND	ND	0		0.200	0.900
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	2.11	9.35	51.39	9.35	51.39	51.39	51.39	**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.88	119	119	119	119	119	119	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.76	1.11	1.91	J	J		=		Y	0.91	1.57
0.67	3.29	1.11	5.49	U	ND		ND		Y	0.00	0.00
2.22	2.91	2.66	3.49	U	ND		ND		Y	0.00	0.00
0.67	1.38	1.11	2.29				=		Y	1.43	2.95
0.44	3.10	1.11	7.76	U	ND		ND		Y	0.00	0.00
0.22	0.57	1.11	2.84	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.11	2.46	U	ND		ND		Y	0.00	0.00
0.44	1.72	1.11	4.31	U	ND		ND		Y	0.00	0.00
0.44	1.17	1.11	2.93	U	ND		ND		Y	0.00	0.00
2.22	4.19	14.23	26.87	U	ND		ND		Y	0.00	0.00
0.44	1.02	1.33	3.06	U	ND		ND		Y	0.00	0.00
0.44	2.49	1.11	6.24	U	ND		ND		Y	0.00	0.00
2.22	5.27	2.66	6.33				=		Y	2.69	6.39
0.89	2.18	5.54	13.64	U	ND		ND		Y	0.00	0.00
0.44	1.35	4.43	13.45	U	ND		ND		Y	0.00	0.00
0.44	2.59	1.33	7.78	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.11	4.40	U	ND		ND		Y	0.00	0.00
0.89	1.93	1.33	2.89	U	ND		ND		Y	0.00	0.00
0.22	1.70	1.11	8.51	U	ND		ND		Y	0.00	0.00
0.22	0.69	4.43	13.89	U	ND		ND		Y	0.00	0.00
0.22	0.77	1.11	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.38	1.11	3.45	U	ND		ND		Y	0.00	0.00
0.22	0.88	0.89	3.52	U	ND		ND		Y	0.00	0.00
0.44	1.60	0.89	3.20	U	ND		ND		Y	0.00	0.00
1.11	2.50	1.77	4.00	U	ND		ND		Y	0.00	0.00
0.22	0.90	1.11	4.49	U	ND		ND		Y	0.00	0.00
0.44	1.86	1.11	4.64	U	ND		ND		Y	0.00	0.00
0.22	0.78	4.43	15.63	U	ND		ND		Y	0.00	0.00
0.44	1.31	1.33	3.93	U	ND		ND		Y	0.00	0.00
0.44	1.86	2.66	11.13	U	ND		ND		Y	0.00	0.00
0.44	1.57	1.11	3.91	U	ND		ND		Y	0.00	0.00
0.44	1.22	1.11	3.05	U	ND		ND		Y	0.00	0.00
0.44	1.60	1.11	4.00	U	ND		ND		Y	0.00	0.00
0.22	1.17	1.11	5.87	U	ND		ND		Y	0.00	0.00

0.44	1.56	2.22	7.82	U	ND	ND	Y	0.00	0.00
0.22	0.66	1.33	3.93	U	ND	ND	Y	0.00	0.00
0.89	2.69	3.55	10.76	U	ND	ND	Y	0.00	0.00
0.22	0.88	1.11	4.40	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.11	5.13	U	ND	ND	Y	0.00	0.00
0.22	1.09	1.11	5.42	U	ND	ND	Y	0.00	0.00
0.22	1.21	1.11	6.06	U	ND	ND	Y	0.00	0.00
0.22	0.90	1.11	4.49	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.11	5.04	U	ND	ND	Y	0.00	0.00
0.22	0.76	1.11	3.82	U	ND	ND	Y	0.00	0.00
1.55	4.96	2.22	7.09			=	Y	10.89	34.83
0.22	1.40	1.11	6.98	U	ND	ND	Y	0.00	0.00
0.44	1.86	2.22	9.28	U	ND	ND	Y	0.00	0.00
0.22	1.04	1.11	5.18	U	ND	ND	Y	0.00	0.00
0.44	1.82	1.11	4.55	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.11	5.13	U	ND	ND	Y	0.00	0.00
0.44	1.60	2.22	8.00	U	ND	ND	Y	0.00	0.00
0.22	1.58	1.11	7.89	U	ND	ND	Y	0.00	0.00
0.11	0.60	1.11	5.96	U	ND	ND	Y	0.00	0.00
0.22	1.49	1.11	7.44	U	ND	ND	Y	0.00	0.00
0.44	1.82	1.11	4.54	U	ND	ND	Y	0.00	0.00
0.44	1.82	3.55	14.55	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.11	5.04	U	ND	ND	Y	0.00	0.00
0.89	3.34	1.11	4.18			=	Y	5.03	18.98
0.22	1.01	1.11	5.04	U	ND	ND	Y	0.00	0.00
0.22	1.21	1.11	6.06	U	ND	ND	Y	0.00	0.00
0.44	2.07	1.11	5.18	U	ND	ND	Y	0.00	0.00
0.44	1.82	3.55	14.55	U	ND	ND	Y	0.00	0.00
0.22	1.03	3.10	14.36	U	ND	ND	Y	0.00	0.00
0.44	2.07	1.11	5.18	J	J	=	Y	0.45	2.10
0.44	3.78	1.11	9.46	U	ND	ND	Y	0.00	0.00
0.44	3.41	1.11	8.53	U	ND	ND	Y	0.00	0.00
0.11	0.75	1.11	7.53	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.11	5.11	U	ND	ND	Y	0.00	0.00
0.44	3.05	1.11	7.62	U	ND	ND	Y	0.00	0.00
0.44	1.93	1.11	4.82			=	Y	2.15	9.34
0.44	1.93	1.11	4.82			=	Y	2.71	11.78
0.44	2.33	1.11	5.82	J	J	=	Y	0.56	2.96
0.67	2.84	1.11	4.73	U	ND	ND	Y	0.00	0.00
0.44	4.59	1.11	11.47	U	ND	ND	Y	0.00	0.00
0.44	1.93	1.11	4.82	J	J	=	Y	0.58	2.52
0.89	6.09	2.22	15.23	U	ND	ND	Y	0.00	0.00
0.89	5.35	2.66	16.06	U	ND	ND	Y	0.00	0.00
0.89	4.54	2.66	13.62	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.10	15.28	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.10	15.28	U	ND	ND	Y	0.00	0.00
0.89	4.36	7.09	34.92	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.99	19.64	U	ND	ND	Y	0.00	0.00
0.89	5.17	2.66	15.50	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.99	19.64	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00

0.89	4.87	3.10	17.06	U	ND	ND	Y	0.00	0.00
0.89	5.34	3.55	21.35	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62			=	Y	9.35	51.39
0.89	4.60	2.22	11.49	U	ND	ND	Y	0.00	0.00
0.89	5.34	2.22	13.35	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00
0.89	5.34	3.10	18.68	U	ND	ND	Y	0.00	0.00
1.33	12.87	3.10	30.03	U	ND	ND	Y	0.00	0.00
1.33	9.88	2.22	16.47	U	ND	ND	Y	0.00	0.00
2.22	11.64	0.44	2.33	U	ND	ND	Y	0.00	0.00
1.33	9.88	2.22	16.47	U	ND	ND	Y	0.00	0.00
1.11	11.84	1.33	14.21	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 20
Sample ID: T-502

Can Factor: 1.33
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**20**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.33
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdnl) (Cistdl) / (Cstdnl) (Aistdl)] Note: 1

2) Raw Amt = (Ansamp) (Cistdl) / (Avg RFn) (Aistdl) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdl ppmv	Aistdl Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	23949	20.0	11870254	0.205	0.91	1.57
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11870254	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11870254	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	44738	20.0	11870254	0.322	1.43	2.95
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11870254	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11870254	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11870254	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11870254	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11870254	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11870254	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11870254	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11870254	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	73068	20.0	11870254	0.606	2.69	6.39
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	32388	20.0	11870254	0.139	0.61	1.51
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11870254	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11870254	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11870254	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11870254	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11870254	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11870254	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11870254	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	17519	20.0	11870254	0.045	0.20	0.62
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11870254	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11870254	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11870254	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11870254	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11870254	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11870254	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11870254	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11870254	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11870254	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11870254	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11870254	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11870254	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11870254	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11870254	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11870254	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11870254	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11870254	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11870254	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12884842	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12884842	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12884842	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12884842	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	1256688	20.0	12884842	2.456	10.89	34.83
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12884842	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12884842	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12884842	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12884842	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12884842	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12884842	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12884842	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12884842	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12884842	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12884842	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12884842	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12884842	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	816091	20.0	12884842	1.135	5.03	18.98
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12884842	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12884842	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12884842	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12884842	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12884842	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	28290	20.0	12884842	0.101	0.45	2.10
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12884842	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12884842	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12884842	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	19358129	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	19358129	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	699084	20.0	19358129	0.484	2.15	9.34
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	719244	20.0	19358129	0.611	2.71	11.78
76	Nonane	d5CB	TRG	128.3	0.711	87574	20.0	19358129	0.127	0.56	2.96
77	Styrene	d5CB	TRG	104.2	0.978	45701	20.0	19358129	0.048	0.21	0.91
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	19358129	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	167406	20.0	19358129	0.131	0.58	2.52
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	19358129	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	19358129	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	19358129	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	19358129	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	19358129	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	286390	20.0	19358129	0.159	0.71	3.47
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	108057	20.0	19358129	0.058	0.26	1.27
87	Decane	d5CB	TRG	142.3	1.250	185100	20.0	19358129	0.153	0.68	3.95
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	19358129	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	209948	20.0	19358129	0.142	0.63	3.10
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	19358129	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	19358129	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	19358129	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	4799676	20.0	19358129	2.109	9.35	51.39
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	19358129	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	19358129	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	19358129	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	19358129	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	19358129	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	19358129	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	19358129	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	19358129	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	19358129	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11870254	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12884842	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	19358129	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	9088015	10.0		11.880	118.80	119

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443520A.D
Acq Time : 11 Dec 124 9:31 pm
Sample : T-502
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:40 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	11870254	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	12884842	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	19358129	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	9088015	11.88	ppbV		118.80
Target Compounds							Qvalue
2) Propylene	4.33	42	23949	0.21	ppbV		86
5) Chloromethane	4.65	50	44738	0.32	ppbV	m	89
14) Acetone	6.29	58	73068	0.61	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.45	45	32388	0.14	ppbV	#	90
23) Carbon disulfide	7.42	76	17519	0.04	ppbV	#	69
47) Benzene	10.43	78	1256688	2.46	ppbV	m	72
61) Toluene	13.20	91	816091	1.13	ppbV		99
67) Octane	13.74	85	28290	0.10	ppbV	#	64
74) Ethylbenzene	15.57	91	699084	0.48	ppbV	#	86
75) m,p-Xylenes	15.72	91	719244	0.61	ppbV	#	72
76) Nonane	16.10	57	87574	0.13	ppbV	#	75
77) Styrene	16.29	104	45701	0.05	ppbV	#	71
79) o-Xylene	16.36	91	167406	0.13	ppbV	#	80
85) 4-Ethyltoluene	17.87	105	286390	0.16	ppbV	m	85
86) 1,3,5-Trimethylbenzene	17.96	105	108057	0.06	ppbV	m	81
87) Decane	18.27	57	185100	0.15	ppbV	#	82
89) 1,2,4-Trimethylbenzene	18.59	105	209948	0.14	ppbV	#	86
93) Isopropyltoluene	19.17	119	4799676	2.11	ppbV	#	89

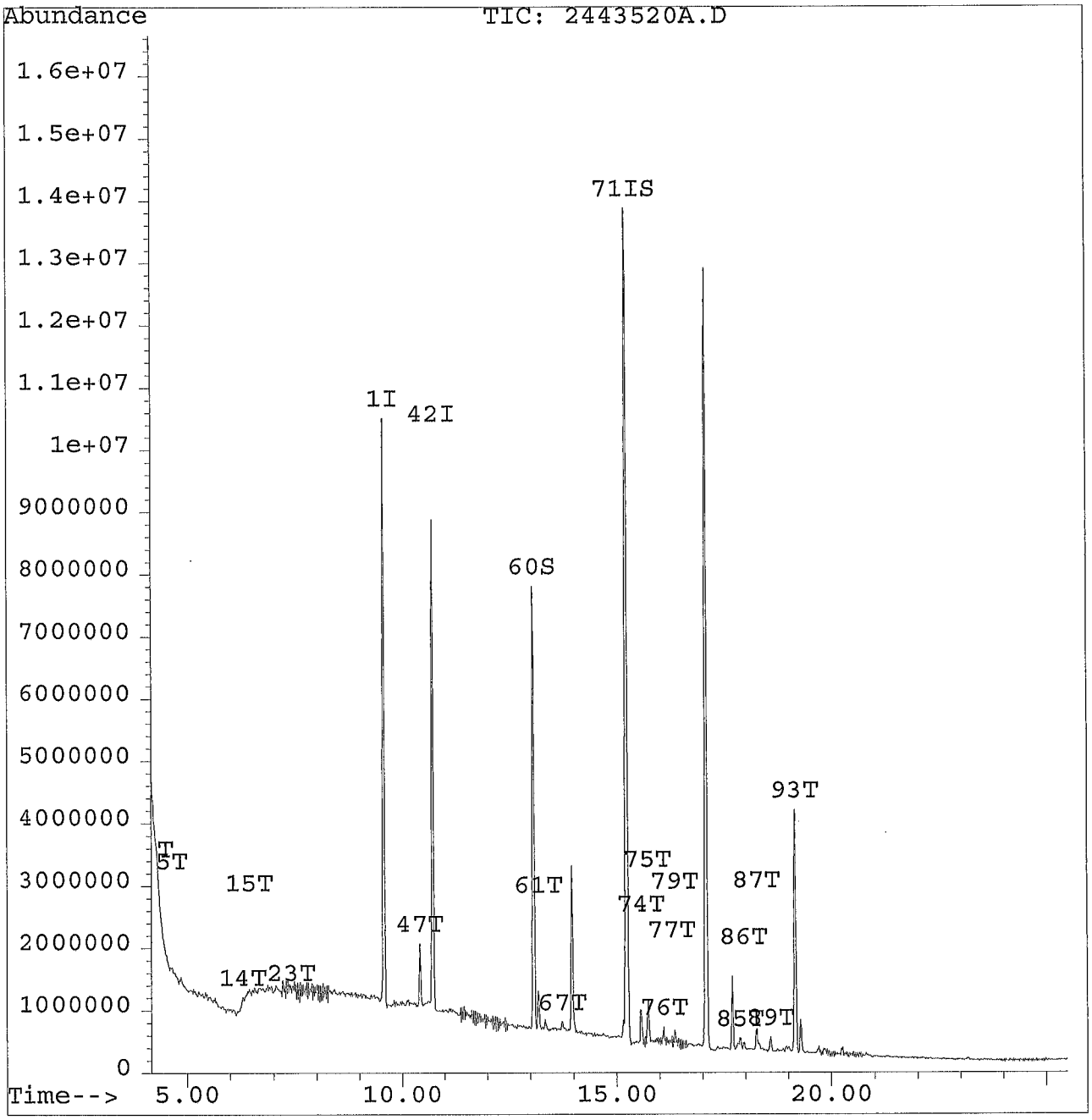
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443520A.D
Acq Time : 11 Dec 124 9:31 pm
Sample : T-502
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:40 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Sample Data Packages

SDG Number 224435

Lab Id Number 21

Client ID T-503

Analytical Method TO-15

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Analytical Report
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Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 21**

File Name: 2443521A.D **Date Sampled:** 11/20/24 **Time:** 08:32
Description: T-503 **Date Analyzed:** 12/11/24 **Time:** 22:08
Canister: 751 **Can Dilution Factor:** 1.28
QC_Batch: 121124-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	0.79	0.74	1.84	1.37	J
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	ND	5.08	6.09	ND	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	1.50	4.78	6.82	4.78	J
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	ND	1.86	4.64	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	115	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 21

File Name: 224435
Descriptio 21
Canister: 751
QC_Batch: 121124-MA1

Date Sampled: 11/20/24 **Time:** 08:32
Date Analyzed: 12/11/24 **Time:** 22:08
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**21**		
File Name:	2443521A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**8:32**
Sample ID:	T-503	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**22:08**
Anal Date:	11 Dec 124 10:08 pm	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**751**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.28**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	LR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.186	4.41	42.00	21599
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	14
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.410	6.42	58.00	49211
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.350	10.70	78.00	175848
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.160	13.50	91.00	112907
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.051	15.90	106	70668
1330-20-7	m,p-Xylenes	75	TRG	0.091	16.06	91.00	103231
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.032	16.61	104.00	28935
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.033	16.37	91.00	40500
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.043	18.23	105.00	73998
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.023	18.31	105.00	40840
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.053	18.95	105.00	75062
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.179	19.53	119.00	394398
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11818965**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12638006**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18695322**
2037-26-5	Toluene-d8	60	SURR	11.541	13.40	98.00	**8659189**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 21
File Name: 2443521A.D
Run Method: A1563_L.M
Can Factor: 1.28
Air Volume: 300.0 ml
Can/Tube Number: 751
Dilution Factor: 0.3840
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3840
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.19	0.79	1.37	0.79	1.37	1.37	1.37	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.41	1.75	4.16	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Benzene	78.1	0.35	1.50	4.78	1.50	4.78	4.78	4.78	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Toluene	92.1	0.16	0.68	2.58	ND	ND	0		0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethylbenzene	106.2	0.05	0.22	0.94	ND	ND	0		0.100	0.250
m,p-Xylenes	106.2	0.09	0.39	1.69	ND	ND	0		0.100	0.250
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Styrene	104.2	0.03	0.14	0.58	ND	ND	0		0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		0.100	0.250
o-Xylene	106.2	0.03	0.14	0.61	ND	ND	0		0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
4-Ethyltoluene	120.2	0.04	0.18	0.89	ND	ND	0		0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.02	0.10	0.48	ND	ND	0		0.200	0.900
Decane	142.3	0.00	0.00	0.00	ND	ND	0		0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.05	0.22	1.11	ND	ND	0		0.200	0.900
I-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.18	0.77	4.21	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.54	115	115	115	115	115	115	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.74	1.07	1.84	J	J		=		Y	0.79	1.37
0.64	3.17	1.07	5.28	U	ND		ND		Y	0.00	0.00
2.13	2.80	2.56	3.36	U	ND		ND		Y	0.00	0.00
0.64	1.32	1.07	2.21	U	ND		ND		Y	0.00	0.00
0.43	2.99	1.07	7.47	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.07	2.73	U	ND		ND		Y	0.00	0.00
0.21	0.48	1.07	2.36	U	ND		ND		Y	0.00	0.00
0.43	1.66	1.07	4.15	U	ND		ND		Y	0.00	0.00
0.43	1.13	1.07	2.82	U	ND		ND		Y	0.00	0.00
2.13	4.03	13.70	25.86	U	ND		ND		Y	0.00	0.00
0.43	0.98	1.28	2.94	U	ND		ND		Y	0.00	0.00
0.43	2.40	1.07	6.00	U	ND		ND		Y	0.00	0.00
2.13	5.08	2.56	6.09	U	ND		ND		Y	0.00	0.00
0.85	2.10	5.33	13.13	U	ND		ND		Y	0.00	0.00
0.43	1.29	4.27	12.95	U	ND		ND		Y	0.00	0.00
0.43	2.50	1.28	7.49	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND		ND		Y	0.00	0.00
0.85	1.86	1.28	2.78	U	ND		ND		Y	0.00	0.00
0.21	1.64	1.07	8.19	U	ND		ND		Y	0.00	0.00
0.21	0.67	4.27	13.37	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.07	3.71	U	ND		ND		Y	0.00	0.00
0.43	1.33	1.07	3.32	U	ND		ND		Y	0.00	0.00
0.21	0.85	0.85	3.39	U	ND		ND		Y	0.00	0.00
0.43	1.54	0.85	3.08	U	ND		ND		Y	0.00	0.00
1.07	2.41	1.71	3.85	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND		ND		Y	0.00	0.00
0.43	1.79	1.07	4.46	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.27	15.05	U	ND		ND		Y	0.00	0.00
0.43	1.26	1.28	3.78	U	ND		ND		Y	0.00	0.00
0.43	1.79	2.56	10.72	U	ND		ND		Y	0.00	0.00
0.43	1.51	1.07	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.17	1.07	2.93	U	ND		ND		Y	0.00	0.00
0.43	1.54	1.07	3.85	U	ND		ND		Y	0.00	0.00
0.21	1.13	1.07	5.65	U	ND		ND		Y	0.00	0.00

0.43	1.50	2.13	7.52	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.28	3.78	U	ND	ND	Y	0.00	0.00
0.85	2.59	3.41	10.36	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.21	1.05	1.07	5.22	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	0.74	1.07	3.68	U	ND	ND	Y	0.00	0.00
1.49	4.78	2.13	6.82	J	J	=	Y	1.50	4.78
0.21	1.34	1.07	6.72	U	ND	ND	Y	0.00	0.00
0.43	1.79	2.13	8.93	U	ND	ND	Y	0.00	0.00
0.21	1.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.38	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.43	1.54	2.13	7.70	U	ND	ND	Y	0.00	0.00
0.21	1.52	1.07	7.59	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.07	5.74	U	ND	ND	Y	0.00	0.00
0.21	1.43	1.07	7.16	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.37	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.85	3.22	1.07	4.02	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.99	2.99	13.82	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	3.64	1.07	9.10	U	ND	ND	Y	0.00	0.00
0.43	3.28	1.07	8.21	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.07	7.24	U	ND	ND	Y	0.00	0.00
0.43	1.97	1.07	4.92	U	ND	ND	Y	0.00	0.00
0.43	2.93	1.07	7.33	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	2.24	1.07	5.60	U	ND	ND	Y	0.00	0.00
0.64	2.73	1.07	4.55	U	ND	ND	Y	0.00	0.00
0.43	4.42	1.07	11.04	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.85	5.86	2.13	14.66	U	ND	ND	Y	0.00	0.00
0.85	5.15	2.56	15.45	U	ND	ND	Y	0.00	0.00
0.85	4.37	2.56	13.11	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	6.83	33.61	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.97	2.56	14.92	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00

0.85	4.69	2.99	16.42	U	ND	ND	Y	0.00	0.00
0.85	5.14	3.41	20.55	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.42	2.13	11.06	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.13	12.84	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.99	17.98	U	ND	ND	Y	0.00	0.00
1.28	12.39	2.99	28.90	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
2.13	11.20	0.43	2.24	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
1.07	11.39	1.28	13.67	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 21
Sample ID: T-503

Can Factor: 1.28
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**21**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.28
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdnl) (Cistdi) / (Cstdnl) (Aistdi)] Note: 1

2) Raw Amt = (Ansamp) (Cistdl) / (Avg RFn) (Aistdl) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	21599	20.0	11818965	0.186	0.79	1.37
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11818965	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11818965	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	14	20.0	11818965	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11818965	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11818965	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11818965	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11818965	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11818965	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	11818965	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11818965	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11818965	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	49211	20.0	11818965	0.410	1.75	4.16
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11818965	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11818965	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11818965	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11818965	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11818965	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11818965	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11818965	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11818965	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11818965	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11818965	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11818965	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11818965	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11818965	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11818965	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11818965	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11818965	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11818965	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11818965	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11818965	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11818965	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11818965	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11818965	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11818965	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11818965	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11818965	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11818965	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11818965	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12638006	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12638006	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12638006	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12638006	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	175848	20.0	12638006	0.350	1.50	4.78
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12638006	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12638006	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12638006	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12638006	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12638006	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12638006	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12638006	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12638006	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12638006	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12638006	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12638006	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12638006	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	112907	20.0	12638006	0.160	0.68	2.58
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12638006	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12638006	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12638006	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12638006	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12638006	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12638006	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12638006	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12638006	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12638006	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18695322	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18695322	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	70668	20.0	18695322	0.051	0.22	0.94
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	103231	20.0	18695322	0.091	0.39	1.69
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18695322	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	28935	20.0	18695322	0.032	0.14	0.58
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18695322	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	40500	20.0	18695322	0.033	0.14	0.61
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18695322	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18695322	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18695322	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18695322	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18695322	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	73998	20.0	18695322	0.043	0.18	0.89
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	40840	20.0	18695322	0.023	0.10	0.48
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18695322	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18695322	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	75062	20.0	18695322	0.053	0.22	1.11
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18695322	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18695322	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18695322	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	394398	20.0	18695322	0.179	0.77	4.21
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18695322	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18695322	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18695322	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18695322	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18695322	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18695322	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18695322	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18695322	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18695322	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11818965	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12638006	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18695322	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8659189	10.0		11.541	115.41	115

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443521A.D
Acq Time : 11 Dec 124 10:08 pm
Sample : T-503
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:58 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	11818965	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	12638006	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	18695322	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8659189	11.54	ppbV		115.41
Target Compounds							Qvalue
2) Propylene	4.31	42	21599	0.19	ppbV	#	71
5) Chloromethane	5.32	50	14	0.00	ppbV	m	89
14) Acetone	6.29	58	49211	0.41	ppbV	#	1
47) Benzene	10.43	78	175848	0.35	ppbV	m	72
61) Toluene	13.20	91	112907	0.16	ppbV		93
74) Ethylbenzene	15.57	91	70668	0.05	ppbV	#	88
75) m,p-Xylenes	15.74	91	103231	0.09	ppbV	#	64
77) Styrene	16.29	104	28935	0.03	ppbV	#	75
79) o-Xylene	16.37	91	40500	0.03	ppbV		93
85) 4-Ethyltoluene	17.89	105	73998	0.04	ppbV	m	84
86) 1,3,5-Trimethylbenzene	17.98	105	40840	0.02	ppbV	m	83
89) 1,2,4-Trimethylbenzene	18.59	105	75062	0.05	ppbV	#	82
93) Isopropyltoluene	19.17	119	394398	0.18	ppbV	#	92

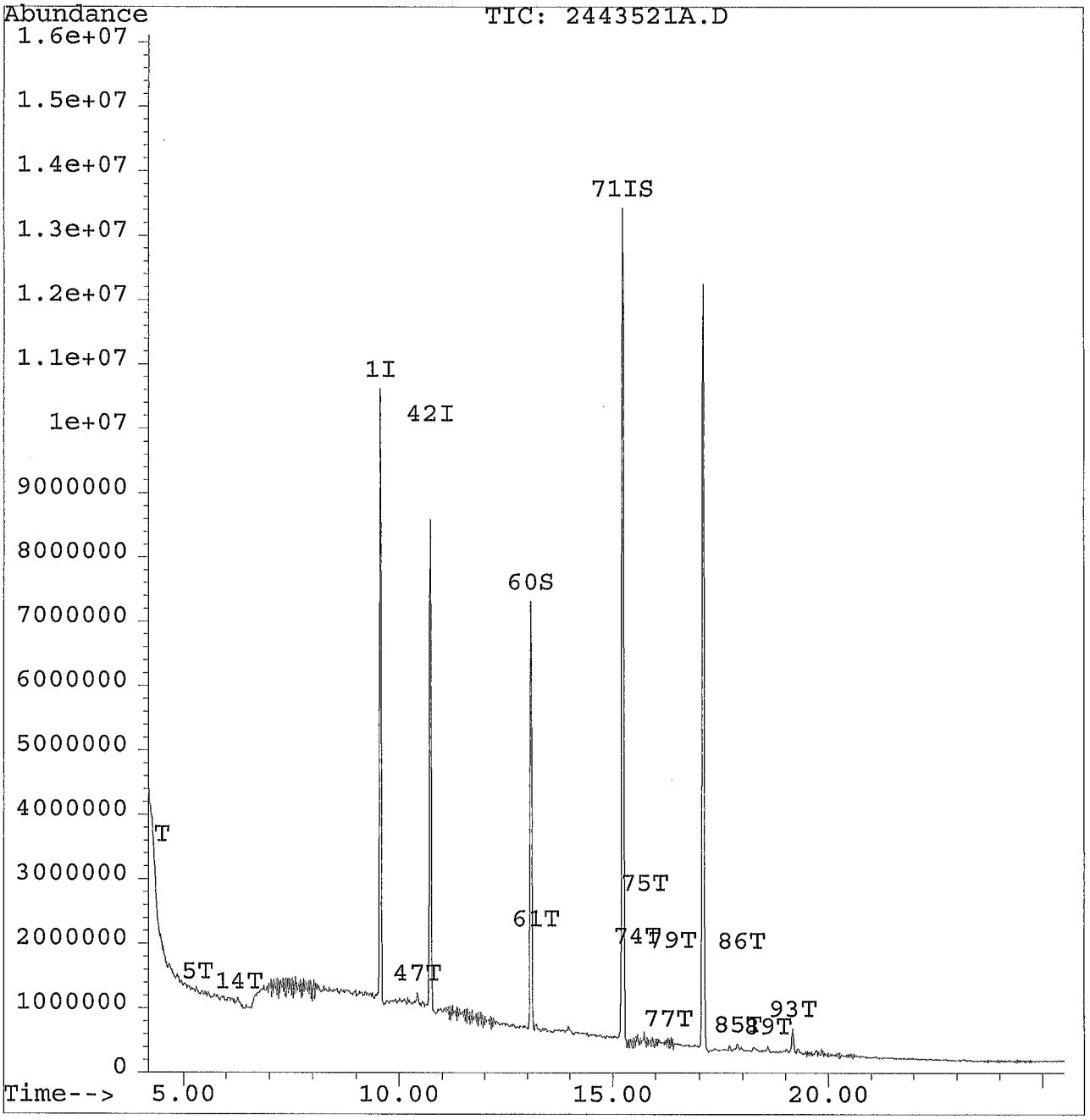
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443521A.D
Acq Time : 11 Dec 124 10:08 pm
Sample : T-503
Misc : SCHMIDT, 300 ML
Quant Time: Dec 13 14:58 19124

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\2443521A.D
Acq Time : 11 Dec 124 10:08 pm
Sample : T-503
Misc : SCHMIDT, 300 ML

Operator: LR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	17.46 ppbV	37657196	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	91
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	37
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number **224435**

Lab Id Number **22**

Client ID T-504

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 22**

File Name: 2443522A.D
Description: T-504
Canister: 644
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 08:44
Date Analyzed: 12/12/24 **Time:** 14:24
Can Dilution Factor: 1.28
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	ND	0.74	1.84	ND	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	32.76	4.03	25.86	61.86	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	ND	5.08	6.09	ND	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	ND	1.33	3.32	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	ND	0.74	3.68	ND	
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	ND	0.57	5.74	ND	
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	ND	3.22	4.02	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	ND	0.72	7.24	ND	
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	0.59	1.86	4.64	2.55	J
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	0.70	2.73	4.55	2.99	J
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	0.52	1.86	4.64	2.27	J
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	1.65	4.20	33.61	8.13	J
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	1.17	4.20	18.90	5.76	J
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 22

File Name: 224435
Descriptio 22
Canister: 644
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 08:44
Date Analyzed: 12/12/24 **Time:** 14:24
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**22**		
File Name:	2443522A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**8:44**
Sample ID:	T-504	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**14:24**
Anal Date:	12 Dec 124 2:24 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**644**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.28**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	7.679	5.72	46.00	280333
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.370	6.42	58.00	44360
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.221	10.70	78.00	111765
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.133	13.50	91.00	94659
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.095	15.90	106	133340
1330-20-7	m,p-Xylenes	75	TRG	0.137	16.06	91.00	157292
111-84-2	Nonane	76	TRG	0.038	16.43	57.00	25116
100-42-5	Styrene	77	TRG	0.164	16.61	104.00	151456
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.123	16.37	91.00	152766
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.387	18.23	105.00	676917
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.179	18.31	105.00	323217
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.274	18.95	105.00	393575
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.136	19.53	119.00	300418
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.35	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11786782**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12720975**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18827652**
2037-26-5	Toluene-d8	60	SURR	11.860	13.40	98.00	**8957146**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 22
File Name: 2443522A.D
Run Method: A1563_L.M
Can Factor: 1.28
Air Volume: 300.0 ml
Can/Tube Number: 644
Dilution Factor: 0.3840
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3840
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	7.68	32.76	61.86	32.76	61.86	61.86	61.86	0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.37	1.58	3.76	ND	ND	0		0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.22	0.94	3.02	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.13	0.57	2.15	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.09	0.41	1.76	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.14	0.59	2.55	0.59	2.55	2.55	2.55	**0.100**	**0.250**
Nonane	128.3	0.04	0.16	0.84	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.16	0.70	2.99	0.70	2.99	2.99	2.99	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.12	0.52	2.27	0.52	2.27	2.27	2.27	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.39	1.65	8.13	1.65	8.13	8.13	8.13	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.18	0.76	3.75	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.27	1.17	5.76	1.17	5.76	5.76	5.76	**0.200**	**0.900**
I-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.14	0.58	3.18	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.86	119	119	119	119	119	119	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.74	1.07	1.84	U	ND		ND		Y	0.00	0.00
0.64	3.17	1.07	5.28	U	ND		ND		Y	0.00	0.00
2.13	2.80	2.56	3.36	U	ND		ND		Y	0.00	0.00
0.64	1.32	1.07	2.21	U	ND		ND		Y	0.00	0.00
0.43	2.99	1.07	7.47	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.07	2.73	U	ND		ND		Y	0.00	0.00
0.21	0.48	1.07	2.36	U	ND		ND		Y	0.00	0.00
0.43	1.66	1.07	4.15	U	ND		ND		Y	0.00	0.00
0.43	1.13	1.07	2.82	U	ND		ND		Y	0.00	0.00
2.13	4.03	13.70	25.86				=		Y	32.76	61.86
0.43	0.98	1.28	2.94	U	ND		ND		Y	0.00	0.00
0.43	2.40	1.07	6.00	U	ND		ND		Y	0.00	0.00
2.13	5.08	2.56	6.09	U	ND		ND		Y	0.00	0.00
0.85	2.10	5.33	13.13	U	ND		ND		Y	0.00	0.00
0.43	1.29	4.27	12.95	U	ND		ND		Y	0.00	0.00
0.43	2.50	1.28	7.49	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND		ND		Y	0.00	0.00
0.85	1.86	1.28	2.78	U	ND		ND		Y	0.00	0.00
0.21	1.64	1.07	8.19	U	ND		ND		Y	0.00	0.00
0.21	0.67	4.27	13.37	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.07	3.71	U	ND		ND		Y	0.00	0.00
0.43	1.33	1.07	3.32	U	ND		ND		Y	0.00	0.00
0.21	0.85	0.85	3.39	U	ND		ND		Y	0.00	0.00
0.43	1.54	0.85	3.08	U	ND		ND		Y	0.00	0.00
1.07	2.41	1.71	3.85	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND		ND		Y	0.00	0.00
0.43	1.79	1.07	4.46	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.27	15.05	U	ND		ND		Y	0.00	0.00
0.43	1.26	1.28	3.78	U	ND		ND		Y	0.00	0.00
0.43	1.79	2.56	10.72	U	ND		ND		Y	0.00	0.00
0.43	1.51	1.07	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.17	1.07	2.93	U	ND		ND		Y	0.00	0.00
0.43	1.54	1.07	3.85	U	ND		ND		Y	0.00	0.00
0.21	1.13	1.07	5.65	U	ND		ND		Y	0.00	0.00

0.43	1.50	2.13	7.52	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.28	3.78	U	ND	ND	Y	0.00	0.00
0.85	2.59	3.41	10.36	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.21	1.05	1.07	5.22	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	0.74	1.07	3.68	U	ND	ND	Y	0.00	0.00
1.49	4.78	2.13	6.82	U	ND	ND	Y	0.00	0.00
0.21	1.34	1.07	6.72	U	ND	ND	Y	0.00	0.00
0.43	1.79	2.13	8.93	U	ND	ND	Y	0.00	0.00
0.21	1.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.38	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.43	1.54	2.13	7.70	U	ND	ND	Y	0.00	0.00
0.21	1.52	1.07	7.59	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.07	5.74	U	ND	ND	Y	0.00	0.00
0.21	1.43	1.07	7.16	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.37	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.85	3.22	1.07	4.02	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.99	2.99	13.82	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	3.64	1.07	9.10	U	ND	ND	Y	0.00	0.00
0.43	3.28	1.07	8.21	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.07	7.24	U	ND	ND	Y	0.00	0.00
0.43	1.97	1.07	4.92	U	ND	ND	Y	0.00	0.00
0.43	2.93	1.07	7.33	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	J	J	=	Y	0.59	2.55
0.43	2.24	1.07	5.60	U	ND	ND	Y	0.00	0.00
0.64	2.73	1.07	4.55	J	J	=	Y	0.70	2.99
0.43	4.42	1.07	11.04	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	J	J	=	Y	0.52	2.27
0.85	5.86	2.13	14.66	U	ND	ND	Y	0.00	0.00
0.85	5.15	2.56	15.45	U	ND	ND	Y	0.00	0.00
0.85	4.37	2.56	13.11	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	6.83	33.61	J	J	=	Y	1.65	8.13
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.97	2.56	14.92	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	J	J	=	Y	1.17	5.76
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00

0.85	4.69	2.99	16.42	U	ND	ND	Y	0.00	0.00
0.85	5.14	3.41	20.55	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.42	2.13	11.06	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.13	12.84	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.99	17.98	U	ND	ND	Y	0.00	0.00
1.28	12.39	2.99	28.90	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
2.13	11.20	0.43	2.24	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
1.07	11.39	1.28	13.67	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 22
Sample ID: T-504

Can Factor: 1.28
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	12.35	50	0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
				0.00	100	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	
ND	0.7	1.5	3.0	6.40	2.99	12.23	6.40	26.21	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**22**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.28
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdnl) (Cistdl) / (Cstdnl) (Aistdl)] Note: 1

2) Raw Amt = (Ansamp) (Cistdl) / (Avg RFn) (Aistdl) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdl ppmv	Aistdl Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	11786782	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11786782	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11786782	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	11786782	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11786782	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11786782	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11786782	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11786782	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11786782	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	280333	20.0	11786782	7.679	32.76	61.86
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11786782	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11786782	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	44360	20.0	11786782	0.370	1.58	3.76
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	11786782	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11786782	0.000	0.00	0.00
17	Methyl Iodide	PFB	TRG	142.9	0.700	0	20.0	11786782	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11786782	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11786782	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11786782	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11786782	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11786782	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11786782	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11786782	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11786782	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11786782	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11786782	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11786782	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11786782	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11786782	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11786782	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11786782	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11786782	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11786782	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11786782	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11786782	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11786782	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11786782	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11786782	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11786782	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11786782	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12720975	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12720975	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12720975	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12720975	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	111765	20.0	12720975	0.221	0.94	3.02
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12720975	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12720975	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12720975	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12720975	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12720975	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12720975	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12720975	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12720975	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12720975	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12720975	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12720975	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12720975	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	94659	20.0	12720975	0.133	0.57	2.15
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12720975	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12720975	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12720975	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12720975	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12720975	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12720975	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12720975	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12720975	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12720975	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18827652	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18827652	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	133340	20.0	18827652	0.095	0.41	1.76
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	157292	20.0	18827652	0.137	0.59	2.55
76	Nonane	d5CB	TRG	128.3	0.711	25116	20.0	18827652	0.038	0.16	0.84
77	Styrene	d5CB	TRG	104.2	0.978	151456	20.0	18827652	0.164	0.70	2.99
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18827652	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	152766	20.0	18827652	0.123	0.52	2.27
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18827652	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18827652	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18827652	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18827652	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18827652	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	676917	20.0	18827652	0.387	1.65	8.13
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	323217	20.0	18827652	0.179	0.76	3.75
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18827652	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18827652	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	393575	20.0	18827652	0.274	1.17	5.76
90	I-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18827652	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18827652	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18827652	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	300418	20.0	18827652	0.136	0.58	3.18
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18827652	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18827652	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18827652	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18827652	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18827652	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18827652	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18827652	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18827652	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18827652	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11786782	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12720975	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18827652	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8957146	10.0		11.860	118.60	119

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443522A.D
Acq Time : 12 Dec 124 2:24 pm
Sample : T-504
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 14:40 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	11786782	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.74	114	12720975	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.25	117	18827652	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	8957146	11.86	ppbV		118.60
Target Compounds							Qvalue
11) Ethanol	5.59	46	280333	7.68	ppbV		88
14) Acetone	6.28	58	44360	0.37	ppbV	#	1
47) Benzene	10.45	78	111765	0.22	ppbV	m	74
61) Toluene	13.21	91	94659	0.13	ppbV		93
74) Ethylbenzene	15.59	91	133340	0.09	ppbV	#	83
75) m,p-Xylenes	15.74	91	157292	0.14	ppbV	#	67
76) Nonane	16.12	57	25116	0.04	ppbV	#	64
77) Styrene	16.29	104	151456	0.16	ppbV	#	84
79) o-Xylene	16.37	91	152766	0.12	ppbV	#	80
85) 4-Ethyltoluene	17.89	105	676917	0.39	ppbV	#	83
86) 1,3,5-Trimethylbenzene	17.98	105	323217	0.18	ppbV	m	84
89) 1,2,4-Trimethylbenzene	18.59	105	393575	0.27	ppbV	#	86
93) Isopropyltoluene	19.19	119	300418	0.14	ppbV	#	92

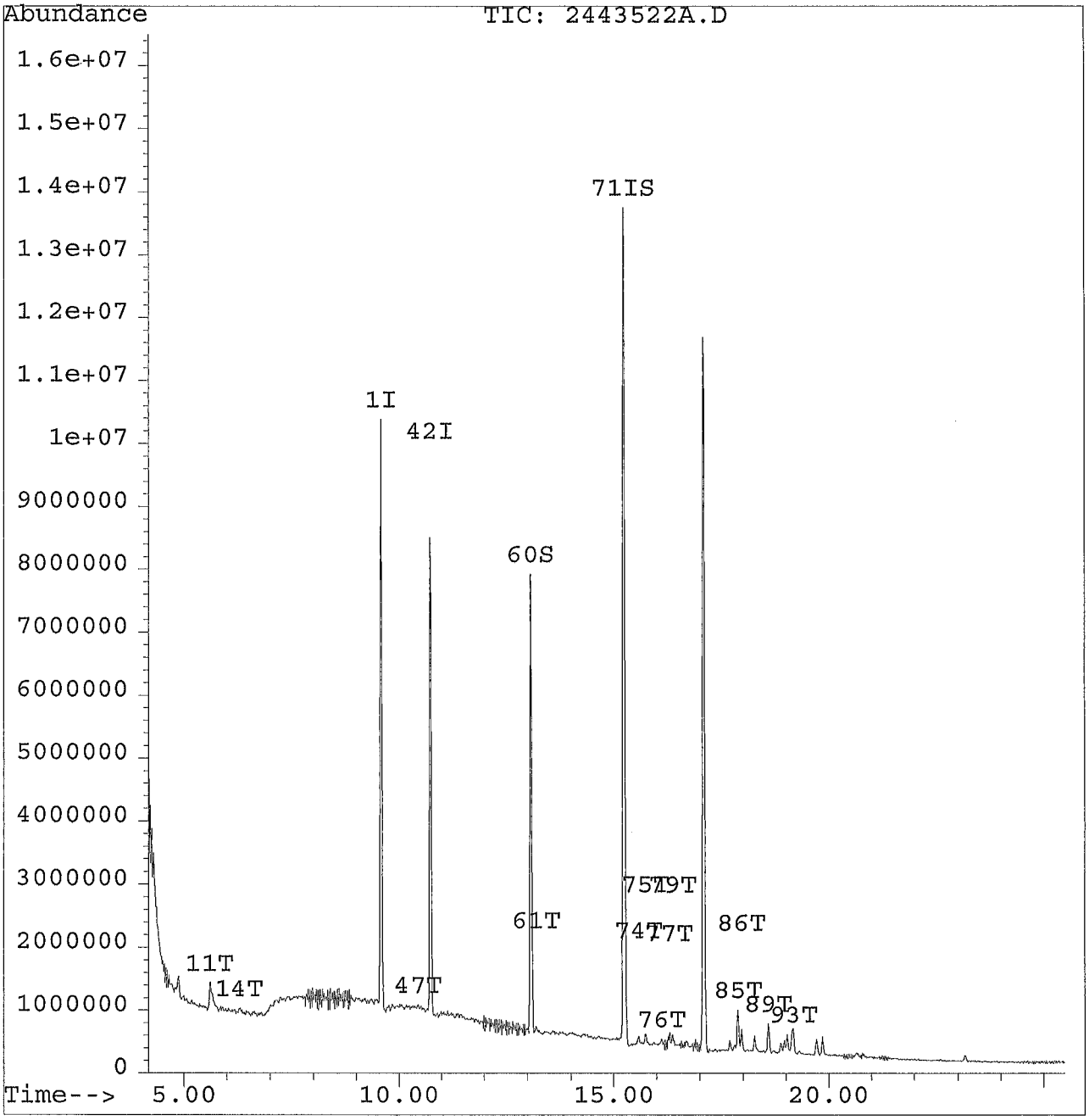
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443522A.D
Acq Time : 12 Dec 124 2:24 pm
Sample : T-504
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 14:40 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443522A.D
Acq Time : 12 Dec 124 2:24 pm Operator: TR
Sample : T-504 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

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Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	16.93 ppbV	36875824	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	70
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	52
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 23

Client ID T-505

Analytical Method TO-15

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 23

File Name: 2443523A.D
Description: T-505
Canister: 883
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/12/24 **Time:** 15:02
Can Dilution Factor: 1.35
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	ND	0.78	1.94	ND	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.34	5.57	ND	
67-56-1	Methanol	2.25	2.70	ND	2.95	3.54	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.40	2.33	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.15	7.87	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.88	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.50	2.49	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.75	4.37	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.19	2.97	ND	
64-17-5	Ethanol	2.25	14.45	20.52	4.25	27.27	38.73	
107-02-8	Acrolein	0.45	1.35	ND	1.03	3.10	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.53	6.33	ND	
67-64-1	Acetone	2.25	2.70	2.50	5.35	6.42	5.95	J
67-63-0	2-propanol (isopropylalcohol)	0.90	5.63	ND	2.22	13.85	ND	
75-65-0	t-Butyl alcohol	0.45	4.50	ND	1.37	13.66	ND	
4227-95-6	Methyl iodide	0.45	1.35	ND	2.63	7.90	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
107-13-1	Acrylonitrile	0.90	1.35	ND	1.96	2.94	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.73	8.63	ND	
107-05-1	Allyl chloride	0.23	4.50	ND	0.70	14.10	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.78	3.91	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.40	3.51	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.90	ND	0.89	3.57	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.90	ND	1.62	3.25	ND	
107-12-0	Propionitrile	1.13	1.80	ND	2.54	4.06	ND	
75-34-3	1,1-Dichloroethane	0.22	1.13	ND	0.91	4.56	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.88	4.71	ND	
108-05-4	Vinyl acetate	0.23	4.50	ND	0.79	15.87	ND	
78-93-3	2-Butanone (MEK)	0.45	1.35	ND	1.33	3.99	ND	
108-20-3	Diisopropyl ether	0.45	2.70	ND	1.88	11.30	ND	
110-54-3	Hexane	0.45	1.13	ND	1.59	3.97	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.24	3.09	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.62	4.06	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.19	5.96	ND	
96-33-3	Methyl acrylate	0.45	2.25	ND	1.59	7.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.35	ND	0.67	3.99	ND	
78-83-1	Isobutyl alcohol	0.90	3.60	ND	2.73	10.93	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.10	5.50	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.91	4.56	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.88	ND	
71-43-2	Benzene	1.58	2.25	ND	5.04	7.20	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.42	7.09	ND	
994-05-8	t-Amyl methyl ether	0.45	2.25	ND	1.88	9.42	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.05	5.26	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.85	4.62	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
123-91-1	1,4 Dioxane	0.45	2.25	ND	1.62	8.12	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.60	8.01	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.05	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.51	7.55	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.84	4.61	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.60	ND	1.85	14.77	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
108-88-3	Toluene	0.90	1.13	ND	3.39	4.24	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.10	5.26	ND	
591-78-6	2-Hexanone	0.45	3.60	ND	1.85	14.77	ND	
142-28-9	1,3-Dichloropropane	0.23	3.15	ND	1.04	14.58	ND	
111-65-9	Octane	0.45	1.13	ND	2.10	5.26	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.84	9.60	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.46	8.66	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.76	7.64	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.08	5.19	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.09	7.73	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.96	4.89	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.96	4.89	ND	
111-84-2	Nonane	0.45	1.13	ND	2.36	5.91	ND	
100-42-5	Styrene	0.68	1.13	ND	2.88	4.80	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.66	11.64	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.96	4.89	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.90	2.25	ND	6.19	15.46	ND	
96-18-4	1,2,3-Trichloropropane	0.90	2.70	ND	5.43	16.30	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.90	2.70	ND	4.61	13.82	ND	
103-65-1	n-Propylbenzene	0.90	3.15	ND	4.43	15.51	ND	
98-82-8	Isopropylbenzene	0.90	3.15	ND	4.43	15.51	ND	
622-96-8	4-Ethyltoluene	0.90	7.20	1.07	4.43	35.44	5.28	J
108-67-8	1,3,5-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
124-18-5	Decane	0.90	2.70	ND	5.25	15.74	ND	
98-06-6	tert-butyl benzene	0.90	2.70	ND	4.95	14.84	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
538-93-2	i-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
135-98-8	sec-butylbenzene	0.90	3.15	ND	4.95	17.31	ND	
541-73-1	1,3-Dichlorobenzene	0.90	3.60	ND	5.42	21.67	ND	
99-87-6	Isopropyltoluene	0.90	2.70	ND	4.95	14.84	ND	
100-44-7	Benzyl chloride	0.90	2.25	ND	4.67	11.67	ND	
106-46-7	1,4-Dichlorobenzene	0.90	2.25	ND	5.42	13.55	ND	
104-51-8	n-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
95-50-1	1,2-Dichlorobenzene	0.90	3.15	ND	5.42	18.96	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.35	3.15	ND	13.06	30.48	ND	
120-82-1	1,2,4-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
91-20-3	Naphthalene	2.25	0.45	ND	11.81	2.36	ND	
87-61-6	1,2,3-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
87-68-3	Hexachlorobutadiene	1.13	1.35	ND	12.02	14.42	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	112	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 23

File Name: 224435
Descriptio 23
Canister: 883
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/12/24 **Time:** 15:02
Can Dilution Factor: 1.35
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.15	6.75	ND	12.90	27.64	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**23**		
File Name:	2443523A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**10:55**
Sample ID:	T-505	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**15:02**
Anal Date:	12 Dec 124 3:02 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**883**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.35**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.333	4.86	31.00	39353
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	4.559	5.72	46.00	154358
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.556	6.42	58.00	61720
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.120	10.70	78.00	57770
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.098	13.50	91.00	66257
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.061	15.90	106	75540
1330-20-7	m,p-Xylenes	75	TRG	0.082	16.06	91.00	82298
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.110	16.61	104.00	88879
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.087	16.37	91.00	94828
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	884
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.238	18.23	105.00	365117
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.132	18.31	105.00	208983
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.097	19.53	119.00	187839
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	242
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.39	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**10931349**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12116571**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**16497103**
2037-26-5	Toluene-d8	60	SURR	11.232	13.40	98.00	**8079892**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 23
File Name: 2443523A.D
Run Method: A1563_L.M
Can Factor: 1.35
Air Volume: 300.0 ml
Can/Tube Number: 883
Dilution Factor: 0.4050
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4050
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.33	1.50	1.96	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	4.56	20.52	38.73	20.52	38.73	38.73	38.73	0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.56	2.50	5.95	2.50	5.95	5.95	5.95	0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.12	0.54	1.73	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.10	0.44	1.66	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.06	0.28	1.20	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.08	0.37	1.61	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.11	0.50	2.12	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.09	0.39	1.70	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.01	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.24	1.07	5.28	1.07	5.28	5.28	5.28	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.13	0.59	2.92	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		0.200	0.800
Isopropyltoluene	134.2	0.10	0.44	2.40	ND	ND	0		0.200	0.600
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		0.200	0.500
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		0.200	0.500
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600
1,2-Dichlorobenzene	147.0	0.00	0.00	0.01	ND	ND	0		0.200	0.700
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		0.300	0.700
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		0.300	0.500
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		0.500	0.100
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		0.300	0.500
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		0.250	0.300
Pentafluorobenzene		20.00							20.0	20.0
1,4-Difluorobenzene		20.00							20.0	20.0
Chlorobenzene-d5		20.00							20.0	20.0
Toluene-d8		11.23	112	112	112	112	112	112	10.0	10.0

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.94	U	ND		ND		Y	0.00	0.00
0.68	3.34	1.13	5.57	U	ND		ND		Y	0.00	0.00
2.25	2.95	2.70	3.54	U	ND		ND		Y	0.00	0.00
0.68	1.40	1.13	2.33	U	ND		ND		Y	0.00	0.00
0.45	3.15	1.13	7.87	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.88	U	ND		ND		Y	0.00	0.00
0.23	0.50	1.13	2.49	U	ND		ND		Y	0.00	0.00
0.45	1.75	1.13	4.37	U	ND		ND		Y	0.00	0.00
0.45	1.19	1.13	2.97	U	ND		ND		Y	0.00	0.00
2.25	4.25	14.45	27.27				=		Y	20.52	38.73
0.45	1.03	1.35	3.10	U	ND		ND		Y	0.00	0.00
0.45	2.53	1.13	6.33	U	ND		ND		Y	0.00	0.00
2.25	5.35	2.70	6.42	J	J		=		Y	2.50	5.95
0.90	2.22	5.63	13.85	U	ND		ND		Y	0.00	0.00
0.45	1.37	4.50	13.66	U	ND		ND		Y	0.00	0.00
0.45	2.63	1.35	7.90	U	ND		ND		Y	0.00	0.00
0.23	0.89	1.13	4.46	U	ND		ND		Y	0.00	0.00
0.90	1.96	1.35	2.94	U	ND		ND		Y	0.00	0.00
0.23	1.73	1.13	8.63	U	ND		ND		Y	0.00	0.00
0.23	0.70	4.50	14.10	U	ND		ND		Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND		ND		Y	0.00	0.00
0.45	1.40	1.13	3.51	U	ND		ND		Y	0.00	0.00
0.23	0.89	0.90	3.57	U	ND		ND		Y	0.00	0.00
0.45	1.62	0.90	3.25	U	ND		ND		Y	0.00	0.00
1.13	2.54	1.80	4.06	U	ND		ND		Y	0.00	0.00
0.22	0.91	1.13	4.56	U	ND		ND		Y	0.00	0.00
0.45	1.88	1.13	4.71	U	ND		ND		Y	0.00	0.00
0.23	0.79	4.50	15.87	U	ND		ND		Y	0.00	0.00
0.45	1.33	1.35	3.99	U	ND		ND		Y	0.00	0.00
0.45	1.88	2.70	11.30	U	ND		ND		Y	0.00	0.00
0.45	1.59	1.13	3.97	U	ND		ND		Y	0.00	0.00
0.45	1.24	1.13	3.09	U	ND		ND		Y	0.00	0.00
0.45	1.62	1.13	4.06	U	ND		ND		Y	0.00	0.00
0.23	1.19	1.13	5.96	U	ND		ND		Y	0.00	0.00

0.45	1.59	2.25	7.93	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.35	3.99	U	ND	ND	Y	0.00	0.00
0.90	2.73	3.60	10.93	U	ND	ND	Y	0.00	0.00
0.23	0.89	1.13	4.46	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.13	5.21	U	ND	ND	Y	0.00	0.00
0.23	1.10	1.13	5.50	U	ND	ND	Y	0.00	0.00
0.23	1.23	1.13	6.15	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.13	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.88	U	ND	ND	Y	0.00	0.00
1.58	5.04	2.25	7.20	U	ND	ND	Y	0.00	0.00
0.23	1.42	1.13	7.09	U	ND	ND	Y	0.00	0.00
0.45	1.88	2.25	9.42	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	1.85	1.13	4.62	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.13	5.21	U	ND	ND	Y	0.00	0.00
0.45	1.62	2.25	8.12	U	ND	ND	Y	0.00	0.00
0.23	1.60	1.13	8.01	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.05	U	ND	ND	Y	0.00	0.00
0.23	1.51	1.13	7.55	U	ND	ND	Y	0.00	0.00
0.45	1.84	1.13	4.61	U	ND	ND	Y	0.00	0.00
0.45	1.85	3.60	14.77	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.90	3.39	1.13	4.24	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.23	1.23	1.13	6.15	U	ND	ND	Y	0.00	0.00
0.45	2.10	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	1.85	3.60	14.77	U	ND	ND	Y	0.00	0.00
0.23	1.04	3.15	14.58	U	ND	ND	Y	0.00	0.00
0.45	2.10	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	3.84	1.13	9.60	U	ND	ND	Y	0.00	0.00
0.45	3.46	1.13	8.66	U	ND	ND	Y	0.00	0.00
0.11	0.76	1.13	7.64	U	ND	ND	Y	0.00	0.00
0.45	2.08	1.13	5.19	U	ND	ND	Y	0.00	0.00
0.45	3.09	1.13	7.73	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.45	2.36	1.13	5.91	U	ND	ND	Y	0.00	0.00
0.68	2.88	1.13	4.80	U	ND	ND	Y	0.00	0.00
0.45	4.66	1.13	11.64	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.90	6.19	2.25	15.46	U	ND	ND	Y	0.00	0.00
0.90	5.43	2.70	16.30	U	ND	ND	Y	0.00	0.00
0.90	4.61	2.70	13.82	U	ND	ND	Y	0.00	0.00
0.90	4.43	3.15	15.51	U	ND	ND	Y	0.00	0.00
0.90	4.43	3.15	15.51	U	ND	ND	Y	0.00	0.00
0.90	4.43	7.20	35.44	J	J	=	Y	1.07	5.28
0.90	4.43	4.05	19.94	U	ND	ND	Y	0.00	0.00
0.90	5.25	2.70	15.74	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	4.43	4.05	19.94	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00

0.90	4.95	3.15	17.31	U	ND	ND	Y	0.00	0.00
0.90	5.42	3.60	21.67	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	4.67	2.25	11.67	U	ND	ND	Y	0.00	0.00
0.90	5.42	2.25	13.55	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	5.42	3.15	18.96	U	ND	ND	Y	0.00	0.00
1.35	13.06	3.15	30.48	U	ND	ND	Y	0.00	0.00
1.35	10.03	2.25	16.72	U	ND	ND	Y	0.00	0.00
2.25	11.81	0.45	2.36	U	ND	ND	Y	0.00	0.00
1.35	10.03	2.25	16.72	U	ND	ND	Y	0.00	0.00
1.13	12.02	1.35	14.42	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 23
Sample ID: T-505

Can Factor: 1.35
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**23**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.35
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)}{(Cstdni)} \frac{(Cistdi)}{(Aistdi)}$ Note: 1 i

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)} \frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000}{(SV)}$ (CDF)

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	10931349	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	10931349	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	39353	20.0	10931349	0.333	1.50	1.96
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	10931349	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	10931349	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	10931349	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	10931349	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	10931349	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	10931349	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	154358	20.0	10931349	4.559	20.52	38.73
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	10931349	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	10931349	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	61720	20.0	10931349	0.556	2.50	5.95
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	10931349	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	10931349	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	10931349	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	10931349	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	10931349	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	10931349	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	10931349	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	10931349	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	10931349	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	10931349	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	10931349	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	10931349	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	10931349	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	10931349	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	10931349	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	10931349	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	10931349	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	10931349	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	10931349	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	10931349	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	10931349	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	10931349	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	10931349	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	10931349	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	10931349	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	10931349	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	10931349	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12116571	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12116571	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12116571	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12116571	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	57770	20.0	12116571	0.120	0.54	1.73
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12116571	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12116571	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12116571	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12116571	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12116571	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12116571	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12116571	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12116571	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12116571	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12116571	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12116571	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12116571	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	66257	20.0	12116571	0.098	0.44	1.66
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12116571	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12116571	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12116571	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12116571	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12116571	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12116571	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12116571	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12116571	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12116571	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	16497103	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	16497103	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	75540	20.0	16497103	0.061	0.28	1.20
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	82298	20.0	16497103	0.082	0.37	1.61
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	16497103	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	88879	20.0	16497103	0.110	0.50	2.12
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	16497103	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	94828	20.0	16497103	0.087	0.39	1.70
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	16497103	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	16497103	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	16497103	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	884	20.0	16497103	0.000	0.00	0.01
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	16497103	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	365117	20.0	16497103	0.238	1.07	5.28
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	208983	20.0	16497103	0.132	0.59	2.92
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	16497103	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	16497103	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	16497103	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	16497103	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	16497103	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	16497103	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	187839	20.0	16497103	0.097	0.44	2.40
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	16497103	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	16497103	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	16497103	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	242	20.0	16497103	0.000	0.00	0.01
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	16497103	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	16497103	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	16497103	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	16497103	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	16497103	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	10931349	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12116571	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	16497103	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8079892	10.0		11.232	112.32	112

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443523A.D
Acq Time : 12 Dec 124 3:02 pm
Sample : T-505
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 14:56 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	10931349	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.75	114	12116571	20.00	ppbV		-0.25
71) Chlorobenzene-d5	15.25	117	16497103	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	8079892	11.23	ppbV		112.32
Target Compounds							Qvalue
4) Methanol	4.79	31	39353	0.33	ppbV	#	70
11) Ethanol	5.61	46	154358	4.56	ppbV	m	86
14) Acetone	6.29	58	61720	0.56	ppbV	m	1
47) Benzene	10.45	78	57770	0.12	ppbV	m	72
61) Toluene	13.21	91	66257	0.10	ppbV		97
74) Ethylbenzene	15.59	91	75540	0.06	ppbV	#	86
75) m,p-Xylenes	15.74	91	82298	0.08	ppbV	#	66
77) Styrene	16.29	104	88879	0.11	ppbV	#	82
79) o-Xylene	16.37	91	94828	0.09	ppbV		92
83) n-Propylbenzene	18.10	91	884	0.00	ppbV	m	98
85) 4-Ethyltoluene	17.89	105	365117	0.24	ppbV	m	86
86) 1,3,5-Trimethylbenzene	17.98	105	208983	0.13	ppbV	m	81
93) Isopropyltoluene	19.19	119	187839	0.10	ppbV	#	89
97) 1,2-Dichlorobenzene	19.94	146	242	0.00	ppbV	m	97

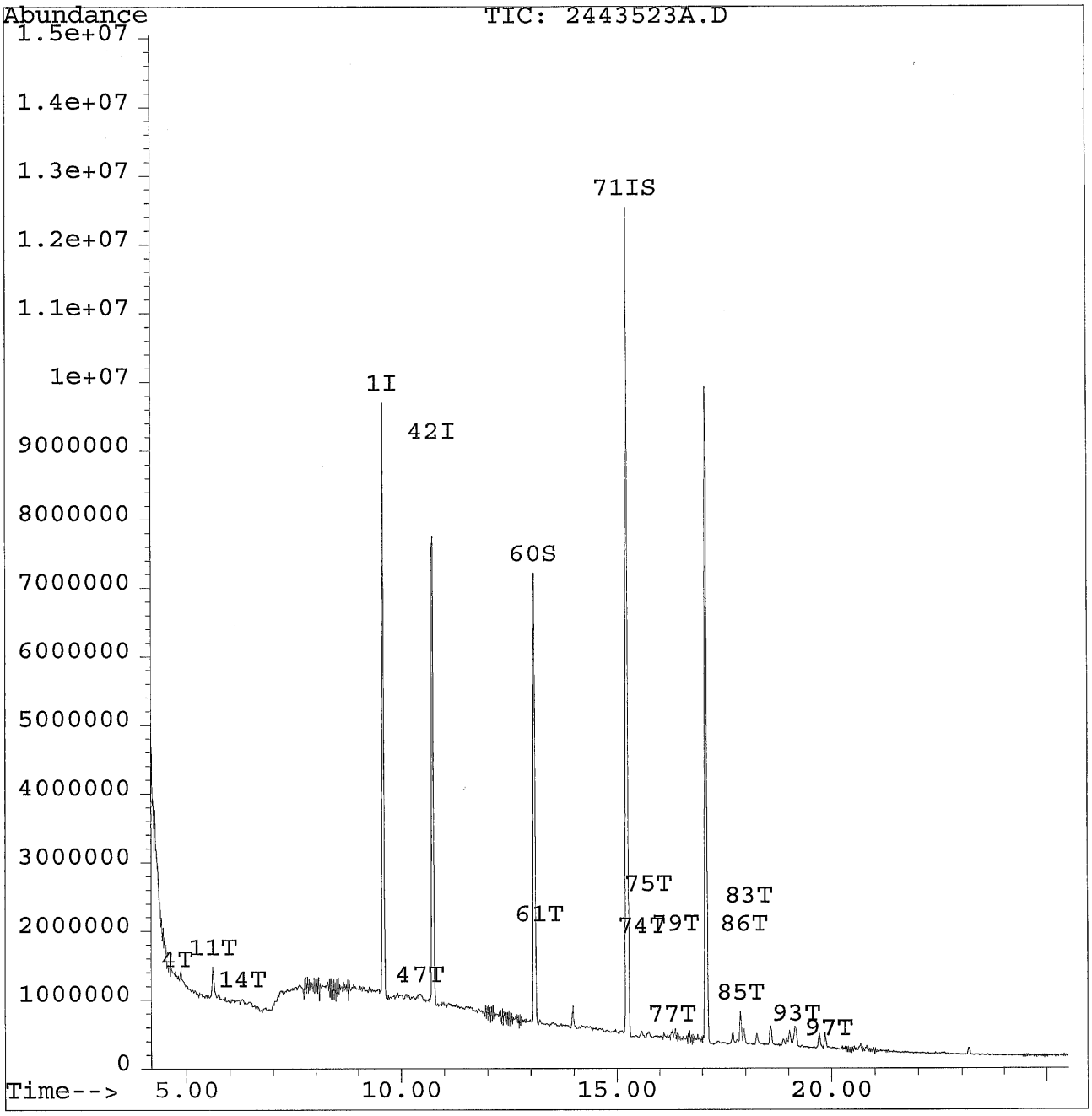
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443523A.D
Acq Time : 12 Dec 124 3:02 pm
Sample : T-505
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 14:56 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443523A.D
Acq Time : 12 Dec 124 3:02 pm Operator: TR
Sample : T-505 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	15.90 ppbV	30026408	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	90
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	37
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 24

Client ID T-506

Analytical Method TO-15

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 24

File Name: 2443524A.D
Description: T-506
Canister: 784
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/12/24 **Time:** 15:40
Can Dilution Factor: 1.36
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	1.17	0.78	1.95	2.02	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.41	2.34	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	19.45	4.28	27.47	36.72	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	14.07	5.39	6.47	33.47	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	32.68	2.23	13.95	80.45	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.10	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.77	7.70	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.97	4.93	ND	
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	ND	2.90	4.84	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.97	4.93	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	ND	4.46	35.71	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	114	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 24

File Name: 224435
Descriptio 24
Canister: 784
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/12/24 **Time:** 15:40
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	224435		
				EAS ID:	24		
File Name:	2443524A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**10:11**
Sample ID:	T-506	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**15:40**
Anal Date:	12 Dec 124 3:40 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**784**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.36**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.259	4.41	42.00	28490
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	4.290	5.72	46.00	148787
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	3.103	6.42	58.00	353041
67-63-0	2-propanol (isopropylalcoh	15	TRG	7.209	6.45	45.00	1588274
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.130	10.70	78.00	62091
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.076	13.50	91.00	51448
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.043	15.90	106	54057
1330-20-7	m,p-Xylenes	75	TRG	0.057	16.06	91.00	58100
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.082	16.61	104.00	67513
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.061	16.37	91.00	68426
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.182	18.23	105.00	284692
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.107	18.31	105.00	172840
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.170	18.95	105.00	218789
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.39	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11198697**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12061210**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**16869353**
2037-26-5	Toluene-d8	60	SURR	11.442	13.40	98.00	**8193653**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**
Laboratory Number:	**24**
File Name:	2443524A.D
Run Method:	A1563_L.M
Can Factor:	1.36
Air Volume:	300.0 ml
Can/Tube Number:	784
Dilution Factor:	0.4080
Base Volume:	1000 ml
Unit Factor (ppbv):	1000 PPBV

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4080
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

UG/M3 — Fixed — Fixed — Fixed — Fixed — (1) — (2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.26	1.17	2.02	1.17	2.02	2.02	2.02	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	4.29	19.45	36.72	19.45	36.72	36.72	36.72	**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	3.10	14.07	33.47	14.07	33.47	33.47	33.47	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	7.21	32.68	80.45	32.68	80.45	80.45	80.45	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.13	0.59	1.88	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.08	0.35	1.31	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.04	0.19	0.85	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.06	0.26	1.12	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.08	0.37	1.58	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.06	0.28	1.21	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.18	0.82	4.05	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.11	0.48	2.38	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.17	0.77	3.80	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.44	114	114	114	114	114	114	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.95				=		Y	1.17	2.02
0.68	3.37	1.13	5.61	U	ND		ND		Y	0.00	0.00
2.27	2.97	2.72	3.56	U	ND		ND		Y	0.00	0.00
0.68	1.41	1.13	2.34	U	ND		ND		Y	0.00	0.00
0.45	3.17	1.13	7.93	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.90	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.13	2.51	U	ND		ND		Y	0.00	0.00
0.45	1.76	1.13	4.40	U	ND		ND		Y	0.00	0.00
0.45	1.20	1.13	2.99	U	ND		ND		Y	0.00	0.00
2.27	4.28	14.55	27.47				=		Y	19.45	36.72
0.45	1.04	1.36	3.12	U	ND		ND		Y	0.00	0.00
0.45	2.55	1.13	6.38	U	ND		ND		Y	0.00	0.00
2.27	5.39	2.72	6.47				=		Y	14.07	33.47
0.91	2.23	5.67	13.95				=		Y	32.68	80.45
0.45	1.38	4.53	13.76	U	ND		ND		Y	0.00	0.00
0.45	2.65	1.36	7.96	U	ND		ND		Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND		ND		Y	0.00	0.00
0.91	1.97	1.36	2.96	U	ND		ND		Y	0.00	0.00
0.23	1.74	1.13	8.70	U	ND		ND		Y	0.00	0.00
0.23	0.71	4.53	14.20	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.13	3.94	U	ND		ND		Y	0.00	0.00
0.45	1.41	1.13	3.53	U	ND		ND		Y	0.00	0.00
0.23	0.90	0.91	3.60	U	ND		ND		Y	0.00	0.00
0.45	1.64	0.91	3.27	U	ND		ND		Y	0.00	0.00
1.13	2.56	1.81	4.09	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND		ND		Y	0.00	0.00
0.45	1.90	1.13	4.74	U	ND		ND		Y	0.00	0.00
0.23	0.80	4.53	15.99	U	ND		ND		Y	0.00	0.00
0.45	1.34	1.36	4.02	U	ND		ND		Y	0.00	0.00
0.45	1.90	2.72	11.38	U	ND		ND		Y	0.00	0.00
0.45	1.60	1.13	4.00	U	ND		ND		Y	0.00	0.00
0.45	1.25	1.13	3.11	U	ND		ND		Y	0.00	0.00
0.45	1.64	1.13	4.09	U	ND		ND		Y	0.00	0.00
0.23	1.20	1.13	6.01	U	ND		ND		Y	0.00	0.00

0.45	1.60	2.27	7.99	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.36	4.02	U	ND	ND	Y	0.00	0.00
0.91	2.75	3.63	11.01	U	ND	ND	Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.23	1.11	1.13	5.54	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND	ND	Y	0.00	0.00
1.59	5.08	2.27	7.25	U	ND	ND	Y	0.00	0.00
0.23	1.43	1.13	7.14	U	ND	ND	Y	0.00	0.00
0.45	1.90	2.27	9.49	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.45	1.64	2.27	8.18	U	ND	ND	Y	0.00	0.00
0.23	1.61	1.13	8.07	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.10	U	ND	ND	Y	0.00	0.00
0.23	1.52	1.13	7.60	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.91	3.42	1.13	4.27	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.05	3.17	14.69	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	3.87	1.13	9.67	U	ND	ND	Y	0.00	0.00
0.45	3.49	1.13	8.72	U	ND	ND	Y	0.00	0.00
0.11	0.77	1.13	7.70	U	ND	ND	Y	0.00	0.00
0.45	2.09	1.13	5.23	U	ND	ND	Y	0.00	0.00
0.45	3.12	1.13	7.79	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.45	2.38	1.13	5.96	U	ND	ND	Y	0.00	0.00
0.68	2.90	1.13	4.84	U	ND	ND	Y	0.00	0.00
0.45	4.69	1.13	11.73	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.91	6.23	2.27	15.58	U	ND	ND	Y	0.00	0.00
0.91	5.47	2.72	16.42	U	ND	ND	Y	0.00	0.00
0.91	4.64	2.72	13.92	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	7.25	35.71	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	5.28	2.72	15.85	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00

0.91	4.98	3.17	17.44	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.63	21.83	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.70	2.27	11.75	U	ND	ND	Y	0.00	0.00
0.91	5.46	2.27	13.65	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.17	19.10	U	ND	ND	Y	0.00	0.00
1.36	13.16	3.17	30.71	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
2.27	11.90	0.45	2.38	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
1.13	12.11	1.36	14.53	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 24
Sample ID: T-506

Can Factor: 1.36
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**24**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.36
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni)/(Cstdni) (Cistdi)/(Aistdi) Note: 1

2) Raw Amt = (Ansamp)/(Avg RFn) (Cistdi)/(Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000/(SV) (CDF)

4) Amount ug/m3 = (amt(ppbv) MW/24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	28490	20.0	11198697	0.259	1.17	2.02
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	11198697	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	11198697	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	11198697	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	11198697	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	11198697	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	11198697	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	11198697	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	11198697	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	148787	20.0	11198697	4.290	19.45	36.72
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	11198697	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	11198697	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	353041	20.0	11198697	3.103	14.07	33.47
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	1588274	20.0	11198697	7.209	32.68	80.45
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	11198697	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	11198697	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	11198697	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	11198697	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	11198697	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	11198697	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	11198697	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	11198697	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	11198697	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	11198697	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	11198697	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	11198697	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	11198697	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	11198697	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	11198697	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	11198697	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	11198697	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	11198697	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	11198697	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	11198697	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	11198697	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	11198697	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	11198697	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	11198697	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	11198697	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	11198697	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12061210	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12061210	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12061210	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12061210	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	62091	20.0	12061210	0.130	0.59	1.88
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12061210	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12061210	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12061210	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12061210	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12061210	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12061210	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12061210	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12061210	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12061210	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12061210	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12061210	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12061210	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	51448	20.0	12061210	0.076	0.35	1.31
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12061210	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12061210	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12061210	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12061210	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12061210	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12061210	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12061210	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12061210	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12061210	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	16869353	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	16869353	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	54057	20.0	16869353	0.043	0.19	0.85
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	58100	20.0	16869353	0.057	0.26	1.12
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	16869353	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	67513	20.0	16869353	0.082	0.37	1.58
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	16869353	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	68426	20.0	16869353	0.061	0.28	1.21
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	16869353	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	16869353	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	16869353	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	16869353	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	16869353	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	284692	20.0	16869353	0.182	0.82	4.05
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	172840	20.0	16869353	0.107	0.48	2.38
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	16869353	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	16869353	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	218789	20.0	16869353	0.170	0.77	3.80
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	16869353	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	16869353	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	16869353	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	16869353	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	16869353	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	16869353	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	16869353	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	16869353	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	16869353	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	16869353	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	16869353	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	16869353	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	16869353	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11198697	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12061210	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	16869353	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8193653	10.0		11.442	114.42	114

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443524A.D
Acq Time : 12 Dec 124 3:40 pm
Sample : T-506
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 15:34 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	11198697	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.74	114	12061210	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.25	117	16869353	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.10	98	8193653	11.44	ppbV		114.42
Target Compounds							Qvalue
2) Propylene	4.33	42	28490	0.26	ppbV		92
11) Ethanol	5.59	46	148787	4.29	ppbV		96
14) Acetone	6.26	58	353041	3.10	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.29	45	1588274	7.21	ppbV	m	92
47) Benzene	10.45	78	62091	0.13	ppbV	m	70
61) Toluene	13.21	91	51448	0.08	ppbV		96
74) Ethylbenzene	15.59	91	54057	0.04	ppbV	#	88
75) m,p-Xylenes	15.74	91	58100	0.06	ppbV		89
77) Styrene	16.29	104	67513	0.08	ppbV	#	77
79) o-Xylene	16.37	91	68426	0.06	ppbV	#	84
85) 4-Ethyltoluene	17.89	105	284692	0.18	ppbV	m	89
86) 1,3,5-Trimethylbenzene	17.98	105	172840	0.11	ppbV	m	78
89) 1,2,4-Trimethylbenzene	18.59	105	218789	0.17	ppbV	#	91

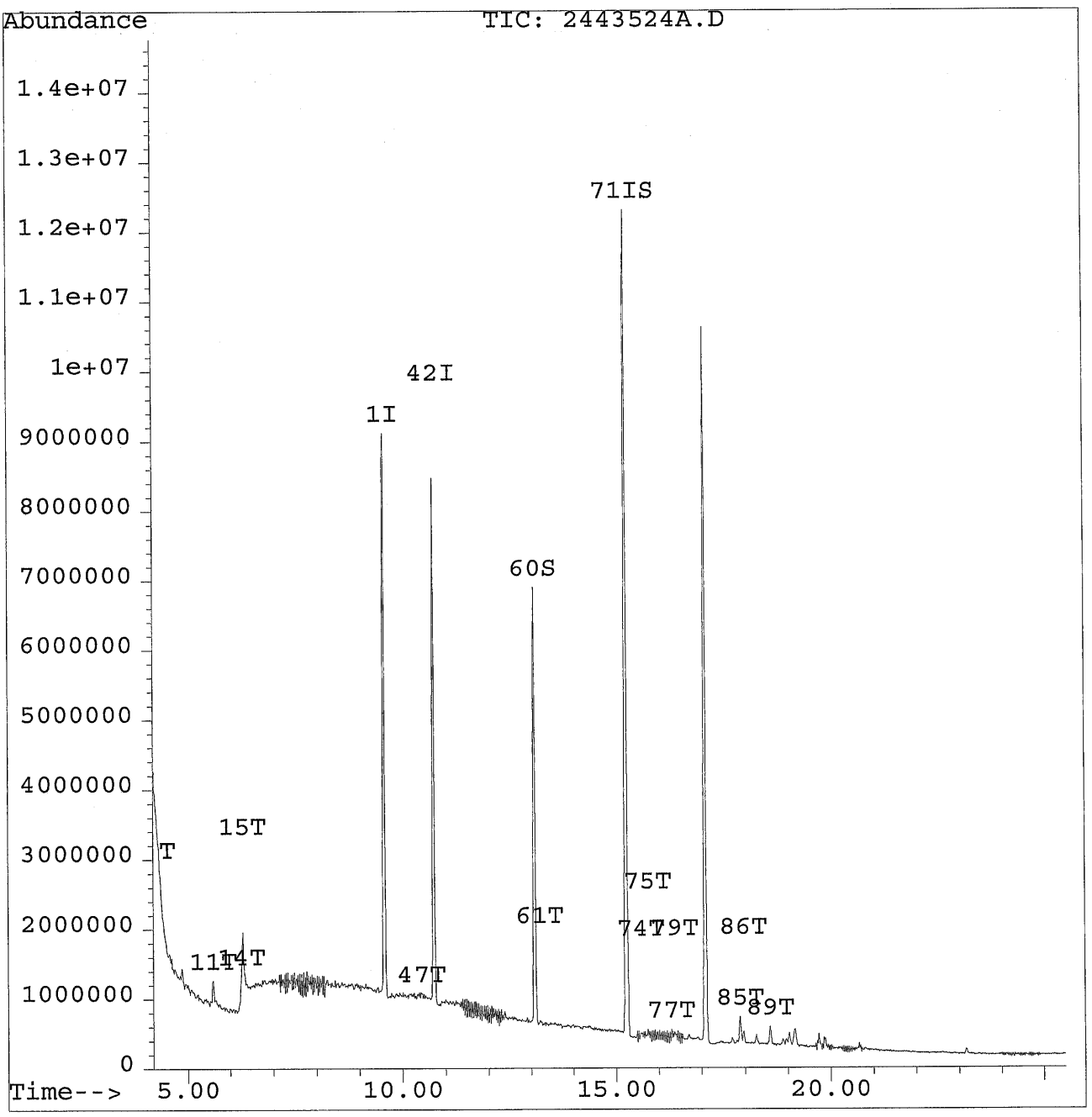
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443524A.D
Acq Time : 12 Dec 124 3:40 pm
Sample : T-506
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 15:34 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443524A.D
Acq Time : 12 Dec 124 3:40 pm Operator: TR
Sample : T-506 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	16.01 ppbV	30647358	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	91
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 25

Client ID T-507

Analytical Method TO-15

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 25

File Name: 2443525A.D
Description: T-507
Canister: 712
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/12/24 **Time:** 16:17
Can Dilution Factor: 1.38
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	10.03	4.34	27.88	18.95	J
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	2.34	5.47	6.57	5.56	J
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	111	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 25

File Name: 224435
Descriptio 25
Canister: 712
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/12/24 **Time:** 16:17
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**25**		
File Name:	2443525A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**10:56**
Sample ID:	T-507	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**16:17**
Anal Date:	12 Dec 124 4:17 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**712**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.38**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	2.181	5.72	46.00	73062
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.508	6.42	58.00	55845
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.176	6.45	45.00	37374
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.104	10.70	78.00	49902
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.070	13.50	91.00	46859
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.039	15.90	106	47576
1330-20-7	m,p-Xylenes	75	TRG	0.049	16.06	91.00	48480
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.072	16.61	104.00	57872
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.055	16.37	91.00	59950
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.146	18.23	105.00	222943
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.103	18.31	105.00	162214
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.161	18.95	105.00	201604
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.077	19.53	119.00	148426
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.44	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**10813883**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12037254**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**16379487**
2037-26-5	Toluene-d8	60	SURR	11.135	13.40	98.00	**7958011**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 25
File Name: 2443525A.D
Run Method: A1563_L.M
Can Factor: 1.38
Air Volume: 300.0 ml
Can/Tube Number: 712
Dilution Factor: 0.4140
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4140
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	2.18	10.03	18.95	10.03	18.95	18.95	18.95	**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.51	2.34	5.56	2.34	5.56	5.56	5.56	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.18	0.81	1.99	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Benzene	78.1	0.10	0.48	1.54	ND	ND	0	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Toluene	92.1	0.07	0.32	1.21	ND	ND	0	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Ethylbenzene	106.2	0.04	0.18	0.78	ND	ND	0	0.100	0.250
m,p-Xylenes	106.2	0.05	0.22	0.97	ND	ND	0	0.100	0.250
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Styrene	104.2	0.07	0.33	1.42	ND	ND	0	0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	0.100	0.250
o-Xylene	106.2	0.06	0.25	1.11	ND	ND	0	0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
4-Ethyltoluene	120.2	0.15	0.67	3.32	ND	ND	0	0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.10	0.47	2.33	ND	ND	0	0.200	0.900
Decane	142.3	0.00	0.00	0.00	ND	ND	0	0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.16	0.74	3.66	ND	ND	0	0.200	0.900
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.08	0.35	1.95	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.14	111	111	111	111	111	111	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.15	1.98	U	ND		ND		Y	0.00	0.00
0.69	3.42	1.15	5.69	U	ND		ND		Y	0.00	0.00
2.30	3.01	2.76	3.62	U	ND		ND		Y	0.00	0.00
0.69	1.43	1.15	2.38	U	ND		ND		Y	0.00	0.00
0.46	3.22	1.15	8.05	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.15	2.94	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.15	2.55	U	ND		ND		Y	0.00	0.00
0.46	1.79	1.15	4.47	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.15	3.04	U	ND		ND		Y	0.00	0.00
2.30	4.34	14.77	27.88	J	J		=		Y	10.03	18.95
0.46	1.06	1.38	3.17	U	ND		ND		Y	0.00	0.00
0.46	2.59	1.15	6.47	U	ND		ND		Y	0.00	0.00
2.30	5.47	2.76	6.57	J	J		=		Y	2.34	5.56
0.92	2.26	5.75	14.15	U	ND		ND		Y	0.00	0.00
0.46	1.40	4.60	13.96	U	ND		ND		Y	0.00	0.00
0.46	2.69	1.38	8.08	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND		ND		Y	0.00	0.00
0.92	2.00	1.38	3.00	U	ND		ND		Y	0.00	0.00
0.23	1.77	1.15	8.83	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.60	14.41	U	ND		ND		Y	0.00	0.00
0.23	0.80	1.15	4.00	U	ND		ND		Y	0.00	0.00
0.46	1.43	1.15	3.58	U	ND		ND		Y	0.00	0.00
0.23	0.91	0.92	3.65	U	ND		ND		Y	0.00	0.00
0.46	1.66	0.92	3.32	U	ND		ND		Y	0.00	0.00
1.15	2.60	1.84	4.15	U	ND		ND		Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND		ND		Y	0.00	0.00
0.46	1.93	1.15	4.81	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.60	16.22	U	ND		ND		Y	0.00	0.00
0.46	1.36	1.38	4.07	U	ND		ND		Y	0.00	0.00
0.46	1.93	2.76	11.55	U	ND		ND		Y	0.00	0.00
0.46	1.62	1.15	4.06	U	ND		ND		Y	0.00	0.00
0.46	1.26	1.15	3.16	U	ND		ND		Y	0.00	0.00
0.46	1.66	1.15	4.15	U	ND		ND		Y	0.00	0.00
0.23	1.22	1.15	6.09	U	ND		ND		Y	0.00	0.00

0.46	1.62	2.30	8.11	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.38	4.07	U	ND	ND	Y	0.00	0.00
0.92	2.79	3.68	11.17	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.23	1.13	1.15	5.62	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.15	3.97	U	ND	ND	Y	0.00	0.00
1.61	5.15	2.30	7.36	U	ND	ND	Y	0.00	0.00
0.23	1.45	1.15	7.24	U	ND	ND	Y	0.00	0.00
0.46	1.93	2.30	9.63	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.72	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.46	1.66	2.30	8.30	U	ND	ND	Y	0.00	0.00
0.23	1.64	1.15	8.19	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.15	6.19	U	ND	ND	Y	0.00	0.00
0.23	1.54	1.15	7.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.92	3.47	1.15	4.34	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.22	14.90	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	3.92	1.15	9.81	U	ND	ND	Y	0.00	0.00
0.46	3.54	1.15	8.85	U	ND	ND	Y	0.00	0.00
0.12	0.78	1.15	7.81	U	ND	ND	Y	0.00	0.00
0.46	2.12	1.15	5.30	U	ND	ND	Y	0.00	0.00
0.46	3.16	1.15	7.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.42	1.15	6.04	U	ND	ND	Y	0.00	0.00
0.69	2.94	1.15	4.91	U	ND	ND	Y	0.00	0.00
0.46	4.76	1.15	11.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.92	6.32	2.30	15.81	U	ND	ND	Y	0.00	0.00
0.92	5.55	2.76	16.66	U	ND	ND	Y	0.00	0.00
0.92	4.71	2.76	14.13	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	7.36	36.23	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.36	2.76	16.08	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00

0.92	5.06	3.22	17.70	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.68	22.16	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.77	2.30	11.93	U	ND	ND	Y	0.00	0.00
0.92	5.54	2.30	13.85	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.22	19.39	U	ND	ND	Y	0.00	0.00
1.38	13.36	3.22	31.16	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
2.30	12.08	0.46	2.42	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
1.15	12.28	1.38	14.74	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 25
Sample ID: T-507

Can Factor: 1.38
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**25**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.38
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) / (Avg RFn) (Cistdi) / (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 / (SV) (CDF)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	10813883	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	10813883	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	10813883	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	10813883	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	10813883	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	10813883	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	10813883	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	10813883	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	10813883	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	73062	20.0	10813883	2.181	10.03	18.95
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	10813883	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	10813883	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	55845	20.0	10813883	0.508	2.34	5.56
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	37374	20.0	10813883	0.176	0.81	1.99
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	10813883	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	10813883	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	10813883	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	10813883	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	10813883	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	10813883	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	10813883	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	10813883	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	10813883	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	10813883	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	10813883	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	10813883	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	10813883	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	10813883	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	10813883	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	10813883	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	10813883	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	10813883	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	10813883	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	10813883	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	10813883	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	10813883	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	10813883	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	10813883	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	10813883	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	10813883	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12037254	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12037254	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12037254	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12037254	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	49902	20.0	12037254	0.104	0.48	1.54
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12037254	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12037254	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12037254	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12037254	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12037254	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12037254	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12037254	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12037254	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12037254	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12037254	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12037254	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12037254	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	46859	20.0	12037254	0.070	0.32	1.21
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12037254	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12037254	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12037254	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12037254	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12037254	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12037254	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12037254	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12037254	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12037254	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	16379487	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	16379487	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	47576	20.0	16379487	0.039	0.18	0.78
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	48480	20.0	16379487	0.049	0.22	0.97
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	16379487	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	57872	20.0	16379487	0.072	0.33	1.42
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	16379487	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	59950	20.0	16379487	0.055	0.25	1.11
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	16379487	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	16379487	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	16379487	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	16379487	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	16379487	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	222943	20.0	16379487	0.146	0.67	3.32
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	162214	20.0	16379487	0.103	0.47	2.33
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	16379487	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	16379487	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	201604	20.0	16379487	0.161	0.74	3.66
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	16379487	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	16379487	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	16379487	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	148426	20.0	16379487	0.077	0.35	1.95
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	16379487	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	16379487	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	16379487	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	16379487	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	16379487	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	16379487	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	16379487	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	16379487	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	16379487	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	10813883	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12037254	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	16379487	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	7958011	10.0		11.135	111.35	111

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443525A.D
Acq Time : 12 Dec 124 4:17 pm
Sample : T-507
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 16:13 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.61	168	10813883	20.00	ppbV		-0.21
42) 1,4-Difluorobenzene	10.75	114	12037254	20.00	ppbV		-0.25
71) Chlorobenzene-d5	15.24	117	16379487	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	7958011	11.14	ppbV		111.35
Target Compounds							Qvalue
11) Ethanol	5.66	46	73062	2.18	ppbV		81
14) Acetone	6.33	58	55845	0.51	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.36	45	37374	0.18	ppbV	#	74
47) Benzene	10.46	78	49902	0.10	ppbV	m	71
61) Toluene	13.23	91	46859	0.07	ppbV		91
74) Ethylbenzene	15.59	91	47576	0.04	ppbV	#	76
75) m,p-Xylenes	15.76	91	48480	0.05	ppbV	#	74
77) Styrene	16.29	104	57872	0.07	ppbV	#	76
79) o-Xylene	16.37	91	59950	0.06	ppbV	#	72
85) 4-Ethyltoluene	17.89	105	222943	0.15	ppbV	m	84
86) 1,3,5-Trimethylbenzene	17.98	105	162214	0.10	ppbV	m	82
89) 1,2,4-Trimethylbenzene	18.59	105	201604	0.16	ppbV	#	86
93) Isopropyltoluene	19.19	119	148426	0.08	ppbV	#	88

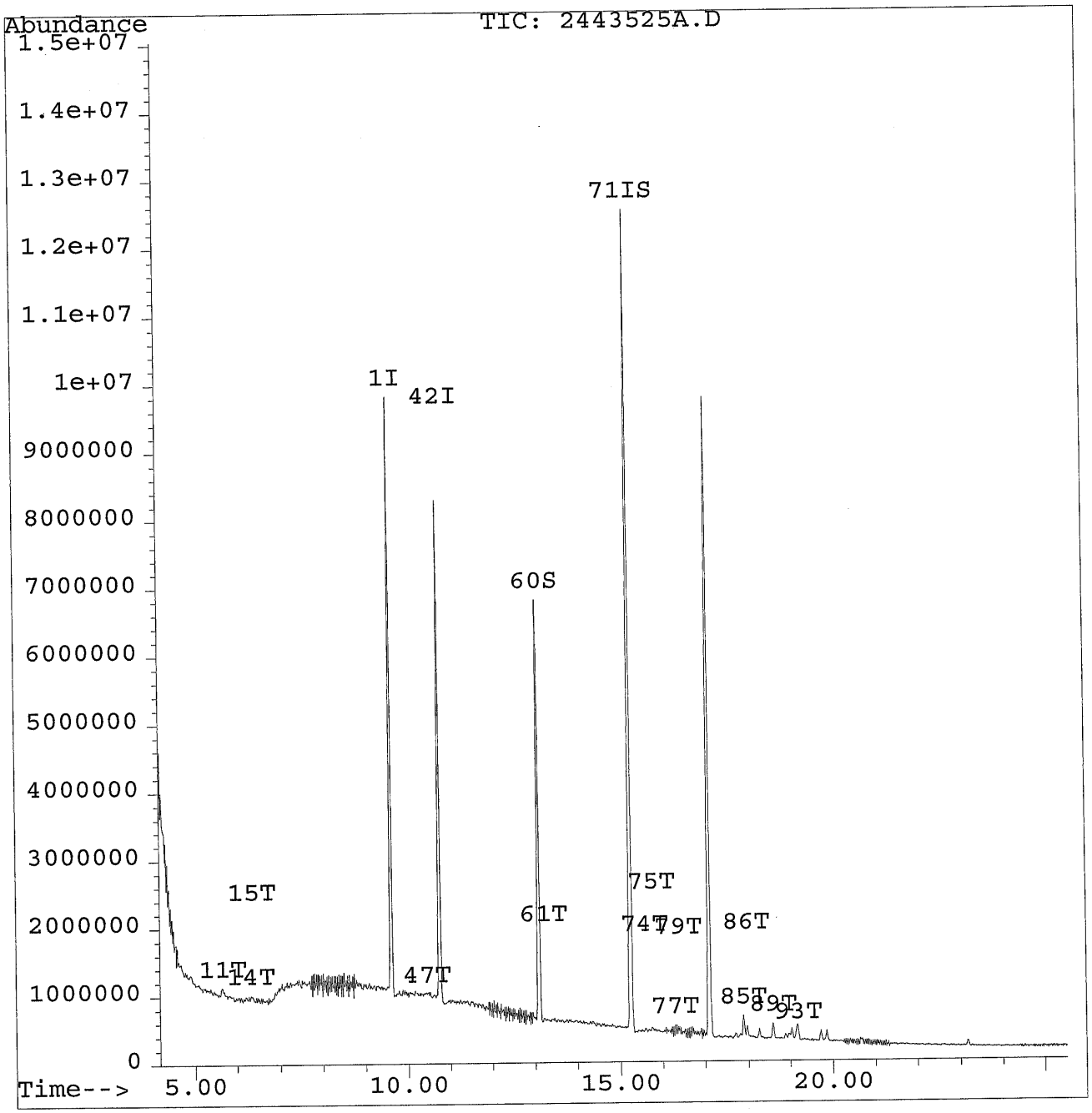
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443525A.D
Acq Time : 12 Dec 124 4:17 pm
Sample : T-507
Misc : SCHMIDT, 300 ML
Quant Time: Dec 16 16:13 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443525A.D
Acq Time : 12 Dec 124 4:17 pm
Sample : T-507
Misc : SCHMIDT, 300 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	15.56 ppbV	29010632	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	90
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	81
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 26

Client ID T-508

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 26

File Name: 2443526A.D
Description: T-508
Canister: 549
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/12/24 **Time:** 16:54
Can Dilution Factor: 1.38
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	ND	4.34	27.88	ND	
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	ND	5.47	6.57	ND	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	1.89	5.15	7.36	6.04	J
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 26

File Name: 224435
Descriptio 26
Canister: 549
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/12/24 **Time:** 16:54
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**26**		
File Name:	2443526A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**10:40**
Sample ID:	T-508	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**16:54**
Anal Date:	12 Dec 124 4:54 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**549**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.38**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.482	6.42	58.00	40979
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.410	10.70	78.00	155595
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.101	13.50	91.00	53873
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.015	15.90	106	18572
1330-20-7	m,p-Xylenes	75	TRG	0.020	16.06	91.00	19847
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	0.00	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.019	18.23	105.00	28464
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.012	18.31	105.00	18854
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**8367681**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**9552539**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**16219849**
2037-26-5	Toluene-d8	60	SURR	11.949	13.40	98.00	**6776786**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 26
File Name: 2443526A.D
Run Method: A1563_L.M
Can Factor: 1.38
Air Volume: 300.0 ml
Can/Tube Number: 549
Dilution Factor: 0.4140
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4140
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.48	2.22	5.28	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.41	1.89	6.04	1.89	6.04	6.04	6.04	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.10	0.46	1.75	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.02	0.07	0.31	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.02	0.09	0.40	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.02	0.09	0.43	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.01	0.06	0.27	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.95	119	119	119	119	119	119	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.15	1.98	U	ND		ND		Y	0.00	0.00
0.69	3.42	1.15	5.69	U	ND		ND		Y	0.00	0.00
2.30	3.01	2.76	3.62	U	ND		ND		Y	0.00	0.00
0.69	1.43	1.15	2.38	U	ND		ND		Y	0.00	0.00
0.46	3.22	1.15	8.05	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.15	2.94	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.15	2.55	U	ND		ND		Y	0.00	0.00
0.46	1.79	1.15	4.47	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.15	3.04	U	ND		ND		Y	0.00	0.00
2.30	4.34	14.77	27.88	U	ND		ND		Y	0.00	0.00
0.46	1.06	1.38	3.17	U	ND		ND		Y	0.00	0.00
0.46	2.59	1.15	6.47	U	ND		ND		Y	0.00	0.00
2.30	5.47	2.76	6.57	U	ND		ND		Y	0.00	0.00
0.92	2.26	5.75	14.15	U	ND		ND		Y	0.00	0.00
0.46	1.40	4.60	13.96	U	ND		ND		Y	0.00	0.00
0.46	2.69	1.38	8.08	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND		ND		Y	0.00	0.00
0.92	2.00	1.38	3.00	U	ND		ND		Y	0.00	0.00
0.23	1.77	1.15	8.83	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.60	14.41	U	ND		ND		Y	0.00	0.00
0.23	0.80	1.15	4.00	U	ND		ND		Y	0.00	0.00
0.46	1.43	1.15	3.58	U	ND		ND		Y	0.00	0.00
0.23	0.91	0.92	3.65	U	ND		ND		Y	0.00	0.00
0.46	1.66	0.92	3.32	U	ND		ND		Y	0.00	0.00
1.15	2.60	1.84	4.15	U	ND		ND		Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND		ND		Y	0.00	0.00
0.46	1.93	1.15	4.81	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.60	16.22	U	ND		ND		Y	0.00	0.00
0.46	1.36	1.38	4.07	U	ND		ND		Y	0.00	0.00
0.46	1.93	2.76	11.55	U	ND		ND		Y	0.00	0.00
0.46	1.62	1.15	4.06	U	ND		ND		Y	0.00	0.00
0.46	1.26	1.15	3.16	U	ND		ND		Y	0.00	0.00
0.46	1.66	1.15	4.15	U	ND		ND		Y	0.00	0.00
0.23	1.22	1.15	6.09	U	ND		ND		Y	0.00	0.00

0.46	1.62	2.30	8.11	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.38	4.07	U	ND	ND	Y	0.00	0.00
0.92	2.79	3.68	11.17	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.23	1.13	1.15	5.62	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.15	3.97	U	ND	ND	Y	0.00	0.00
1.61	5.15	2.30	7.36	J	J	=	Y	1.89	6.04
0.23	1.45	1.15	7.24	U	ND	ND	Y	0.00	0.00
0.46	1.93	2.30	9.63	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.72	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.46	1.66	2.30	8.30	U	ND	ND	Y	0.00	0.00
0.23	1.64	1.15	8.19	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.15	6.19	U	ND	ND	Y	0.00	0.00
0.23	1.54	1.15	7.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.92	3.47	1.15	4.34	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.22	14.90	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	3.92	1.15	9.81	U	ND	ND	Y	0.00	0.00
0.46	3.54	1.15	8.85	U	ND	ND	Y	0.00	0.00
0.12	0.78	1.15	7.81	U	ND	ND	Y	0.00	0.00
0.46	2.12	1.15	5.30	U	ND	ND	Y	0.00	0.00
0.46	3.16	1.15	7.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.42	1.15	6.04	U	ND	ND	Y	0.00	0.00
0.69	2.94	1.15	4.91	U	ND	ND	Y	0.00	0.00
0.46	4.76	1.15	11.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.92	6.32	2.30	15.81	U	ND	ND	Y	0.00	0.00
0.92	5.55	2.76	16.66	U	ND	ND	Y	0.00	0.00
0.92	4.71	2.76	14.13	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	7.36	36.23	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.36	2.76	16.08	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00

0.92	5.06	3.22	17.70	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.68	22.16	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.77	2.30	11.93	U	ND	ND	Y	0.00	0.00
0.92	5.54	2.30	13.85	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.22	19.39	U	ND	ND	Y	0.00	0.00
1.38	13.36	3.22	31.16	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
2.30	12.08	0.46	2.42	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
1.15	12.28	1.38	14.74	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 26
Sample ID: T-508

Can Factor: 1.38
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**26**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.38
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\frac{(Cistdi)}{(Aistdi)}\right|_i$ Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}\frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000}{(SV)}$ (CDF)

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	8367681	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	8367681	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	8367681	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	8367681	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	8367681	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	8367681	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	8367681	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	8367681	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	8367681	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	8367681	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	8367681	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	8367681	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	40979	20.0	8367681	0.482	2.22	5.28
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	8367681	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	8367681	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	8367681	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	8367681	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	8367681	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	8367681	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	8367681	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	8367681	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	8367681	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	8367681	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	8367681	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	8367681	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	8367681	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	8367681	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	8367681	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	8367681	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	8367681	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	8367681	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	8367681	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	8367681	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	8367681	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	8367681	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	8367681	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	8367681	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	8367681	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	8367681	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	8367681	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	9552539	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	9552539	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	9552539	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	9552539	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	155595	20.0	9552539	0.410	1.89	6.04
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	9552539	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	9552539	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	9552539	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	9552539	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	9552539	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	9552539	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	9552539	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	9552539	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	9552539	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	9552539	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	9552539	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	9552539	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	53873	20.0	9552539	0.101	0.46	1.75
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	9552539	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	9552539	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	9552539	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	9552539	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	9552539	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	9552539	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	9552539	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	9552539	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	9552539	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	16219849	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	16219849	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	18572	20.0	16219849	0.015	0.07	0.31
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	19847	20.0	16219849	0.020	0.09	0.40
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	16219849	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	16219849	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	16219849	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	16219849	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	16219849	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	16219849	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	16219849	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	16219849	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	16219849	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	28464	20.0	16219849	0.019	0.09	0.43
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	18854	20.0	16219849	0.012	0.06	0.27
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	16219849	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	16219849	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	16219849	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	16219849	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	16219849	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	16219849	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	16219849	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	16219849	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	16219849	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	16219849	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	16219849	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	16219849	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	16219849	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	16219849	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	16219849	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	16219849	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	8367681	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	9552539	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	16219849	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6776786	10.0		11.949	119.49	119

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443526A.D
Acq Time : 12 Dec 124 4:54 pm
Sample : T-508
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 12:17 19124

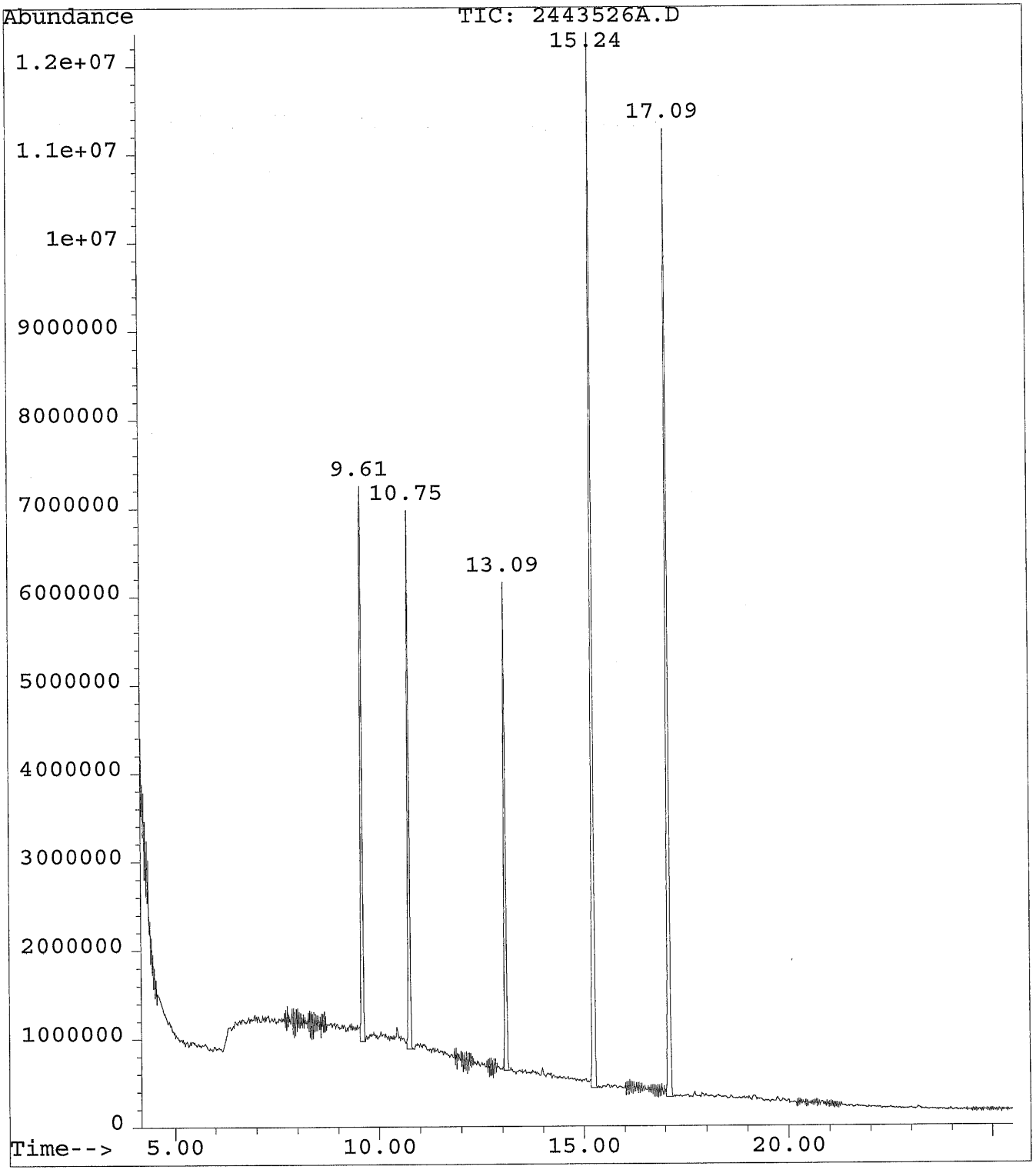
Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.61	168	8367681	20.00	ppbV		-0.21
42) 1,4-Difluorobenzene	10.75	114	9552539	20.00	ppbV		-0.25
71) Chlorobenzene-d5	15.24	117	16219849	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.09	98	6776786	11.95	ppbV		119.49
Target Compounds							Qvalue
14) Acetone	6.33	58	40979	0.48	ppbV	#	1
47) Benzene	10.46	78	155595	0.41	ppbV	m	70
61) Toluene	13.21	91	53873	0.10	ppbV		99
74) Ethylbenzene	15.59	91	18572	0.02	ppbV	#	89
75) m,p-Xylenes	15.76	91	19847	0.02	ppbV	#	83
85) 4-Ethyltoluene	17.89	105	28464	0.02	ppbV	m	83
86) 1,3,5-Trimethylbenzene	17.98	105	18854	0.01	ppbV	m	81

(#) = qualifier out of range (m) = manual integration

File : C:\MSCHEM\1\DATA\12124A\2443526A.D
Operator : DA
Acquired : 12 Dec 124 4:54 pm using AcqMethod A1563_L.M
Instrument : 5970 - MS
Sample Name: T-508
Misc Info : SCHMIDT, 300 ML
Vial Number: 1



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443526A.D
Acq Time : 12 Dec 124 4:54 pm
Sample : T-508
Misc : SCHMIDT, 300 ML

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	18.56 ppbV	34266122	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 27

Client ID T-509

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 27

File Name: 2443527A.D
Description: T-509
Canister: 882
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/12/24 **Time:** 18:37
Can Dilution Factor: 1.40
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.47	1.17	1.08	0.80	2.01	1.86	J
75-71-8	Dichlorodifluoromethane	0.70	1.17	ND	3.47	5.78	ND	
67-56-1	Methanol	2.33	2.80	ND	3.06	3.67	ND	
74-87-3	Chloromethane	0.70	1.17	ND	1.45	2.41	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.47	1.17	ND	3.27	8.17	ND	
75-01-4	Vinyl chloride	0.23	1.17	ND	0.60	2.99	ND	
106-99-0	1,3-Butadiene	0.23	1.17	ND	0.52	2.58	ND	
74-83-9	Bromomethane	0.47	1.17	ND	1.81	4.53	ND	
75-00-3	Chloroethane	0.47	1.17	ND	1.23	3.08	ND	
64-17-5	Ethanol	2.33	14.98	ND	4.41	28.28	ND	
107-02-8	Acrolein	0.47	1.40	ND	1.07	3.22	ND	
75-69-4	Trichlorofluoromethane	0.47	1.17	ND	2.63	6.57	ND	
67-64-1	Acetone	2.33	2.80	ND	5.55	6.66	ND	
67-63-0	2-propanol (isopropylalcohol)	0.93	5.83	ND	2.30	14.36	ND	
75-65-0	t-Butyl alcohol	0.47	4.67	ND	1.42	14.16	ND	
4227-95-6	Methyl iodide	0.47	1.40	ND	2.73	8.19	ND	
75-35-4	1,1-Dichloroethene	0.23	1.17	ND	0.93	4.63	ND	
107-13-1	Acrylonitrile	0.93	1.40	ND	2.03	3.04	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.17	ND	1.79	8.95	ND	
107-05-1	Allyl chloride	0.23	4.67	ND	0.73	14.62	ND	
75-09-2	Methylene chloride	0.23	1.17	ND	0.81	4.06	ND	
75-15-0	Carbon disulfide	0.47	1.17	ND	1.45	3.64	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.93	ND	0.93	3.70	ND	
1634-04-4	Methyl tert butyl ether	0.47	0.93	ND	1.68	3.37	ND	
107-12-0	Propionitrile	1.17	1.87	ND	2.63	4.21	ND	
75-34-3	1,1-Dichloroethane	0.23	1.17	ND	0.94	4.73	ND	
637-92-3	Ethyl tert butyl ether	0.47	1.17	ND	1.95	4.88	ND	
108-05-4	Vinyl acetate	0.23	4.67	ND	0.82	16.46	ND	
78-93-3	2-Butanone (MEK)	0.47	1.40	ND	1.38	4.13	ND	
108-20-3	Diisopropyl ether	0.47	2.80	ND	1.95	11.72	ND	
110-54-3	Hexane	0.47	1.17	ND	1.65	4.12	ND	
126-98-7	Methacrylonitrile	0.47	1.17	ND	1.28	3.21	ND	
141-78-6	Ethyl acetate	0.47	1.17	ND	1.68	4.21	ND	
74-97-5	Bromochloromethane	0.23	1.17	ND	1.24	6.18	ND	
96-33-3	Methyl acrylate	0.47	2.33	ND	1.65	8.23	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.40	ND	0.69	4.13	ND	
78-83-1	Isobutyl alcohol	0.93	3.73	ND	2.83	11.33	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.17	ND	0.93	4.63	ND	
594-20-7	2,2-Dichloropropane	0.23	1.17	ND	1.08	5.40	ND	
67-66-3	Chloroform	0.23	1.17	ND	1.14	5.71	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.17	ND	1.27	6.37	ND	
107-06-2	1,2-Dichloroethane	0.23	1.17	ND	0.95	4.73	ND	
563-58-6	1,1-Dichloropropene	0.23	1.17	ND	1.06	5.30	ND	
110-82-7	Cyclohexane	0.23	1.17	ND	0.80	4.02	ND	
71-43-2	Benzene	1.63	2.33	2.98	5.22	7.46	9.54	
56-23-5	Carbon tetrachloride	0.23	1.17	ND	1.47	7.35	ND	
994-05-8	t-Amyl methyl ether	0.47	2.33	ND	1.95	9.77	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.17	ND	1.09	5.46	ND	
142-82-5	n-Heptane	0.47	1.17	ND	1.92	4.79	ND	
78-87-5	1,2-Dichloropropane	0.23	1.17	ND	1.08	5.40	ND	
123-91-1	1,4 Dioxane	0.47	2.33	ND	1.68	8.42	ND	
74-95-3	Dibromomethane	0.23	1.17	ND	1.66	8.31	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.17	ND	0.63	6.28	ND	
75-27-4	Bromodichloromethane	0.23	1.17	ND	1.57	7.83	ND	
80-62-6	Methyl methacrylate	0.47	1.17	ND	1.91	4.78	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.47	3.73	ND	1.92	15.32	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.17	ND	1.06	5.30	ND	
108-88-3	Toluene	0.93	1.17	1.10	3.52	4.40	4.16	J
10061-02-6	trans-1,3-Dichloropropene	0.23	1.17	ND	1.06	5.30	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.17	ND	1.27	6.37	ND	
97-63-2	Ethyl methacrylate	0.47	1.17	ND	2.18	5.46	ND	
591-78-6	2-Hexanone	0.47	3.73	ND	1.92	15.32	ND	
142-28-9	1,3-Dichloropropane	0.23	3.27	ND	1.08	15.12	ND	
111-65-9	Octane	0.47	1.17	ND	2.18	5.46	ND	
124-48-1	Dibromochloromethane	0.47	1.17	ND	3.98	9.95	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.47	1.17	ND	3.59	8.98	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.17	ND	0.79	7.92	ND	
108-90-7	Chlorobenzene	0.47	1.17	ND	2.15	5.38	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.47	1.17	ND	3.21	8.02	ND	
100-41-4	Ethylbenzene	0.47	1.17	ND	2.03	5.07	ND	
1330-20-7	m,p-Xylenes	0.47	1.17	0.53	2.03	5.07	2.33	J
111-84-2	Nonane	0.47	1.17	ND	2.45	6.13	ND	
100-42-5	Styrene	0.70	1.17	ND	2.99	4.98	ND	
75-25-2	Bromoform	0.47	1.17	ND	4.83	12.07	ND	
95-47-6	o-Xylene	0.47	1.17	ND	2.03	5.07	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.93	2.33	ND	6.41	16.04	ND	
96-18-4	1,2,3-Trichloropropane	0.93	2.80	ND	5.63	16.90	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.93	2.80	ND	4.78	14.33	ND	
103-65-1	n-Propylbenzene	0.93	3.27	ND	4.59	16.08	ND	
98-82-8	Isopropylbenzene	0.93	3.27	ND	4.59	16.08	ND	
622-96-8	4-Ethyltoluene	0.93	7.47	0.95	4.59	36.76	4.69	J
108-67-8	1,3,5-Trimethylbenzene	0.93	4.20	ND	4.59	20.68	ND	
124-18-5	Decane	0.93	2.80	ND	5.44	16.32	ND	
98-06-6	tert-butyl benzene	0.93	2.80	ND	5.13	15.39	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.93	4.20	ND	4.59	20.68	ND	
538-93-2	i-Butylbenzene	0.93	2.80	ND	5.13	15.39	ND	
135-98-8	sec-butylbenzene	0.93	3.27	ND	5.13	17.95	ND	
541-73-1	1,3-Dichlorobenzene	0.93	3.73	ND	5.62	22.48	ND	
99-87-6	Isopropyltoluene	0.93	2.80	ND	5.13	15.39	ND	
100-44-7	Benzyl chloride	0.93	2.33	ND	4.84	12.10	ND	
106-46-7	1,4-Dichlorobenzene	0.93	2.33	ND	5.62	14.05	ND	
104-51-8	n-Butylbenzene	0.93	2.80	ND	5.13	15.39	ND	
95-50-1	1,2-Dichlorobenzene	0.93	3.27	ND	5.62	19.67	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.40	3.27	ND	13.55	31.61	ND	
120-82-1	1,2,4-Trichlorobenzene	1.40	2.33	ND	10.40	17.33	ND	
91-20-3	Naphthalene	2.33	0.47	ND	12.25	2.45	ND	
87-61-6	1,2,3-Trichlorobenzene	1.40	2.33	ND	10.40	17.33	ND	
87-68-3	Hexachlorobutadiene	1.17	1.40	ND	12.46	14.95	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	117	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 27

File Name: 224435
Descriptio 27
Canister: 882
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/12/24 **Time:** 18:37
Can Dilution Factor: 1.40
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.27	7.00	ND	13.38	28.67	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**27**		
File Name:	2443527A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**12:20**
Sample ID:	T-509	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**18:37**
Anal Date:	12 Dec 124 6:37 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**882**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.40**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.231	4.41	42.00	30355
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.221	4.86	31.00	31871
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.486	5.72	46.00	20098
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.466	6.42	58.00	63246
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.639	10.70	78.00	368680
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.237	13.50	91.00	191686
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.073	15.90	106	99556
1330-20-7	m,p-Xylenes	75	TRG	0.115	16.06	91.00	127606
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.088	16.61	104.00	78876
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.087	16.37	91.00	105006
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.204	18.23	105.00	347221
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.124	18.31	105.00	218474
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.188	18.95	105.00	262678
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.097	19.53	119.00	209513
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	124
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.40	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**13351366**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**14520233**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18308918**
2037-26-5	Toluene-d8	60	SURR	11.693	13.40	98.00	**10080602**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**
Laboratory Number:	**27**
File Name:	2443527A.D
Run Method:	A1563_L.M
Can Factor:	1.40
Air Volume:	300.0 ml
Can/Tube Number:	882
Dilution Factor:	0.4200
Base Volume:	1000 ml
Unit Factor (ppbv):	1000 PPBV

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4200
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

UG/M3 Fixed Fixed Fixed Fixed (1) (2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.23	1.08	1.86	1.08	1.86	1.86	1.86	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.22	1.03	1.35	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.49	2.27	4.28	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.47	2.18	5.18	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.64	2.98	9.54	2.98	9.54	9.54	9.54	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.24	1.10	4.16	1.10	4.16	4.16	4.16	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.07	0.34	1.48	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.11	0.53	2.33	0.53	2.33	2.33	2.33	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.09	0.41	1.75	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.09	0.40	1.76	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.20	0.95	4.69	0.95	4.69	4.69	4.69	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.12	0.58	2.85	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.19	0.88	4.32	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.10	0.45	2.50	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.69	117	117	117	117	117	117	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.47	0.80	1.17	2.01	J	J		=		Y	1.08	1.86
0.70	3.47	1.17	5.78	U	ND		ND		Y	0.00	0.00
2.33	3.06	2.80	3.67	U	ND		ND		Y	0.00	0.00
0.70	1.45	1.17	2.41	U	ND		ND		Y	0.00	0.00
0.47	3.27	1.17	8.17	U	ND		ND		Y	0.00	0.00
0.23	0.60	1.17	2.99	U	ND		ND		Y	0.00	0.00
0.23	0.52	1.17	2.58	U	ND		ND		Y	0.00	0.00
0.47	1.81	1.17	4.53	U	ND		ND		Y	0.00	0.00
0.47	1.23	1.17	3.08	U	ND		ND		Y	0.00	0.00
2.33	4.41	14.98	28.28	U	ND		ND		Y	0.00	0.00
0.47	1.07	1.40	3.22	U	ND		ND		Y	0.00	0.00
0.47	2.63	1.17	6.57	U	ND		ND		Y	0.00	0.00
2.33	5.55	2.80	6.66	U	ND		ND		Y	0.00	0.00
0.93	2.30	5.83	14.36	U	ND		ND		Y	0.00	0.00
0.47	1.42	4.67	14.16	U	ND		ND		Y	0.00	0.00
0.47	2.73	1.40	8.19	U	ND		ND		Y	0.00	0.00
0.23	0.93	1.17	4.63	U	ND		ND		Y	0.00	0.00
0.93	2.03	1.40	3.04	U	ND		ND		Y	0.00	0.00
0.23	1.79	1.17	8.95	U	ND		ND		Y	0.00	0.00
0.23	0.73	4.67	14.62	U	ND		ND		Y	0.00	0.00
0.23	0.81	1.17	4.06	U	ND		ND		Y	0.00	0.00
0.47	1.45	1.17	3.64	U	ND		ND		Y	0.00	0.00
0.23	0.93	0.93	3.70	U	ND		ND		Y	0.00	0.00
0.47	1.68	0.93	3.37	U	ND		ND		Y	0.00	0.00
1.17	2.63	1.87	4.21	U	ND		ND		Y	0.00	0.00
0.23	0.94	1.17	4.73	U	ND		ND		Y	0.00	0.00
0.47	1.95	1.17	4.88	U	ND		ND		Y	0.00	0.00
0.23	0.82	4.67	16.46	U	ND		ND		Y	0.00	0.00
0.47	1.38	1.40	4.13	U	ND		ND		Y	0.00	0.00
0.47	1.95	2.80	11.72	U	ND		ND		Y	0.00	0.00
0.47	1.65	1.17	4.12	U	ND		ND		Y	0.00	0.00
0.47	1.28	1.17	3.21	U	ND		ND		Y	0.00	0.00
0.47	1.68	1.17	4.21	U	ND		ND		Y	0.00	0.00
0.23	1.24	1.17	6.18	U	ND		ND		Y	0.00	0.00

0.47	1.65	2.33	8.23	U	ND	ND	Y	0.00	0.00
0.23	0.69	1.40	4.13	U	ND	ND	Y	0.00	0.00
0.93	2.83	3.73	11.33	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.17	4.63	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.17	5.40	U	ND	ND	Y	0.00	0.00
0.23	1.14	1.17	5.71	U	ND	ND	Y	0.00	0.00
0.23	1.27	1.17	6.37	U	ND	ND	Y	0.00	0.00
0.23	0.95	1.17	4.73	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.17	5.30	U	ND	ND	Y	0.00	0.00
0.23	0.80	1.17	4.02	U	ND	ND	Y	0.00	0.00
1.63	5.22	2.33	7.46			=	Y	2.98	9.54
0.23	1.47	1.17	7.35	U	ND	ND	Y	0.00	0.00
0.47	1.95	2.33	9.77	U	ND	ND	Y	0.00	0.00
0.23	1.09	1.17	5.46	U	ND	ND	Y	0.00	0.00
0.47	1.92	1.17	4.79	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.17	5.40	U	ND	ND	Y	0.00	0.00
0.47	1.68	2.33	8.42	U	ND	ND	Y	0.00	0.00
0.23	1.66	1.17	8.31	U	ND	ND	Y	0.00	0.00
0.12	0.63	1.17	6.28	U	ND	ND	Y	0.00	0.00
0.23	1.57	1.17	7.83	U	ND	ND	Y	0.00	0.00
0.47	1.91	1.17	4.78	U	ND	ND	Y	0.00	0.00
0.47	1.92	3.73	15.32	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.17	5.30	U	ND	ND	Y	0.00	0.00
0.93	3.52	1.17	4.40	J	J	=	Y	1.10	4.16
0.23	1.06	1.17	5.30	U	ND	ND	Y	0.00	0.00
0.23	1.27	1.17	6.37	U	ND	ND	Y	0.00	0.00
0.47	2.18	1.17	5.46	U	ND	ND	Y	0.00	0.00
0.47	1.92	3.73	15.32	U	ND	ND	Y	0.00	0.00
0.23	1.08	3.27	15.12	U	ND	ND	Y	0.00	0.00
0.47	2.18	1.17	5.46	U	ND	ND	Y	0.00	0.00
0.47	3.98	1.17	9.95	U	ND	ND	Y	0.00	0.00
0.47	3.59	1.17	8.98	U	ND	ND	Y	0.00	0.00
0.12	0.79	1.17	7.92	U	ND	ND	Y	0.00	0.00
0.47	2.15	1.17	5.38	U	ND	ND	Y	0.00	0.00
0.47	3.21	1.17	8.02	U	ND	ND	Y	0.00	0.00
0.47	2.03	1.17	5.07	U	ND	ND	Y	0.00	0.00
0.47	2.03	1.17	5.07	J	J	=	Y	0.53	2.33
0.47	2.45	1.17	6.13	U	ND	ND	Y	0.00	0.00
0.70	2.99	1.17	4.98	U	ND	ND	Y	0.00	0.00
0.47	4.83	1.17	12.07	U	ND	ND	Y	0.00	0.00
0.47	2.03	1.17	5.07	U	ND	ND	Y	0.00	0.00
0.93	6.41	2.33	16.04	U	ND	ND	Y	0.00	0.00
0.93	5.63	2.80	16.90	U	ND	ND	Y	0.00	0.00
0.93	4.78	2.80	14.33	U	ND	ND	Y	0.00	0.00
0.93	4.59	3.27	16.08	U	ND	ND	Y	0.00	0.00
0.93	4.59	3.27	16.08	U	ND	ND	Y	0.00	0.00
0.93	4.59	7.47	36.76	J	J	=	Y	0.95	4.69
0.93	4.59	4.20	20.68	U	ND	ND	Y	0.00	0.00
0.93	5.44	2.80	16.32	U	ND	ND	Y	0.00	0.00
0.93	5.13	2.80	15.39	U	ND	ND	Y	0.00	0.00
0.93	4.59	4.20	20.68	U	ND	ND	Y	0.00	0.00
0.93	5.13	2.80	15.39	U	ND	ND	Y	0.00	0.00

0.93	5.13	3.27	17.95	U	ND	ND	Y	0.00	0.00
0.93	5.62	3.73	22.48	U	ND	ND	Y	0.00	0.00
0.93	5.13	2.80	15.39	U	ND	ND	Y	0.00	0.00
0.93	4.84	2.33	12.10	U	ND	ND	Y	0.00	0.00
0.93	5.62	2.33	14.05	U	ND	ND	Y	0.00	0.00
0.93	5.13	2.80	15.39	U	ND	ND	Y	0.00	0.00
0.93	5.62	3.27	19.67	U	ND	ND	Y	0.00	0.00
1.40	13.55	3.27	31.61	U	ND	ND	Y	0.00	0.00
1.40	10.40	2.33	17.33	U	ND	ND	Y	0.00	0.00
2.33	12.25	0.47	2.45	U	ND	ND	Y	0.00	0.00
1.40	10.40	2.33	17.33	U	ND	ND	Y	0.00	0.00
1.17	12.46	1.40	14.95	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435 **Can Factor:** 1.40
EASID: 27 **Gas Constant** 24.417049
Sample ID: T-509 **Volume:** 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	
ND	**0.7**	**1.5**	3.3	7.00	3.27	13.38	7.00	28.67	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**27**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.40
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)} \times \frac{(Cistdi)}{(Aistdi)}$ **= Cn**

3) Amount ppbv = (Raw Amt) $\times \frac{1000}{(SV)} \times$ (CDF)

4) Amount ug/m3 = (amt(ppbv) $\times \frac{MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	30355	20.0	13351366	0.231	1.08	1.86
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	13351366	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	31871	20.0	13351366	0.221	1.03	1.35
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	13351366	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	13351366	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	13351366	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	13351366	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	13351366	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	13351366	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	20098	20.0	13351366	0.486	2.27	4.28
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	13351366	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	13351366	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	63246	20.0	13351366	0.466	2.18	5.18
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	13351366	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	13351366	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	13351366	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	13351366	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	13351366	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	13351366	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	13351366	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	13351366	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	13351366	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	13351366	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	13351366	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	13351366	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	13351366	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	13351366	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	13351366	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	13351366	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	13351366	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	13351366	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	13351366	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	13351366	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	13351366	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	13351366	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	13351366	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	13351366	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	13351366	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	13351366	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	13351366	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	14520233	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	14520233	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	14520233	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	14520233	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	368680	20.0	14520233	0.639	2.98	9.54
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	14520233	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	14520233	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	14520233	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	14520233	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	14520233	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	14520233	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	14520233	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	14520233	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	14520233	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	14520233	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	14520233	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	14520233	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	191686	20.0	14520233	0.237	1.10	4.16
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	14520233	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	14520233	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	14520233	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	14520233	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	14520233	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	14520233	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	14520233	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	14520233	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	14520233	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18308918	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18308918	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	99556	20.0	18308918	0.073	0.34	1.48
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	127606	20.0	18308918	0.115	0.53	2.33
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18308918	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	78876	20.0	18308918	0.088	0.41	1.75
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18308918	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	105006	20.0	18308918	0.087	0.40	1.76
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18308918	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18308918	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18308918	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18308918	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18308918	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	347221	20.0	18308918	0.204	0.95	4.69
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	218474	20.0	18308918	0.124	0.58	2.85
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18308918	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18308918	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	262678	20.0	18308918	0.188	0.88	4.32
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18308918	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18308918	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18308918	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	209513	20.0	18308918	0.097	0.45	2.50
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18308918	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18308918	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	124	20.0	18308918	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18308918	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18308918	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18308918	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18308918	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18308918	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18308918	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	13351366	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	14520233	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18308918	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	10080602	10.0		11.693	116.93	117

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443527A.D
Acq Time : 12 Dec 124 6:37 pm
Sample : T-509
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 12:31 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	13351366	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	14520233	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.23	117	18308918	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	10080602	11.69	ppbV		116.93
Target Compounds							Qvalue
2) Propylene	4.26	42	30355	0.23	ppbV		87
4) Methanol	4.77	31	31871	0.22	ppbV	#	99
11) Ethanol	5.61	46	20098	0.49	ppbV		86
14) Acetone	6.24	58	63246	0.47	ppbV	#	1
47) Benzene	10.41	78	368680	0.64	ppbV	m	71
61) Toluene	13.19	91	191686	0.24	ppbV		93
74) Ethylbenzene	15.57	91	99556	0.07	ppbV		94
75) m,p-Xylenes	15.74	91	127606	0.11	ppbV	#	79
77) Styrene	16.29	104	78876	0.09	ppbV	#	81
79) o-Xylene	16.37	91	105006	0.09	ppbV	#	73
85) 4-Ethyltoluene	17.89	105	347221	0.20	ppbV	m	85
86) 1,3,5-Trimethylbenzene	17.96	105	218474	0.12	ppbV	m	82
89) 1,2,4-Trimethylbenzene	18.59	105	262678	0.19	ppbV	#	80
93) Isopropyltoluene	19.17	119	209513	0.10	ppbV	#	89
96) n-Butylbenzene	20.14	91	124	0.00	ppbV	m	97

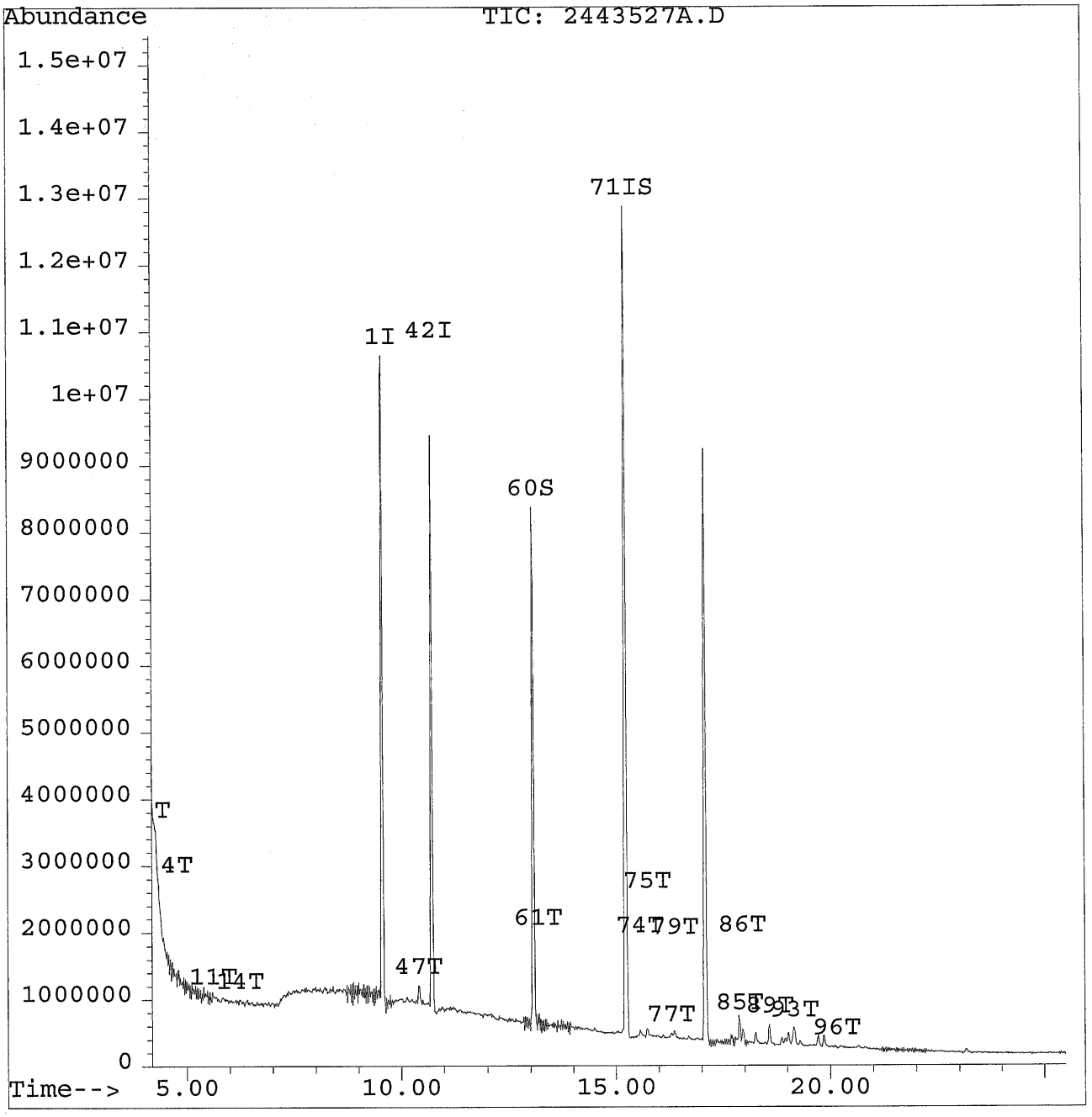
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443527A.D
Acq Time : 12 Dec 124 6:37 pm
Sample : T-509
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 12:31 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443527A.D
Acq Time : 12 Dec 124 6:37 pm
Sample : T-509
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

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Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	13.24 ppbV	27283479	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
3	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	87
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 28

Client ID T-510

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 28

File Name: 2443528A.D
Description: T-510
Canister: 860
QC_Batch: 121324-MA1

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/13/24 **Time:** 15:23
Can Dilution Factor: 1.42
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.47	1.18	ND	0.82	2.04	ND	
75-71-8	Dichlorodifluoromethane	0.71	1.18	ND	3.52	5.86	ND	
67-56-1	Methanol	2.37	2.84	ND	3.10	3.72	ND	
74-87-3	Chloromethane	0.71	1.18	ND	1.47	2.45	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.47	1.18	ND	3.31	8.28	ND	
75-01-4	Vinyl chloride	0.24	1.18	ND	0.61	3.03	ND	
106-99-0	1,3-Butadiene	0.24	1.18	ND	0.53	2.62	ND	
74-83-9	Bromomethane	0.47	1.18	ND	1.84	4.60	ND	
75-00-3	Chloroethane	0.47	1.18	ND	1.25	3.13	ND	
64-17-5	Ethanol	2.37	15.19	ND	4.47	28.69	ND	
107-02-8	Acrolein	0.47	1.42	ND	1.09	3.26	ND	
75-69-4	Trichlorofluoromethane	0.47	1.18	ND	2.66	6.66	ND	
67-64-1	Acetone	2.37	2.84	ND	5.63	6.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.95	5.92	ND	2.33	14.56	ND	
75-65-0	t-Butyl alcohol	0.47	4.73	ND	1.44	14.36	ND	
4227-95-6	Methyl iodide	0.47	1.42	ND	2.77	8.31	ND	
75-35-4	1,1-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	
107-13-1	Acrylonitrile	0.95	1.42	ND	2.06	3.09	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.24	1.18	ND	1.82	9.08	ND	
107-05-1	Allyl chloride	0.24	4.73	ND	0.74	14.83	ND	
75-09-2	Methylene chloride	0.24	1.18	ND	0.82	4.11	ND	
75-15-0	Carbon disulfide	0.47	1.18	ND	1.48	3.69	ND	
156-60-5	trans-1,2-Dichloroethene	0.24	0.95	ND	0.94	3.76	ND	
1634-04-4	Methyl tert butyl ether	0.47	0.95	ND	1.71	3.42	ND	
107-12-0	Propionitrile	1.18	1.89	ND	2.67	4.27	ND	
75-34-3	1,1-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
637-92-3	Ethyl tert butyl ether	0.47	1.18	ND	1.98	4.95	ND	
108-05-4	Vinyl acetate	0.24	4.73	ND	0.83	16.69	ND	
78-93-3	2-Butanone (MEK)	0.47	1.42	ND	1.40	4.19	ND	
108-20-3	Diisopropyl ether	0.47	2.84	ND	1.98	11.89	ND	
110-54-3	Hexane	0.47	1.18	ND	1.67	4.18	ND	
126-98-7	Methacrylonitrile	0.47	1.18	ND	1.30	3.25	ND	
141-78-6	Ethyl acetate	0.47	1.18	ND	1.71	4.27	ND	
74-97-5	Bromochloromethane	0.24	1.18	ND	1.25	6.27	ND	
96-33-3	Methyl acrylate	0.47	2.37	ND	1.67	8.35	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.24	1.42	ND	0.70	4.19	ND	
78-83-1	Isobutyl alcohol	0.95	3.79	ND	2.87	11.49	ND	
156-59-2	cis-1,2-Dichloroethene	0.24	1.18	ND	0.94	4.70	ND	
594-20-7	2,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
67-66-3	Chloroform	0.24	1.18	ND	1.16	5.79	ND	
71-55-6	1,1,1-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
107-06-2	1,2-Dichloroethane	0.24	1.18	ND	0.96	4.80	ND	
563-58-6	1,1-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
110-82-7	Cyclohexane	0.24	1.18	ND	0.82	4.08	ND	
71-43-2	Benzene	1.66	2.37	ND	5.30	7.57	ND	
56-23-5	Carbon tetrachloride	0.24	1.18	ND	1.49	7.45	ND	
994-05-8	t-Amyl methyl ether	0.47	2.37	ND	1.98	9.91	ND	
540-84-1	2,2,4-Trimethylpentane	0.24	1.18	ND	1.11	5.53	ND	
142-82-5	n-Heptane	0.47	1.18	ND	1.94	4.86	ND	
78-87-5	1,2-Dichloropropane	0.24	1.18	ND	1.10	5.48	ND	
123-91-1	1,4 Dioxane	0.47	2.37	ND	1.71	8.54	ND	
74-95-3	Dibromomethane	0.24	1.18	ND	1.68	8.42	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.18	ND	0.64	6.37	ND	
75-27-4	Bromodichloromethane	0.24	1.18	ND	1.59	7.94	ND	
80-62-6	Methyl methacrylate	0.47	1.18	ND	1.94	4.85	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.47	3.79	ND	1.94	15.54	ND	
10061-01-5	cis-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
108-88-3	Toluene	0.95	1.18	ND	3.57	4.46	ND	
10061-02-6	trans-1,3-Dichloropropene	0.24	1.18	ND	1.08	5.38	ND	
79-00-5	1,1,2-Trichloroethane	0.24	1.18	ND	1.29	6.47	ND	
97-63-2	Ethyl methacrylate	0.47	1.18	ND	2.21	5.53	ND	
591-78-6	2-Hexanone	0.47	3.79	ND	1.94	15.54	ND	
142-28-9	1,3-Dichloropropane	0.24	3.31	ND	1.10	15.33	ND	
111-65-9	Octane	0.47	1.18	ND	2.21	5.53	ND	
124-48-1	Dibromochloromethane	0.47	1.18	ND	4.04	10.09	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.47	1.18	ND	3.64	9.11	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.18	ND	0.80	8.04	ND	
108-90-7	Chlorobenzene	0.47	1.18	ND	2.18	5.46	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.47	1.18	ND	3.25	8.13	ND	
100-41-4	Ethylbenzene	0.47	1.18	ND	2.06	5.15	ND	
1330-20-7	m,p-Xylenes	0.47	1.18	1.65	2.06	5.15	7.19	
111-84-2	Nonane	0.47	1.18	ND	2.49	6.22	ND	
100-42-5	Styrene	0.71	1.18	ND	3.03	5.05	ND	
75-25-2	Bromoform	0.47	1.18	ND	4.90	12.25	ND	
95-47-6	o-Xylene	0.47	1.18	0.93	2.06	5.15	4.03	J
79-34-5	1,1,2,2-Tetrachloroethane	0.95	2.37	ND	6.51	16.26	ND	
96-18-4	1,2,3-Trichloropropane	0.95	2.84	ND	5.71	17.14	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.95	2.84	ND	4.85	14.54	ND	
103-65-1	n-Propylbenzene	0.95	3.31	ND	4.66	16.31	ND	
98-82-8	Isopropylbenzene	0.95	3.31	ND	4.66	16.31	ND	
622-96-8	4-Ethyltoluene	0.95	7.57	ND	4.66	37.28	ND	
108-67-8	1,3,5-Trimethylbenzene	0.95	4.26	0.99	4.66	20.97	4.88	J
124-18-5	Decane	0.95	2.84	ND	5.52	16.55	ND	
98-06-6	tert-butyl benzene	0.95	2.84	ND	5.20	15.61	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.95	4.26	ND	4.66	20.97	ND	
538-93-2	i-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
135-98-8	sec-butylbenzene	0.95	3.31	ND	5.20	18.21	ND	
541-73-1	1,3-Dichlorobenzene	0.95	3.79	ND	5.70	22.80	ND	
99-87-6	Isopropyltoluene	0.95	2.84	ND	5.20	15.61	ND	
100-44-7	Benzyl chloride	0.95	2.37	ND	4.91	12.27	ND	
106-46-7	1,4-Dichlorobenzene	0.95	2.37	ND	5.70	14.25	ND	
104-51-8	n-Butylbenzene	0.95	2.84	ND	5.20	15.61	ND	
95-50-1	1,2-Dichlorobenzene	0.95	3.31	ND	5.70	19.95	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.42	3.31	ND	13.74	32.07	ND	
120-82-1	1,2,4-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
91-20-3	Naphthalene	2.37	0.47	ND	12.43	2.49	ND	
87-61-6	1,2,3-Trichlorobenzene	1.42	2.37	ND	10.55	17.58	ND	
87-68-3	Hexachlorobutadiene	1.18	1.42	ND	12.64	15.17	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 28

File Name: 224435
Descriptio 28
Canister: 860
QC_Batch: 121324-MA1

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/13/24 **Time:** 15:23
Can Dilution Factor: 1.42
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.31	7.10	ND	13.57	29.08	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**28**		
File Name:	2443528A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**12:18**
Sample ID:	T-510	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**15:23**
Anal Date:	13 Dec 124 3:23 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**860**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.42**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.436	6.42	58.00	68102
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.071	10.70	78.00	45464
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.082	13.50	91.00	73756
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.082	15.90	106	123756
1330-20-7	m,p-Xylenes	75	TRG	0.349	16.06	91.00	431000
111-84-2	Nonane	76	TRG	0.073	16.43	57.00	52351
100-42-5	Styrene	77	TRG	0.119	16.61	104.00	118056
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.196	16.35	91.00	262715
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.209	18.31	105.00	408309
124-18-5	Decane	87	TRG	0.071	18.60	57.00	89945
98-06-6	tert-butyl benzene	88	TRG	0.053	18.93	119.00	102274

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.193	18.95	105.00	297878
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.40	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**15390699**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**16092367**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**20285937**
2037-26-5	Toluene-d8	60	SURR	12.050	13.40	98.00	**11512703**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 28
File Name: 2443528A.D
Run Method: A1563_L.M
Can Factor: 1.42
Air Volume: 300.0 ml
Can/Tube Number: 860
Dilution Factor: 0.4260
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4260
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.44	2.06	4.91	ND	ND	0		0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.07	0.34	1.08	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.08	0.39	1.47	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.08	0.39	1.68	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.35	1.65	7.19	1.65	7.19	7.19	7.19	**0.100**	**0.250**
Nonane	128.3	0.07	0.34	1.80	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.12	0.56	2.40	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.20	0.93	4.03	0.93	4.03	4.03	4.03	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.21	0.99	4.88	0.99	4.88	4.88	4.88	**0.200**	**0.900**
Decane	142.3	0.07	0.34	1.96	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.05	0.25	1.37	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.19	0.91	4.49	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.05	120	120	120	120	120	120	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.47	0.82	1.18	2.04	U	ND		ND		Y	0.00	0.00
0.71	3.52	1.18	5.86	U	ND		ND		Y	0.00	0.00
2.37	3.10	2.84	3.72	U	ND		ND		Y	0.00	0.00
0.71	1.47	1.18	2.45	U	ND		ND		Y	0.00	0.00
0.47	3.31	1.18	8.28	U	ND		ND		Y	0.00	0.00
0.24	0.61	1.18	3.03	U	ND		ND		Y	0.00	0.00
0.24	0.53	1.18	2.62	U	ND		ND		Y	0.00	0.00
0.47	1.84	1.18	4.60	U	ND		ND		Y	0.00	0.00
0.47	1.25	1.18	3.13	U	ND		ND		Y	0.00	0.00
2.37	4.47	15.19	28.69	U	ND		ND		Y	0.00	0.00
0.47	1.09	1.42	3.26	U	ND		ND		Y	0.00	0.00
0.47	2.66	1.18	6.66	U	ND		ND		Y	0.00	0.00
2.37	5.63	2.84	6.76	U	ND		ND		Y	0.00	0.00
0.95	2.33	5.92	14.56	U	ND		ND		Y	0.00	0.00
0.47	1.44	4.73	14.36	U	ND		ND		Y	0.00	0.00
0.47	2.77	1.42	8.31	U	ND		ND		Y	0.00	0.00
0.24	0.94	1.18	4.70	U	ND		ND		Y	0.00	0.00
0.95	2.06	1.42	3.09	U	ND		ND		Y	0.00	0.00
0.24	1.82	1.18	9.08	U	ND		ND		Y	0.00	0.00
0.24	0.74	4.73	14.83	U	ND		ND		Y	0.00	0.00
0.24	0.82	1.18	4.11	U	ND		ND		Y	0.00	0.00
0.47	1.48	1.18	3.69	U	ND		ND		Y	0.00	0.00
0.24	0.94	0.95	3.76	U	ND		ND		Y	0.00	0.00
0.47	1.71	0.95	3.42	U	ND		ND		Y	0.00	0.00
1.18	2.67	1.89	4.27	U	ND		ND		Y	0.00	0.00
0.24	0.96	1.18	4.80	U	ND		ND		Y	0.00	0.00
0.47	1.98	1.18	4.95	U	ND		ND		Y	0.00	0.00
0.24	0.83	4.73	16.69	U	ND		ND		Y	0.00	0.00
0.47	1.40	1.42	4.19	U	ND		ND		Y	0.00	0.00
0.47	1.98	2.84	11.89	U	ND		ND		Y	0.00	0.00
0.47	1.67	1.18	4.18	U	ND		ND		Y	0.00	0.00
0.47	1.30	1.18	3.25	U	ND		ND		Y	0.00	0.00
0.47	1.71	1.18	4.27	U	ND		ND		Y	0.00	0.00
0.24	1.25	1.18	6.27	U	ND		ND		Y	0.00	0.00

0.47	1.67	2.37	8.35	U	ND	ND	Y	0.00	0.00
0.24	0.70	1.42	4.19	U	ND	ND	Y	0.00	0.00
0.95	2.87	3.79	11.49	U	ND	ND	Y	0.00	0.00
0.24	0.94	1.18	4.70	U	ND	ND	Y	0.00	0.00
0.24	1.10	1.18	5.48	U	ND	ND	Y	0.00	0.00
0.24	1.16	1.18	5.79	U	ND	ND	Y	0.00	0.00
0.24	1.29	1.18	6.47	U	ND	ND	Y	0.00	0.00
0.24	0.96	1.18	4.80	U	ND	ND	Y	0.00	0.00
0.24	1.08	1.18	5.38	U	ND	ND	Y	0.00	0.00
0.24	0.82	1.18	4.08	U	ND	ND	Y	0.00	0.00
1.66	5.30	2.37	7.57	U	ND	ND	Y	0.00	0.00
0.24	1.49	1.18	7.45	U	ND	ND	Y	0.00	0.00
0.47	1.98	2.37	9.91	U	ND	ND	Y	0.00	0.00
0.24	1.11	1.18	5.53	U	ND	ND	Y	0.00	0.00
0.47	1.94	1.18	4.86	U	ND	ND	Y	0.00	0.00
0.24	1.10	1.18	5.48	U	ND	ND	Y	0.00	0.00
0.47	1.71	2.37	8.54	U	ND	ND	Y	0.00	0.00
0.24	1.68	1.18	8.42	U	ND	ND	Y	0.00	0.00
0.12	0.64	1.18	6.37	U	ND	ND	Y	0.00	0.00
0.24	1.59	1.18	7.94	U	ND	ND	Y	0.00	0.00
0.47	1.94	1.18	4.85	U	ND	ND	Y	0.00	0.00
0.47	1.94	3.79	15.54	U	ND	ND	Y	0.00	0.00
0.24	1.08	1.18	5.38	U	ND	ND	Y	0.00	0.00
0.95	3.57	1.18	4.46	U	ND	ND	Y	0.00	0.00
0.24	1.08	1.18	5.38	U	ND	ND	Y	0.00	0.00
0.24	1.29	1.18	6.47	U	ND	ND	Y	0.00	0.00
0.47	2.21	1.18	5.53	U	ND	ND	Y	0.00	0.00
0.47	1.94	3.79	15.54	U	ND	ND	Y	0.00	0.00
0.24	1.10	3.31	15.33	U	ND	ND	Y	0.00	0.00
0.47	2.21	1.18	5.53	U	ND	ND	Y	0.00	0.00
0.47	4.04	1.18	10.09	U	ND	ND	Y	0.00	0.00
0.47	3.64	1.18	9.11	U	ND	ND	Y	0.00	0.00
0.12	0.80	1.18	8.04	U	ND	ND	Y	0.00	0.00
0.47	2.18	1.18	5.46	U	ND	ND	Y	0.00	0.00
0.47	3.25	1.18	8.13	U	ND	ND	Y	0.00	0.00
0.47	2.06	1.18	5.15	U	ND	ND	Y	0.00	0.00
0.47	2.06	1.18	5.15			=	Y	1.65	7.19
0.47	2.49	1.18	6.22	U	ND	ND	Y	0.00	0.00
0.71	3.03	1.18	5.05	U	ND	ND	Y	0.00	0.00
0.47	4.90	1.18	12.25	U	ND	ND	Y	0.00	0.00
0.47	2.06	1.18	5.15	J	J	=	Y	0.93	4.03
0.95	6.51	2.37	16.26	U	ND	ND	Y	0.00	0.00
0.95	5.71	2.84	17.14	U	ND	ND	Y	0.00	0.00
0.95	4.85	2.84	14.54	U	ND	ND	Y	0.00	0.00
0.95	4.66	3.31	16.31	U	ND	ND	Y	0.00	0.00
0.95	4.66	3.31	16.31	U	ND	ND	Y	0.00	0.00
0.95	4.66	7.57	37.28	U	ND	ND	Y	0.00	0.00
0.95	4.66	4.26	20.97	J	J	=	Y	0.99	4.88
0.95	5.52	2.84	16.55	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00
0.95	4.66	4.26	20.97	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00

0.95	5.20	3.31	18.21	U	ND	ND	Y	0.00	0.00
0.95	5.70	3.79	22.80	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00
0.95	4.91	2.37	12.27	U	ND	ND	Y	0.00	0.00
0.95	5.70	2.37	14.25	U	ND	ND	Y	0.00	0.00
0.95	5.20	2.84	15.61	U	ND	ND	Y	0.00	0.00
0.95	5.70	3.31	19.95	U	ND	ND	Y	0.00	0.00
1.42	13.74	3.31	32.07	U	ND	ND	Y	0.00	0.00
1.42	10.55	2.37	17.58	U	ND	ND	Y	0.00	0.00
2.37	12.43	0.47	2.49	U	ND	ND	Y	0.00	0.00
1.42	10.55	2.37	17.58	U	ND	ND	Y	0.00	0.00
1.18	12.64	1.42	15.17	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 28
Sample ID: T-510

Can Factor: 1.42
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	
ND	**0.7**	**1.5**	3.3	7.10	3.31	13.57	7.10	29.08	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**28**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.42	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}\ \frac{(Cistdi)}{(Aistdi)}$ **= Cn**

3) Amount ppbv = (Raw Amt) $\frac{1000}{(SV)}$ (CDF)

4) Amount ug/m3 = (amt(ppbv) $\frac{MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	15390699	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	15390699	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	15390699	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	15390699	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	15390699	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	15390699	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	15390699	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	15390699	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	15390699	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	15390699	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	15390699	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	15390699	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	68102	20.0	15390699	0.436	2.06	4.91
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	15390699	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	15390699	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	15390699	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	15390699	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	15390699	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	15390699	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	15390699	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	15390699	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	15390699	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	15390699	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	15390699	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	15390699	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	15390699	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	15390699	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	15390699	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	15390699	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	15390699	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	15390699	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	15390699	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	15390699	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	15390699	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	15390699	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	15390699	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	15390699	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	15390699	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	15390699	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	15390699	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	16092367	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	16092367	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	16092367	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	16092367	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	45464	20.0	16092367	0.071	0.34	1.08
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	16092367	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	16092367	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	16092367	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	16092367	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	16092367	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	16092367	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	16092367	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	16092367	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	16092367	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	16092367	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	16092367	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	16092367	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	73756	20.0	16092367	0.082	0.39	1.47
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	16092367	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	16092367	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	16092367	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	16092367	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	16092367	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	16092367	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	16092367	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	16092367	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	16092367	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	20285937	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	20285937	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	123756	20.0	20285937	0.082	0.39	1.68
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	431000	20.0	20285937	0.349	1.65	7.19
76	Nonane	d5CB	TRG	128.3	0.711	52351	20.0	20285937	0.073	0.34	1.80
77	Styrene	d5CB	TRG	104.2	0.978	118056	20.0	20285937	0.119	0.56	2.40
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	20285937	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	262715	20.0	20285937	0.196	0.93	4.03
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	20285937	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	20285937	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	20285937	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	20285937	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	20285937	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	20285937	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	408309	20.0	20285937	0.209	0.99	4.88
87	Decane	d5CB	TRG	142.3	1.250	89945	20.0	20285937	0.071	0.34	1.96
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	102274	20.0	20285937	0.053	0.25	1.37
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	297878	20.0	20285937	0.193	0.91	4.49
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	20285937	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	20285937	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	20285937	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	20285937	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	20285937	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	20285937	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	20285937	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	20285937	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	20285937	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	20285937	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	20285937	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	20285937	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	20285937	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	15390699	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	16092367	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	20285937	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	11512703	10.0		12.050	120.50	120

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443528A.D
Acq Time : 13 Dec 124 3:23 pm
Sample : T-510
Misc : SCHMIDT
Quant Time: Dec 19 14:34 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	15390699	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.74	114	16092367	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.23	117	20285937	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	11512703	12.05	ppbV		120.50
Target Compounds							Qvalue
14) Acetone	6.29	58	68102	0.44	ppbV	#	1
47) Benzene	10.45	78	45464	0.07	ppbV	m	79
61) Toluene	13.19	91	73756	0.08	ppbV		95
74) Ethylbenzene	15.57	91	123756	0.08	ppbV		91
75) m,p-Xylenes	15.72	91	431000	0.35	ppbV	#	73
76) Nonane	16.10	57	52351	0.07	ppbV	#	81
77) Styrene	16.27	104	118056	0.12	ppbV	#	83
79) o-Xylene	16.35	91	262715	0.20	ppbV	#	77
86) 1,3,5-Trimethylbenzene	17.87	105	408309	0.21	ppbV	m	81
87) Decane	18.25	57	89945	0.07	ppbV	#	82
88) tert-butyl benzene	18.57	119	102274	0.05	ppbV	#	82
89) 1,2,4-Trimethylbenzene	18.57	105	297878	0.19	ppbV	#	86

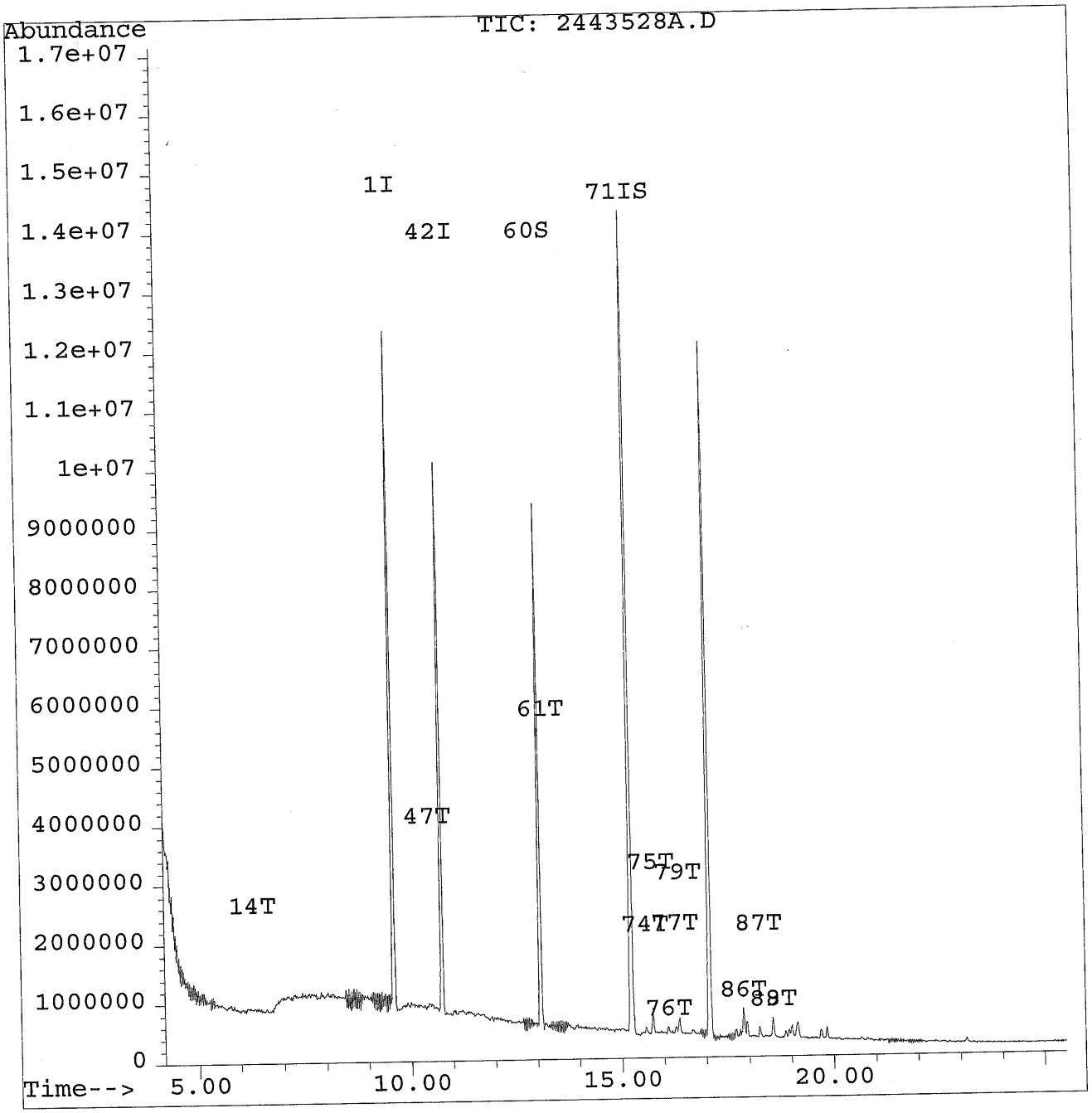
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443528A.D
Acq Time : 13 Dec 124 3:23 pm
Sample : T-510
Misc : SCHMIDT
Quant Time: Dec 19 14:34 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443528A.D
Acq Time : 13 Dec 124 3:23 pm
Sample : T-510
Misc : SCHMIDT

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	15.78 ppbV	37367201	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	81
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 29

Client ID T-511

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 29**

File Name: 2443529A.D
Description: T-511
Canister: 627
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/12/24 **Time:** 20:06
Can Dilution Factor: 1.37
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.14	ND	0.79	1.97	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.14	ND	3.39	5.65	ND	
67-56-1	Methanol	2.28	2.74	ND	2.99	3.59	ND	
74-87-3	Chloromethane	0.69	1.14	ND	1.42	2.36	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.14	ND	3.20	7.99	ND	
75-01-4	Vinyl chloride	0.23	1.14	ND	0.59	2.92	ND	
106-99-0	1,3-Butadiene	0.23	1.14	ND	0.51	2.53	ND	
74-83-9	Bromomethane	0.46	1.14	ND	1.77	4.44	ND	
75-00-3	Chloroethane	0.46	1.14	ND	1.21	3.02	ND	
64-17-5	Ethanol	2.28	14.66	ND	4.31	27.68	ND	
107-02-8	Acrolein	0.46	1.37	ND	1.05	3.15	ND	
75-69-4	Trichlorofluoromethane	0.46	1.14	ND	2.57	6.42	ND	
67-64-1	Acetone	2.28	2.74	2.63	5.43	6.52	6.27	J
67-63-0	2-propanol (isopropylalcohol)	0.91	5.71	ND	2.25	14.05	ND	
75-65-0	t-Butyl alcohol	0.46	4.57	ND	1.39	13.86	ND	
4227-95-6	Methyl iodide	0.46	1.37	ND	2.67	8.02	ND	
75-35-4	1,1-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	
107-13-1	Acrylonitrile	0.91	1.37	ND	1.99	2.98	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.14	ND	1.75	8.76	ND	
107-05-1	Allyl chloride	0.23	4.57	ND	0.72	14.31	ND	
75-09-2	Methylene chloride	0.23	1.14	ND	0.79	3.97	ND	
75-15-0	Carbon disulfide	0.46	1.14	ND	1.42	3.56	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.91	3.62	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.91	ND	1.65	3.30	ND	
107-12-0	Propionitrile	1.14	1.83	ND	2.58	4.12	ND	
75-34-3	1,1-Dichloroethane	0.23	1.14	ND	0.92	4.63	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.14	ND	1.91	4.78	ND	
108-05-4	Vinyl acetate	0.23	4.57	ND	0.81	16.10	ND	
78-93-3	2-Butanone (MEK)	0.46	1.37	ND	1.35	4.05	ND	
108-20-3	Diisopropyl ether	0.46	2.74	ND	1.91	11.47	ND	
110-54-3	Hexane	0.46	1.14	ND	1.61	4.03	ND	
126-98-7	Methacrylonitrile	0.46	1.14	ND	1.25	3.14	ND	
141-78-6	Ethyl acetate	0.46	1.14	ND	1.65	4.12	ND	
74-97-5	Bromochloromethane	0.23	1.14	ND	1.21	6.05	ND	
96-33-3	Methyl acrylate	0.46	2.28	ND	1.61	8.05	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.37	ND	0.68	4.05	ND	
78-83-1	Isobutyl alcohol	0.91	3.65	ND	2.77	11.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	
594-20-7	2,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
67-66-3	Chloroform	0.23	1.14	ND	1.12	5.58	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
107-06-2	1,2-Dichloroethane	0.23	1.14	ND	0.93	4.63	ND	
563-58-6	1,1-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
110-82-7	Cyclohexane	0.23	1.14	ND	0.79	3.94	ND	
71-43-2	Benzene	1.60	2.28	3.65	5.11	7.30	11.68	
56-23-5	Carbon tetrachloride	0.23	1.14	ND	1.44	7.19	ND	
994-05-8	t-Amyl methyl ether	0.46	2.28	ND	1.91	9.56	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.14	ND	1.07	5.34	ND	
142-82-5	n-Heptane	0.46	1.14	ND	1.87	4.69	ND	
78-87-5	1,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
123-91-1	1,4 Dioxane	0.46	2.28	ND	1.65	8.24	ND	
74-95-3	Dibromomethane	0.23	1.14	ND	1.63	8.13	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.14	ND	0.61	6.14	ND	
75-27-4	Bromodichloromethane	0.23	1.14	ND	1.53	7.66	ND	
80-62-6	Methyl methacrylate	0.46	1.14	ND	1.87	4.68	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.65	ND	1.87	14.99	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
108-88-3	Toluene	0.91	1.14	1.39	3.45	4.31	5.23	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
97-63-2	Ethyl methacrylate	0.46	1.14	ND	2.14	5.34	ND	
591-78-6	2-Hexanone	0.46	3.65	ND	1.87	14.99	ND	
142-28-9	1,3-Dichloropropane	0.23	3.20	ND	1.06	14.79	ND	
111-65-9	Octane	0.46	1.14	ND	2.14	5.34	ND	
124-48-1	Dibromochloromethane	0.46	1.14	ND	3.90	9.74	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.14	ND	3.51	8.79	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.14	ND	0.78	7.75	ND	
108-90-7	Chlorobenzene	0.46	1.14	ND	2.11	5.26	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.14	ND	3.14	7.85	ND	
100-41-4	Ethylbenzene	0.46	1.14	ND	1.99	4.97	ND	
1330-20-7	m,p-Xylenes	0.46	1.14	0.64	1.99	4.97	2.79	J
111-84-2	Nonane	0.46	1.14	ND	2.40	6.00	ND	
100-42-5	Styrene	0.69	1.14	ND	2.92	4.87	ND	
75-25-2	Bromoform	0.46	1.14	ND	4.73	11.82	ND	
95-47-6	o-Xylene	0.46	1.14	ND	1.99	4.97	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.28	ND	6.28	15.69	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.74	ND	5.51	16.54	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.74	ND	4.68	14.03	ND	
103-65-1	n-Propylbenzene	0.91	3.20	ND	4.50	15.74	ND	
98-82-8	Isopropylbenzene	0.91	3.20	ND	4.50	15.74	ND	
622-96-8	4-Ethyltoluene	0.91	7.31	ND	4.50	35.97	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
124-18-5	Decane	0.91	2.74	ND	5.32	15.97	ND	
98-06-6	tert-butyl benzene	0.91	2.74	ND	5.02	15.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
538-93-2	i-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
135-98-8	sec-butylbenzene	0.91	3.20	ND	5.02	17.57	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.65	ND	5.50	21.99	ND	
99-87-6	Isopropyltoluene	0.91	2.74	ND	5.02	15.06	ND	
100-44-7	Benzyl chloride	0.91	2.28	ND	4.74	11.84	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.28	ND	5.50	13.75	ND	
104-51-8	n-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.20	ND	5.50	19.25	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.37	3.20	ND	13.26	30.94	ND	
120-82-1	1,2,4-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
91-20-3	Naphthalene	2.28	0.46	ND	11.99	2.40	ND	
87-61-6	1,2,3-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
87-68-3	Hexachlorobutadiene	1.14	1.37	ND	12.19	14.63	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	108	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 29

File Name: 224435
Descriptio 29
Canister: 627
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/12/24 **Time:** 20:06
Can Dilution Factor: 1.37
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.20	6.85	ND	13.09	28.05	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**29**		
File Name:	2443529A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**12:31**
Sample ID:	T-511	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**20:06**
Anal Date:	12 Dec 124 8:06 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**627**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.37**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.303	4.86	31.00	34982
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.577	6.42	58.00	62405
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.799	10.70	78.00	411161
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.304	13.50	91.00	219638
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.088	15.90	106	111769
1330-20-7	m,p-Xylenes	75	TRG	0.141	16.06	91.00	144891
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.087	16.61	104.00	72437
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.081	16.36	91.00	90803
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.151	18.31	105.00	245317
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.170	18.95	105.00	219042
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**10653579**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12951992**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**16948549**
2037-26-5	Toluene-d8	60	SURR	10.849	13.40	98.00	**8342717**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 29
File Name: 2443529A.D
Run Method: A1563_L.M
Can Factor: 1.37
Air Volume: 300.0 ml
Can/Tube Number: 627
Dilution Factor: 0.4110
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4110
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.30	1.39	1.82	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.58	2.63	6.27	2.63	6.27	6.27	6.27	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Benzene	78.1	0.80	3.65	11.68	3.65	11.68	11.68	11.68	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Toluene	92.1	0.30	1.39	5.23	1.39	5.23	5.23	5.23	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethylbenzene	106.2	0.09	0.40	1.76	ND	ND	0		0.100	0.250
m,p-Xylenes	106.2	0.14	0.64	2.79	0.64	2.79	2.79	2.79	0.100	0.250
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Styrene	104.2	0.09	0.40	1.70	ND	ND	0		0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		0.100	0.250
o-Xylene	106.2	0.08	0.37	1.61	ND	ND	0		0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	0.700
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0		0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.15	0.69	3.39	ND	ND	0		0.200	0.900
Decane	142.3	0.00	0.00	0.00	ND	ND	0		0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.17	0.77	3.81	ND	ND	0		0.200	0.900
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		10.85	108	108	108	108	108	108	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.14	1.97	U	ND		ND		Y	0.00	0.00
0.69	3.39	1.14	5.65	U	ND		ND		Y	0.00	0.00
2.28	2.99	2.74	3.59	U	ND		ND		Y	0.00	0.00
0.69	1.42	1.14	2.36	U	ND		ND		Y	0.00	0.00
0.46	3.20	1.14	7.99	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.14	2.92	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.14	2.53	U	ND		ND		Y	0.00	0.00
0.46	1.77	1.14	4.44	U	ND		ND		Y	0.00	0.00
0.46	1.21	1.14	3.02	U	ND		ND		Y	0.00	0.00
2.28	4.31	14.66	27.68	U	ND		ND		Y	0.00	0.00
0.46	1.05	1.37	3.15	U	ND		ND		Y	0.00	0.00
0.46	2.57	1.14	6.42	U	ND		ND		Y	0.00	0.00
2.28	5.43	2.74	6.52	J	J		=		Y	2.63	6.27
0.91	2.25	5.71	14.05	U	ND		ND		Y	0.00	0.00
0.46	1.39	4.57	13.86	U	ND		ND		Y	0.00	0.00
0.46	2.67	1.37	8.02	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.14	4.53	U	ND		ND		Y	0.00	0.00
0.91	1.99	1.37	2.98	U	ND		ND		Y	0.00	0.00
0.23	1.75	1.14	8.76	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.57	14.31	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.14	3.97	U	ND		ND		Y	0.00	0.00
0.46	1.42	1.14	3.56	U	ND		ND		Y	0.00	0.00
0.23	0.91	0.91	3.62	U	ND		ND		Y	0.00	0.00
0.46	1.65	0.91	3.30	U	ND		ND		Y	0.00	0.00
1.14	2.58	1.83	4.12	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.14	4.63	U	ND		ND		Y	0.00	0.00
0.46	1.91	1.14	4.78	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.57	16.10	U	ND		ND		Y	0.00	0.00
0.46	1.35	1.37	4.05	U	ND		ND		Y	0.00	0.00
0.46	1.91	2.74	11.47	U	ND		ND		Y	0.00	0.00
0.46	1.61	1.14	4.03	U	ND		ND		Y	0.00	0.00
0.46	1.25	1.14	3.14	U	ND		ND		Y	0.00	0.00
0.46	1.65	1.14	4.12	U	ND		ND		Y	0.00	0.00
0.23	1.21	1.14	6.05	U	ND		ND		Y	0.00	0.00

0.46	1.61	2.28	8.05	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.37	4.05	U	ND	ND	Y	0.00	0.00
0.91	2.77	3.65	11.09	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.14	4.53	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.14	5.28	U	ND	ND	Y	0.00	0.00
0.23	1.12	1.14	5.58	U	ND	ND	Y	0.00	0.00
0.23	1.25	1.14	6.24	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.14	4.63	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.14	5.19	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.14	3.94	U	ND	ND	Y	0.00	0.00
1.60	5.11	2.28	7.30			=	Y	3.65	11.68
0.23	1.44	1.14	7.19	U	ND	ND	Y	0.00	0.00
0.46	1.91	2.28	9.56	U	ND	ND	Y	0.00	0.00
0.23	1.07	1.14	5.34	U	ND	ND	Y	0.00	0.00
0.46	1.87	1.14	4.69	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.14	5.28	U	ND	ND	Y	0.00	0.00
0.46	1.65	2.28	8.24	U	ND	ND	Y	0.00	0.00
0.23	1.63	1.14	8.13	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.14	6.14	U	ND	ND	Y	0.00	0.00
0.23	1.53	1.14	7.66	U	ND	ND	Y	0.00	0.00
0.46	1.87	1.14	4.68	U	ND	ND	Y	0.00	0.00
0.46	1.87	3.65	14.99	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.14	5.19	U	ND	ND	Y	0.00	0.00
0.91	3.45	1.14	4.31			=	Y	1.39	5.23
0.23	1.04	1.14	5.19	U	ND	ND	Y	0.00	0.00
0.23	1.25	1.14	6.24	U	ND	ND	Y	0.00	0.00
0.46	2.14	1.14	5.34	U	ND	ND	Y	0.00	0.00
0.46	1.87	3.65	14.99	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.20	14.79	U	ND	ND	Y	0.00	0.00
0.46	2.14	1.14	5.34	U	ND	ND	Y	0.00	0.00
0.46	3.90	1.14	9.74	U	ND	ND	Y	0.00	0.00
0.46	3.51	1.14	8.79	U	ND	ND	Y	0.00	0.00
0.11	0.78	1.14	7.75	U	ND	ND	Y	0.00	0.00
0.46	2.11	1.14	5.26	U	ND	ND	Y	0.00	0.00
0.46	3.14	1.14	7.85	U	ND	ND	Y	0.00	0.00
0.46	1.99	1.14	4.97	U	ND	ND	Y	0.00	0.00
0.46	1.99	1.14	4.97	J	J	=	Y	0.64	2.79
0.46	2.40	1.14	6.00	U	ND	ND	Y	0.00	0.00
0.69	2.92	1.14	4.87	U	ND	ND	Y	0.00	0.00
0.46	4.73	1.14	11.82	U	ND	ND	Y	0.00	0.00
0.46	1.99	1.14	4.97	U	ND	ND	Y	0.00	0.00
0.91	6.28	2.28	15.69	U	ND	ND	Y	0.00	0.00
0.91	5.51	2.74	16.54	U	ND	ND	Y	0.00	0.00
0.91	4.68	2.74	14.03	U	ND	ND	Y	0.00	0.00
0.91	4.50	3.20	15.74	U	ND	ND	Y	0.00	0.00
0.91	4.50	3.20	15.74	U	ND	ND	Y	0.00	0.00
0.91	4.50	7.31	35.97	U	ND	ND	Y	0.00	0.00
0.91	4.50	4.11	20.23	U	ND	ND	Y	0.00	0.00
0.91	5.32	2.74	15.97	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00
0.91	4.50	4.11	20.23	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00

0.91	5.02	3.20	17.57	U	ND	ND	Y	0.00	0.00
0.91	5.50	3.65	21.99	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00
0.91	4.74	2.28	11.84	U	ND	ND	Y	0.00	0.00
0.91	5.50	2.28	13.75	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00
0.91	5.50	3.20	19.25	U	ND	ND	Y	0.00	0.00
1.37	13.26	3.20	30.94	U	ND	ND	Y	0.00	0.00
1.37	10.18	2.28	16.96	U	ND	ND	Y	0.00	0.00
2.28	11.99	0.46	2.40	U	ND	ND	Y	0.00	0.00
1.37	10.18	2.28	16.96	U	ND	ND	Y	0.00	0.00
1.14	12.19	1.37	14.63	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 29
Sample ID: T-511

Can Factor: 1.37
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**29**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.37	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}\right|_i$ Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	10653579	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	10653579	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	34982	20.0	10653579	0.303	1.39	1.82
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	10653579	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	10653579	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	10653579	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	10653579	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	10653579	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	10653579	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	10653579	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	10653579	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	10653579	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	62405	20.0	10653579	0.577	2.63	6.27
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	10653579	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	10653579	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	10653579	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	10653579	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	10653579	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	10653579	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	10653579	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	10653579	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	10653579	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	10653579	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	10653579	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	10653579	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	10653579	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	10653579	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	10653579	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	10653579	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	10653579	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	10653579	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	10653579	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	10653579	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	10653579	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	10653579	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	10653579	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	10653579	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	10653579	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	10653579	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	10653579	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	12951992	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	12951992	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	12951992	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	12951992	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	411161	20.0	12951992	0.799	3.65	11.68
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	12951992	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	12951992	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	12951992	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	12951992	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	12951992	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	12951992	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	12951992	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	12951992	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	12951992	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	12951992	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	12951992	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	12951992	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	219638	20.0	12951992	0.304	1.39	5.23
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	12951992	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	12951992	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	12951992	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	12951992	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	12951992	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	12951992	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	12951992	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	12951992	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	12951992	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	16948549	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	16948549	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	111769	20.0	16948549	0.088	0.40	1.76
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	144891	20.0	16948549	0.141	0.64	2.79
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	16948549	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	72437	20.0	16948549	0.087	0.40	1.70
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	16948549	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	90803	20.0	16948549	0.081	0.37	1.61
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	16948549	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	16948549	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	16948549	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	16948549	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	16948549	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	16948549	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	245317	20.0	16948549	0.151	0.69	3.39
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	16948549	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	16948549	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	219042	20.0	16948549	0.170	0.77	3.81
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	16948549	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	16948549	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	16948549	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	16948549	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	16948549	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	16948549	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	16948549	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	16948549	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	16948549	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	16948549	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	16948549	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	16948549	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	16948549	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	10653579	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12951992	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	16948549	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8342717	10.0		10.849	108.49	108

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443529A.D
Acq Time : 12 Dec 124 8:06 pm
Sample : T-511
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 12:51 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.56	168	10653579	20.00	ppbV		-0.26
42) 1,4-Difluorobenzene	10.72	114	12951992	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.24	117	16948549	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	8342717	10.85	ppbV		108.49
Target Compounds							Qvalue
4) Methanol	4.77	31	34982	0.30	ppbV	#	74
14) Acetone	6.21	58	62405	0.58	ppbV	#	1
47) Benzene	10.41	78	411161	0.80	ppbV	m	69
61) Toluene	13.19	91	219638	0.30	ppbV		91
74) Ethylbenzene	15.56	91	111769	0.09	ppbV	#	89
75) m,p-Xylenes	15.73	91	144891	0.14	ppbV	#	66
77) Styrene	16.28	104	72437	0.09	ppbV	#	81
79) o-Xylene	16.36	91	90803	0.08	ppbV	#	76
86) 1,3,5-Trimethylbenzene	17.88	105	245317	0.15	ppbV	m	79
89) 1,2,4-Trimethylbenzene	18.58	105	219042	0.17	ppbV	#	88

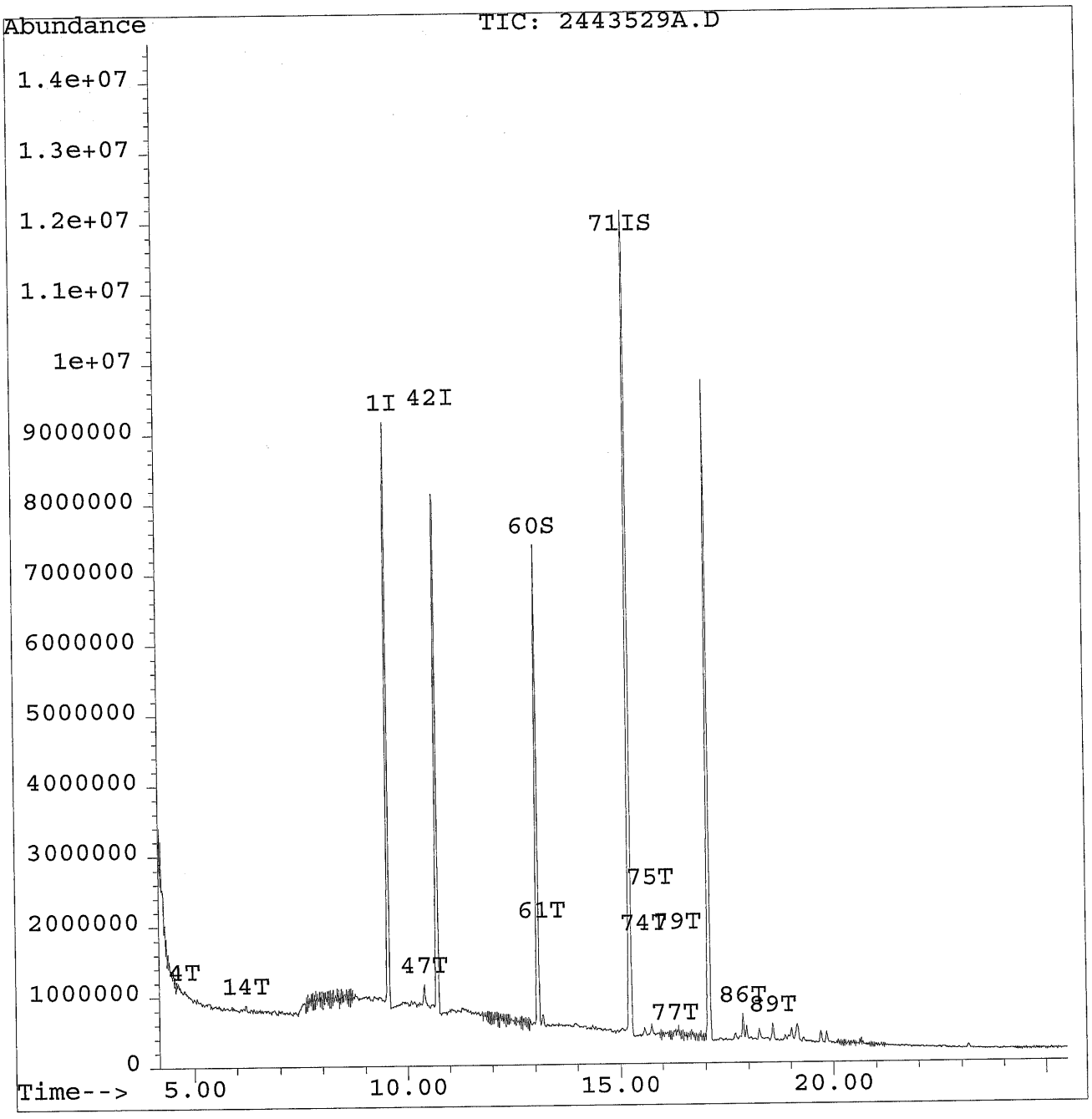
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443529A.D
Acq Time : 12 Dec 124 8:06 pm
Sample : T-511
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 12:51 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443529A.D
Acq Time : 12 Dec 124 8:06 pm
Sample : T-511
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.08	14.91 ppbV	28637152	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	91
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 30

Client ID T-512

Analytical Method TO-15

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Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 30**

File Name: 2443530A.D **Date Sampled:** 11/20/24 **Time:** 12:41
Description: T-512 **Date Analyzed:** 12/12/24 **Time:** 20:44
Canister: 417 **Can Dilution Factor:** 1.36
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	ND	0.78	1.95	ND	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.41	2.34	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	2.76	5.39	6.47	6.57	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.10	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.77	7.70	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	0.46	1.97	4.93	2.02	J
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	ND	2.90	4.84	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.97	4.93	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	ND	4.46	35.71	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 30

File Name: 224435
Descriptio 30
Canister: 417
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/12/24 **Time:** 20:44
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**30**		
File Name:	2443530A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**12:41**
Sample ID:	T-512	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**20:44**
Anal Date:	12 Dec 124 8:44 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**417**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.36**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.096	4.41	42.00	19822
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.609	6.42	58.00	130461
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.311	10.70	78.00	271392
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.144	13.50	91.00	176248
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.057	15.90	106	122525
1330-20-7	m,p-Xylenes	75	TRG	0.102	16.06	91.00	177909
111-84-2	Nonane	76	TRG	0.024	16.43	57.00	24718
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.043	16.37	91.00	81451
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.048	18.23	105.00	126322
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.033	18.31	105.00	89821
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.053	18.95	105.00	116349
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.35	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**21079411**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**21970518**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**28605196**
2037-26-5	Toluene-d8	60	SURR	12.310	13.40	98.00	**16057163**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 30
File Name: 2443530A.D
Run Method: A1563_L.M
Can Factor: 1.36
Air Volume: 300.0 ml
Can/Tube Number: 417
Dilution Factor: 0.4080
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4080
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.10	0.43	0.75	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.61	2.76	6.57	2.76	6.57	6.57	6.57	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.31	1.41	4.51	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.14	0.65	2.46	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.06	0.26	1.13	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.10	0.46	2.02	0.46	2.02	2.02	2.02	**0.100**	**0.250**
Nonane	128.3	0.02	0.11	0.58	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.04	0.19	0.85	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.05	0.22	1.06	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.03	0.15	0.73	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.05	0.24	1.19	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.31	123	123	123	123	123	123	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.95	U	ND		ND		Y	0.00	0.00
0.68	3.37	1.13	5.61	U	ND		ND		Y	0.00	0.00
2.27	2.97	2.72	3.56	U	ND		ND		Y	0.00	0.00
0.68	1.41	1.13	2.34	U	ND		ND		Y	0.00	0.00
0.45	3.17	1.13	7.93	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.90	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.13	2.51	U	ND		ND		Y	0.00	0.00
0.45	1.76	1.13	4.40	U	ND		ND		Y	0.00	0.00
0.45	1.20	1.13	2.99	U	ND		ND		Y	0.00	0.00
2.27	4.28	14.55	27.47	U	ND		ND		Y	0.00	0.00
0.45	1.04	1.36	3.12	U	ND		ND		Y	0.00	0.00
0.45	2.55	1.13	6.38	U	ND		ND		Y	0.00	0.00
2.27	5.39	2.72	6.47				=		Y	2.76	6.57
0.91	2.23	5.67	13.95	U	ND		ND		Y	0.00	0.00
0.45	1.38	4.53	13.76	U	ND		ND		Y	0.00	0.00
0.45	2.65	1.36	7.96	U	ND		ND		Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND		ND		Y	0.00	0.00
0.91	1.97	1.36	2.96	U	ND		ND		Y	0.00	0.00
0.23	1.74	1.13	8.70	U	ND		ND		Y	0.00	0.00
0.23	0.71	4.53	14.20	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.13	3.94	U	ND		ND		Y	0.00	0.00
0.45	1.41	1.13	3.53	U	ND		ND		Y	0.00	0.00
0.23	0.90	0.91	3.60	U	ND		ND		Y	0.00	0.00
0.45	1.64	0.91	3.27	U	ND		ND		Y	0.00	0.00
1.13	2.56	1.81	4.09	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND		ND		Y	0.00	0.00
0.45	1.90	1.13	4.74	U	ND		ND		Y	0.00	0.00
0.23	0.80	4.53	15.99	U	ND		ND		Y	0.00	0.00
0.45	1.34	1.36	4.02	U	ND		ND		Y	0.00	0.00
0.45	1.90	2.72	11.38	U	ND		ND		Y	0.00	0.00
0.45	1.60	1.13	4.00	U	ND		ND		Y	0.00	0.00
0.45	1.25	1.13	3.11	U	ND		ND		Y	0.00	0.00
0.45	1.64	1.13	4.09	U	ND		ND		Y	0.00	0.00
0.23	1.20	1.13	6.01	U	ND		ND		Y	0.00	0.00

0.45	1.60	2.27	7.99	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.36	4.02	U	ND	ND	Y	0.00	0.00
0.91	2.75	3.63	11.01	U	ND	ND	Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.23	1.11	1.13	5.54	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND	ND	Y	0.00	0.00
1.59	5.08	2.27	7.25	U	ND	ND	Y	0.00	0.00
0.23	1.43	1.13	7.14	U	ND	ND	Y	0.00	0.00
0.45	1.90	2.27	9.49	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.45	1.64	2.27	8.18	U	ND	ND	Y	0.00	0.00
0.23	1.61	1.13	8.07	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.10	U	ND	ND	Y	0.00	0.00
0.23	1.52	1.13	7.60	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.91	3.42	1.13	4.27	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.05	3.17	14.69	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	3.87	1.13	9.67	U	ND	ND	Y	0.00	0.00
0.45	3.49	1.13	8.72	U	ND	ND	Y	0.00	0.00
0.11	0.77	1.13	7.70	U	ND	ND	Y	0.00	0.00
0.45	2.09	1.13	5.23	U	ND	ND	Y	0.00	0.00
0.45	3.12	1.13	7.79	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	J	J	=	Y	0.46	2.02
0.45	2.38	1.13	5.96	U	ND	ND	Y	0.00	0.00
0.68	2.90	1.13	4.84	U	ND	ND	Y	0.00	0.00
0.45	4.69	1.13	11.73	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.91	6.23	2.27	15.58	U	ND	ND	Y	0.00	0.00
0.91	5.47	2.72	16.42	U	ND	ND	Y	0.00	0.00
0.91	4.64	2.72	13.92	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	7.25	35.71	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	5.28	2.72	15.85	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00

0.91	4.98	3.17	17.44	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.63	21.83	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.70	2.27	11.75	U	ND	ND	Y	0.00	0.00
0.91	5.46	2.27	13.65	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.17	19.10	U	ND	ND	Y	0.00	0.00
1.36	13.16	3.17	30.71	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
2.27	11.90	0.45	2.38	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
1.13	12.11	1.36	14.53	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 30
Sample ID: T-512

Can Factor: 1.36
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**30**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.36
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	19822	20.0	21079411	0.096	0.43	0.75
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	21079411	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	21079411	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	21079411	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	21079411	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	21079411	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	21079411	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	21079411	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	21079411	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	21079411	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	21079411	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	21079411	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	130461	20.0	21079411	0.609	2.76	6.57
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	21079411	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	21079411	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	21079411	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	21079411	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	21079411	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	21079411	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	21079411	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	21079411	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	21079411	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	21079411	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	21079411	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	21079411	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	21079411	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	21079411	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	21079411	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	21079411	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	21079411	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	21079411	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	21079411	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	21079411	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	21079411	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	21079411	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	21079411	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	21079411	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	21079411	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	21079411	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	21079411	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	21970518	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	21970518	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	21970518	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	21970518	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	271392	20.0	21970518	0.311	1.41	4.51
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	21970518	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	21970518	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	21970518	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	21970518	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	21970518	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	21970518	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	21970518	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	21970518	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	21970518	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	21970518	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	21970518	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	21970518	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	176248	20.0	21970518	0.144	0.65	2.46
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	21970518	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	21970518	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	21970518	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	21970518	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	21970518	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	21970518	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	21970518	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	21970518	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	21970518	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	28605196	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	28605196	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	122525	20.0	28605196	0.057	0.26	1.13
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	177909	20.0	28605196	0.102	0.46	2.02
76	Nonane	d5CB	TRG	128.3	0.711	24718	20.0	28605196	0.024	0.11	0.58
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	28605196	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	28605196	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	81451	20.0	28605196	0.043	0.19	0.85
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	28605196	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	28605196	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	28605196	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	28605196	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	28605196	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	126322	20.0	28605196	0.048	0.22	1.06
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	89821	20.0	28605196	0.033	0.15	0.73
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	28605196	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	28605196	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	116349	20.0	28605196	0.053	0.24	1.19
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	28605196	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	28605196	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	28605196	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	28605196	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	28605196	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	28605196	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	28605196	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	28605196	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	28605196	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	28605196	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	28605196	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	28605196	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	28605196	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	21079411	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	21970518	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	28605196	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	16057163	10.0		12.310	123.10	123

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443530A.D
Acq Time : 12 Dec 124 8:44 pm
Sample : T-512
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 14:58 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	21079411	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	21970518	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	28605196	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	16057163	12.31	ppbV		123.10
Target Compounds							Qvalue
2) Propylene	4.26	42	19822	0.10	ppbV		94
14) Acetone	6.23	58	130461	0.61	ppbV	#	1
47) Benzene	10.41	78	271392	0.31	ppbV	m	74
61) Toluene	13.20	91	176248	0.14	ppbV		97
74) Ethylbenzene	15.57	91	122525	0.06	ppbV		94
75) m,p-Xylenes	15.74	91	177909	0.10	ppbV	#	79
76) Nonane	16.10	57	24718	0.02	ppbV	#	57
79) o-Xylene	16.37	91	81451	0.04	ppbV	#	84
85) 4-Ethyltoluene	17.88	105	126322	0.05	ppbV	m	79
86) 1,3,5-Trimethylbenzene	17.96	105	89821	0.03	ppbV	m	87
89) 1,2,4-Trimethylbenzene	18.59	105	116349	0.05	ppbV	#	81

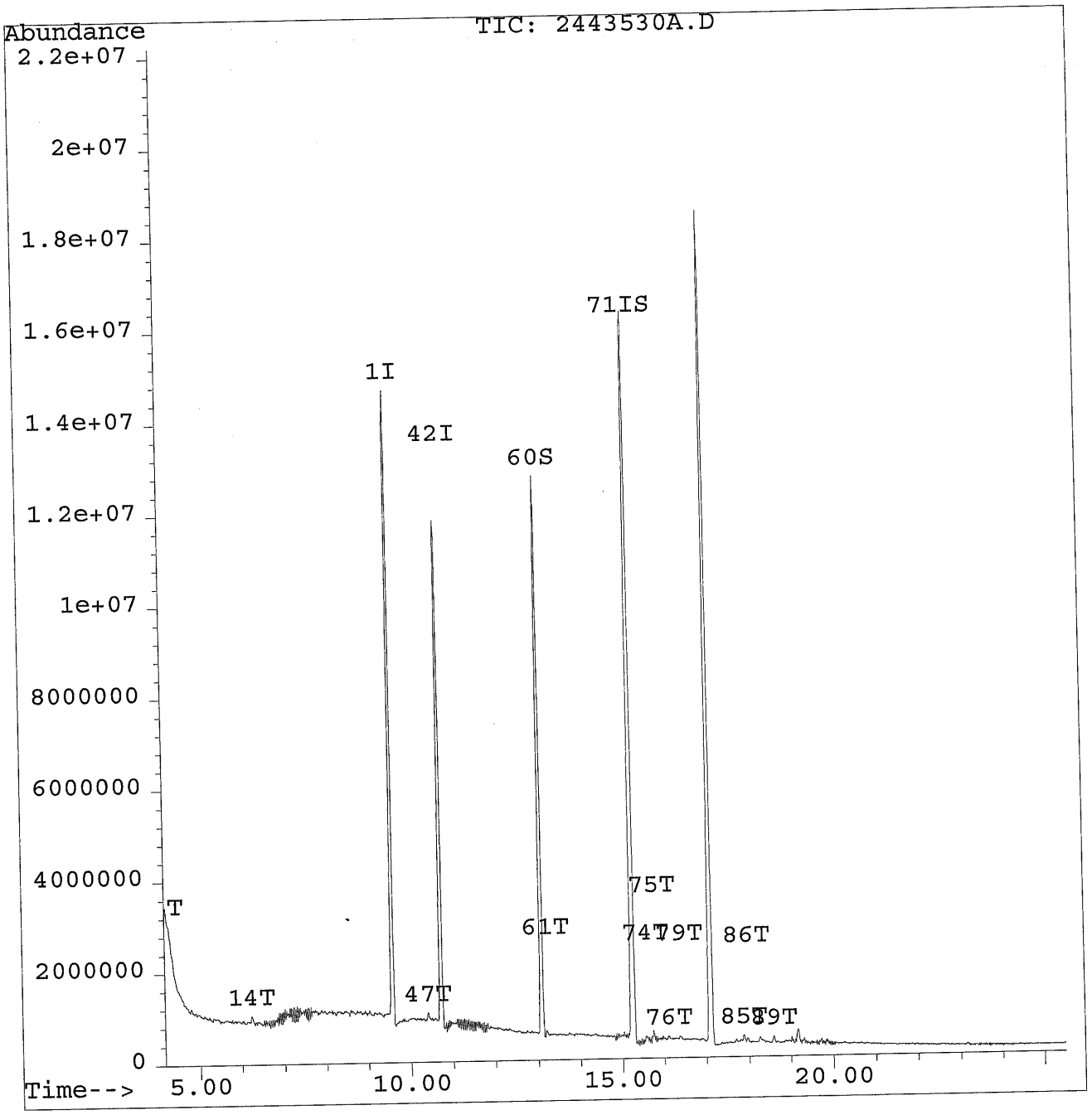
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443530A.D
Acq Time : 12 Dec 124 8:44 pm
Sample : T-512
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 14:58 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443530A.D
Acq Time : 12 Dec 124 8:44 pm
Sample : T-512
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	20.44 ppbV	73193283	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
3	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	90
4	3-Pyridinol	964	000109-00-2	8
5	2-Furancarbonyl chloride	4649	000527-69-5	7

Sample Data Packages

SDG Number 224435

Lab Id Number 31

Client ID T-513

Analytical Method TO-15

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Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 31**

File Name: 2443531A.D **Date Sampled:** 11/20/24 **Time:** 12:28
Description: T-513 **Date Analyzed:** 12/12/24 **Time:** 21:22
Canister: 781 **Can Dilution Factor:** 1.36
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	ND	0.78	1.95	ND	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.37	5.61	ND	
67-56-1	Methanol	2.27	2.72	ND	2.97	3.56	ND	
74-87-3	Chloromethane	0.68	1.13	ND	1.41	2.34	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.17	7.93	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.90	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.51	2.51	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.76	4.40	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.20	2.99	ND	
64-17-5	Ethanol	2.27	14.55	ND	4.28	27.47	ND	
107-02-8	Acrolein	0.45	1.36	ND	1.04	3.12	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.55	6.38	ND	
67-64-1	Acetone	2.27	2.72	3.55	5.39	6.47	8.44	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.67	ND	2.23	13.95	ND	
75-65-0	t-Butyl alcohol	0.45	4.53	ND	1.38	13.76	ND	
4227-95-6	Methyl iodide	0.45	1.36	ND	2.65	7.96	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
107-13-1	Acrylonitrile	0.91	1.36	ND	1.97	2.96	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.74	8.70	ND	
107-05-1	Allyl chloride	0.23	4.53	ND	0.71	14.20	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.79	3.94	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.41	3.53	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.90	3.60	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.91	ND	1.64	3.27	ND	
107-12-0	Propionitrile	1.13	1.81	ND	2.56	4.09	ND	
75-34-3	1,1-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.90	4.74	ND	
108-05-4	Vinyl acetate	0.23	4.53	ND	0.80	15.99	ND	
78-93-3	2-Butanone (MEK)	0.45	1.36	ND	1.34	4.02	ND	
108-20-3	Diisopropyl ether	0.45	2.72	ND	1.90	11.38	ND	
110-54-3	Hexane	0.45	1.13	ND	1.60	4.00	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.25	3.11	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.64	4.09	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.20	6.01	ND	
96-33-3	Methyl acrylate	0.45	2.27	ND	1.60	7.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.36	ND	0.67	4.02	ND	
78-83-1	Isobutyl alcohol	0.91	3.63	ND	2.75	11.01	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.90	4.50	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.11	5.54	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.92	4.60	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.91	ND	
71-43-2	Benzene	1.59	2.27	ND	5.08	7.25	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.43	7.14	ND	
994-05-8	t-Amyl methyl ether	0.45	2.27	ND	1.90	9.49	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.06	5.30	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.86	4.65	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.05	5.24	ND	
123-91-1	1,4 Dioxane	0.45	2.27	ND	1.64	8.18	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.61	8.07	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.10	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.52	7.60	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.86	4.65	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.63	ND	1.86	14.88	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
108-88-3	Toluene	0.91	1.13	ND	3.42	4.27	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.03	5.15	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.24	6.19	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.12	5.30	ND	
591-78-6	2-Hexanone	0.45	3.63	ND	1.86	14.88	ND	
142-28-9	1,3-Dichloropropane	0.23	3.17	ND	1.05	14.69	ND	
111-65-9	Octane	0.45	1.13	ND	2.12	5.30	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.87	9.67	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.49	8.72	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.77	7.70	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.09	5.23	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.12	7.79	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.97	4.93	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	0.47	1.97	4.93	2.05	J
111-84-2	Nonane	0.45	1.13	ND	2.38	5.96	ND	
100-42-5	Styrene	0.68	1.13	ND	2.90	4.84	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.69	11.73	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.97	4.93	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.27	ND	6.23	15.58	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.72	ND	5.47	16.42	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.72	ND	4.64	13.92	ND	
103-65-1	n-Propylbenzene	0.91	3.17	ND	4.46	15.62	ND	
98-82-8	Isopropylbenzene	0.91	3.17	ND	4.46	15.62	ND	
622-96-8	4-Ethyltoluene	0.91	7.25	ND	4.46	35.71	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
124-18-5	Decane	0.91	2.72	ND	5.28	15.85	ND	
98-06-6	tert-butyl benzene	0.91	2.72	ND	4.98	14.95	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.08	ND	4.46	20.08	ND	
538-93-2	i-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
135-98-8	sec-butylbenzene	0.91	3.17	ND	4.98	17.44	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.63	ND	5.46	21.83	ND	
99-87-6	Isopropyltoluene	0.91	2.72	ND	4.98	14.95	ND	
100-44-7	Benzyl chloride	0.91	2.27	ND	4.70	11.75	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.27	ND	5.46	13.65	ND	
104-51-8	n-Butylbenzene	0.91	2.72	ND	4.98	14.95	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.17	ND	5.46	19.10	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.36	3.17	ND	13.16	30.71	ND	
120-82-1	1,2,4-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
91-20-3	Naphthalene	2.27	0.45	ND	11.90	2.38	ND	
87-61-6	1,2,3-Trichlorobenzene	1.36	2.27	ND	10.10	16.84	ND	
87-68-3	Hexachlorobutadiene	1.13	1.36	ND	12.11	14.53	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	119	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 31

File Name: 224435
Descriptio 31
Canister: 781
QC_Batch: 121224-MA1

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/12/24 **Time:** 21:22
Can Dilution Factor: 1.36
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.17	6.80	ND	13.00	27.85	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**31**		
File Name:	2443531A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**12:28**
Sample ID:	T-513	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**21:22**
Anal Date:	12 Dec 124 9:22 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**781**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.36**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.095	4.41	42.00	20360
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.782	6.42	58.00	174070
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	0
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.322	10.70	78.00	289295
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	0
108-88-3	Toluene	61	TRG	0.150	13.50	91.00	189408
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.062	15.90	106	140920
1330-20-7	m,p-Xylenes	75	TRG	0.104	16.06	91.00	192115
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.044	16.37	91.00	88606
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.057	18.23	105.00	161217
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.038	18.31	105.00	111016
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.073	18.95	105.00	169219
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	243
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**21904513**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**22595844**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**30410227**
2037-26-5	Toluene-d8	60	SURR	11.857	13.40	98.00	**15906010**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 31
File Name: 2443531A.D
Run Method: A1563_L.M
Can Factor: 1.36
Air Volume: 300.0 ml
Can/Tube Number: 781
Dilution Factor: 0.4080
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4080
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.09	0.43	0.74	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.78	3.55	8.44	3.55	8.44	8.44	8.44	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.32	1.46	4.68	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.15	0.68	2.57	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.06	0.28	1.23	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.10	0.47	2.05	0.47	2.05	2.05	2.05	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.04	0.20	0.87	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.06	0.26	1.27	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.04	0.17	0.85	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.07	0.33	1.63	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.86	119	119	119	119	119	119	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.95	U	ND		ND		Y	0.00	0.00
0.68	3.37	1.13	5.61	U	ND		ND		Y	0.00	0.00
2.27	2.97	2.72	3.56	U	ND		ND		Y	0.00	0.00
0.68	1.41	1.13	2.34	U	ND		ND		Y	0.00	0.00
0.45	3.17	1.13	7.93	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.90	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.13	2.51	U	ND		ND		Y	0.00	0.00
0.45	1.76	1.13	4.40	U	ND		ND		Y	0.00	0.00
0.45	1.20	1.13	2.99	U	ND		ND		Y	0.00	0.00
2.27	4.28	14.55	27.47	U	ND		ND		Y	0.00	0.00
0.45	1.04	1.36	3.12	U	ND		ND		Y	0.00	0.00
0.45	2.55	1.13	6.38	U	ND		ND		Y	0.00	0.00
2.27	5.39	2.72	6.47				=		Y	3.55	8.44
0.91	2.23	5.67	13.95	U	ND		ND		Y	0.00	0.00
0.45	1.38	4.53	13.76	U	ND		ND		Y	0.00	0.00
0.45	2.65	1.36	7.96	U	ND		ND		Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND		ND		Y	0.00	0.00
0.91	1.97	1.36	2.96	U	ND		ND		Y	0.00	0.00
0.23	1.74	1.13	8.70	U	ND		ND		Y	0.00	0.00
0.23	0.71	4.53	14.20	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.13	3.94	U	ND		ND		Y	0.00	0.00
0.45	1.41	1.13	3.53	U	ND		ND		Y	0.00	0.00
0.23	0.90	0.91	3.60	U	ND		ND		Y	0.00	0.00
0.45	1.64	0.91	3.27	U	ND		ND		Y	0.00	0.00
1.13	2.56	1.81	4.09	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND		ND		Y	0.00	0.00
0.45	1.90	1.13	4.74	U	ND		ND		Y	0.00	0.00
0.23	0.80	4.53	15.99	U	ND		ND		Y	0.00	0.00
0.45	1.34	1.36	4.02	U	ND		ND		Y	0.00	0.00
0.45	1.90	2.72	11.38	U	ND		ND		Y	0.00	0.00
0.45	1.60	1.13	4.00	U	ND		ND		Y	0.00	0.00
0.45	1.25	1.13	3.11	U	ND		ND		Y	0.00	0.00
0.45	1.64	1.13	4.09	U	ND		ND		Y	0.00	0.00
0.23	1.20	1.13	6.01	U	ND		ND		Y	0.00	0.00

0.45	1.60	2.27	7.99	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.36	4.02	U	ND	ND	Y	0.00	0.00
0.91	2.75	3.63	11.01	U	ND	ND	Y	0.00	0.00
0.23	0.90	1.13	4.50	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.23	1.11	1.13	5.54	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.13	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND	ND	Y	0.00	0.00
1.59	5.08	2.27	7.25	U	ND	ND	Y	0.00	0.00
0.23	1.43	1.13	7.14	U	ND	ND	Y	0.00	0.00
0.45	1.90	2.27	9.49	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.24	U	ND	ND	Y	0.00	0.00
0.45	1.64	2.27	8.18	U	ND	ND	Y	0.00	0.00
0.23	1.61	1.13	8.07	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.10	U	ND	ND	Y	0.00	0.00
0.23	1.52	1.13	7.60	U	ND	ND	Y	0.00	0.00
0.45	1.86	1.13	4.65	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.91	3.42	1.13	4.27	U	ND	ND	Y	0.00	0.00
0.23	1.03	1.13	5.15	U	ND	ND	Y	0.00	0.00
0.23	1.24	1.13	6.19	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	1.86	3.63	14.88	U	ND	ND	Y	0.00	0.00
0.23	1.05	3.17	14.69	U	ND	ND	Y	0.00	0.00
0.45	2.12	1.13	5.30	U	ND	ND	Y	0.00	0.00
0.45	3.87	1.13	9.67	U	ND	ND	Y	0.00	0.00
0.45	3.49	1.13	8.72	U	ND	ND	Y	0.00	0.00
0.11	0.77	1.13	7.70	U	ND	ND	Y	0.00	0.00
0.45	2.09	1.13	5.23	U	ND	ND	Y	0.00	0.00
0.45	3.12	1.13	7.79	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	J	J	=	Y	0.47	2.05
0.45	2.38	1.13	5.96	U	ND	ND	Y	0.00	0.00
0.68	2.90	1.13	4.84	U	ND	ND	Y	0.00	0.00
0.45	4.69	1.13	11.73	U	ND	ND	Y	0.00	0.00
0.45	1.97	1.13	4.93	U	ND	ND	Y	0.00	0.00
0.91	6.23	2.27	15.58	U	ND	ND	Y	0.00	0.00
0.91	5.47	2.72	16.42	U	ND	ND	Y	0.00	0.00
0.91	4.64	2.72	13.92	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	3.17	15.62	U	ND	ND	Y	0.00	0.00
0.91	4.46	7.25	35.71	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	5.28	2.72	15.85	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.46	4.08	20.08	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00

0.91	4.98	3.17	17.44	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.63	21.83	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	4.70	2.27	11.75	U	ND	ND	Y	0.00	0.00
0.91	5.46	2.27	13.65	U	ND	ND	Y	0.00	0.00
0.91	4.98	2.72	14.95	U	ND	ND	Y	0.00	0.00
0.91	5.46	3.17	19.10	U	ND	ND	Y	0.00	0.00
1.36	13.16	3.17	30.71	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
2.27	11.90	0.45	2.38	U	ND	ND	Y	0.00	0.00
1.36	10.10	2.27	16.84	U	ND	ND	Y	0.00	0.00
1.13	12.11	1.36	14.53	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 31
Sample ID: T-513

Can Factor: 1.36
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	
ND	**0.7**	**1.5**	3.2	6.80	3.17	13.00	6.80	27.85	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**31**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.36
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)}{(Cstdni)}\right|\left|\frac{(Cistdi)}{(Aistdi)}\right|$ Note: 1

2) Raw Amt = $\frac{(Ansamp)}{(Avg\ RFn)}\frac{(Cistdi)}{(Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000}{(SV)}$ (CDF)

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	20360	20.0	21904513	0.095	0.43	0.74
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	21904513	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	21904513	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	21904513	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	21904513	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	21904513	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	21904513	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	21904513	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	21904513	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	21904513	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	21904513	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	21904513	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	174070	20.0	21904513	0.782	3.55	8.44
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	21904513	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	21904513	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	21904513	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	21904513	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	21904513	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	21904513	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	21904513	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	21904513	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	21904513	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	21904513	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	21904513	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	21904513	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	21904513	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	21904513	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	21904513	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	21904513	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	21904513	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	21904513	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	21904513	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	21904513	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	21904513	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	21904513	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	21904513	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	21904513	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	21904513	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	21904513	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	21904513	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	22595844	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	22595844	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	22595844	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	22595844	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	289295	20.0	22595844	0.322	1.46	4.68
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	22595844	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	22595844	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	22595844	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	22595844	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	22595844	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	22595844	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	22595844	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	22595844	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	22595844	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	22595844	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	22595844	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	22595844	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	189408	20.0	22595844	0.150	0.68	2.57
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	22595844	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	22595844	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	22595844	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	22595844	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	22595844	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	22595844	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	22595844	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	22595844	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	22595844	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	30410227	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	30410227	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	140920	20.0	30410227	0.062	0.28	1.23
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	192115	20.0	30410227	0.104	0.47	2.05
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	30410227	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	30410227	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	30410227	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	88606	20.0	30410227	0.044	0.20	0.87
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	30410227	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	30410227	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	30410227	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	30410227	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	30410227	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	161217	20.0	30410227	0.057	0.26	1.27
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	111016	20.0	30410227	0.038	0.17	0.85
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	30410227	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	30410227	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	169219	20.0	30410227	0.073	0.33	1.63
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	30410227	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	30410227	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	243	20.0	30410227	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	30410227	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	30410227	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	30410227	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	30410227	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	30410227	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	30410227	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	30410227	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	30410227	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	30410227	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	30410227	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	21904513	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	22595844	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	30410227	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	15906010	10.0		11.857	118.57	119

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443531A.D
Acq Time : 12 Dec 124 9:22 pm
Sample : T-513
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 15:05 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.56	168	21904513	20.00	ppbV		-0.27
42) 1,4-Difluorobenzene	10.72	114	22595844	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.22	117	30410227	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	15906010	11.86	ppbV		118.57
Target Compounds							Qvalue
2) Propylene	4.19	42	20360	0.09	ppbV	m	0
14) Acetone	6.19	58	174070	0.78	ppbV	#	1
47) Benzene	10.39	78	289295	0.32	ppbV	m	72
61) Toluene	13.19	91	189408	0.15	ppbV		97
74) Ethylbenzene	15.57	91	140920	0.06	ppbV	#	83
75) m,p-Xylenes	15.74	91	192115	0.10	ppbV	#	74
79) o-Xylene	16.37	91	88606	0.04	ppbV	#	80
85) 4-Ethyltoluene	17.89	105	161217	0.06	ppbV	m	82
86) 1,3,5-Trimethylbenzene	17.97	105	111016	0.04	ppbV	m	84
89) 1,2,4-Trimethylbenzene	18.59	105	169219	0.07	ppbV	#	89
92) 1,3-Dichlorobenzene	19.30	146	243	0.00	ppbV	m	87

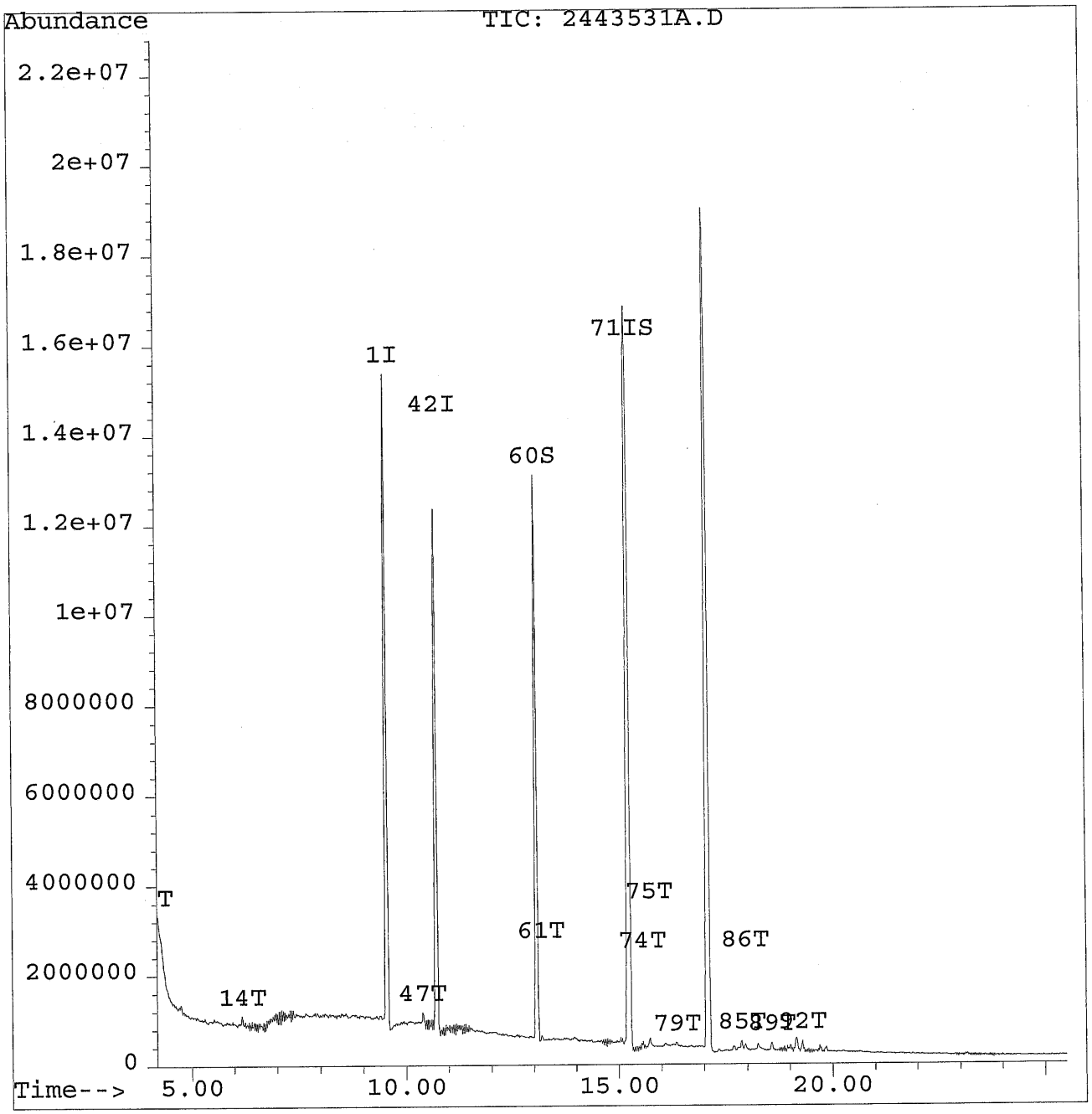
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443531A.D
Acq Time : 12 Dec 124 9:22 pm
Sample : T-513
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 15:05 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443531A.D
Acq Time : 12 Dec 124 9:22 pm
Sample : T-513
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	21.55 ppbV	84020410	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	95
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	90
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	25
4	Pyridine, 1-oxide	962	000694-59-7	14
5	3-Pyridinol	964	000109-00-2	14

Sample Data Packages

SDG Number 224435

Lab Id Number 32

Client ID T-514

Analytical Method TO-15

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Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 32

File Name: 2443532A.D
Description: T-514
Canister: 506
QC_Batch: 121024-MA1

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/10/24 **Time:** 15:54
Can Dilution Factor: 1.38
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	ND	4.34	27.88	ND	
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	ND	5.47	6.57	ND	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	106	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 32
Canister: 506
QC_Batch: 121024-MA1

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/10/24 **Time:** 15:54
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**32**		
File Name:	2443532A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/20/24**	**Time:**	**12:45**
Sample ID:	T-514	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**15:54**
Anal Date:	10 Dec 124 3:54 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**506**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.38**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.334	4.86	31.00	49331
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.447	6.42	58.00	62113
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.029	7.61	76.00	12836
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.54	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	445
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.001	19.46	91.00	464
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.44	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**13663386**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**13823701**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18290004**
2037-26-5	Toluene-d8	60	SURR	10.616	13.40	98.00	**8712673**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**
Laboratory Number:	**32**
File Name:	2443532A.D
Run Method:	A1563_L.M
Can Factor:	1.38
Air Volume:	300.0 ml
Can/Tube Number:	506
Dilution Factor:	0.4140
Base Volume:	1000 ml
Unit Factor (ppbv):	1000 PPBV

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4140
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.33	1.53	2.01	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.45	2.06	4.90	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.03	0.13	0.41	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	0.050	0.300
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	0.200	0.800
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	0.050	0.250
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	0.350	0.500
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	0.100	0.500
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	0.050	0.250
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	0.100	0.500
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	0.100	0.250
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	0.200	0.250
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	0.050	0.250
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	0.050	0.250
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	0.100	0.800
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	0.050	0.700
Octane	114.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	0.025	0.250
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	0.100	0.250
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	0.150	0.250
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	0.100	0.250
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	0.100	0.250
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	0.200	0.500
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	0.200	0.600
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	0.200	0.600
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.700
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	1.600
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	0.200	0.900
Decane	142.3	0.00	0.00	0.00	ND	ND	0	0.200	0.600
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.01	ND	ND	0	0.200	0.900
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	0.200	0.600

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.02	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		10.62	106	106	106	106	106	106	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.15	1.98	U	ND		ND		Y	0.00	0.00
0.69	3.42	1.15	5.69	U	ND		ND		Y	0.00	0.00
2.30	3.01	2.76	3.62	U	ND		ND		Y	0.00	0.00
0.69	1.43	1.15	2.38	U	ND		ND		Y	0.00	0.00
0.46	3.22	1.15	8.05	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.15	2.94	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.15	2.55	U	ND		ND		Y	0.00	0.00
0.46	1.79	1.15	4.47	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.15	3.04	U	ND		ND		Y	0.00	0.00
2.30	4.34	14.77	27.88	U	ND		ND		Y	0.00	0.00
0.46	1.06	1.38	3.17	U	ND		ND		Y	0.00	0.00
0.46	2.59	1.15	6.47	U	ND		ND		Y	0.00	0.00
2.30	5.47	2.76	6.57	U	ND		ND		Y	0.00	0.00
0.92	2.26	5.75	14.15	U	ND		ND		Y	0.00	0.00
0.46	1.40	4.60	13.96	U	ND		ND		Y	0.00	0.00
0.46	2.69	1.38	8.08	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND		ND		Y	0.00	0.00
0.92	2.00	1.38	3.00	U	ND		ND		Y	0.00	0.00
0.23	1.77	1.15	8.83	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.60	14.41	U	ND		ND		Y	0.00	0.00
0.23	0.80	1.15	4.00	U	ND		ND		Y	0.00	0.00
0.46	1.43	1.15	3.58	U	ND		ND		Y	0.00	0.00
0.23	0.91	0.92	3.65	U	ND		ND		Y	0.00	0.00
0.46	1.66	0.92	3.32	U	ND		ND		Y	0.00	0.00
1.15	2.60	1.84	4.15	U	ND		ND		Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND		ND		Y	0.00	0.00
0.46	1.93	1.15	4.81	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.60	16.22	U	ND		ND		Y	0.00	0.00
0.46	1.36	1.38	4.07	U	ND		ND		Y	0.00	0.00
0.46	1.93	2.76	11.55	U	ND		ND		Y	0.00	0.00
0.46	1.62	1.15	4.06	U	ND		ND		Y	0.00	0.00
0.46	1.26	1.15	3.16	U	ND		ND		Y	0.00	0.00
0.46	1.66	1.15	4.15	U	ND		ND		Y	0.00	0.00
0.23	1.22	1.15	6.09	U	ND		ND		Y	0.00	0.00

0.46	1.62	2.30	8.11	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.38	4.07	U	ND	ND	Y	0.00	0.00
0.92	2.79	3.68	11.17	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.23	1.13	1.15	5.62	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.15	3.97	U	ND	ND	Y	0.00	0.00
1.61	5.15	2.30	7.36	U	ND	ND	Y	0.00	0.00
0.23	1.45	1.15	7.24	U	ND	ND	Y	0.00	0.00
0.46	1.93	2.30	9.63	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.72	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.46	1.66	2.30	8.30	U	ND	ND	Y	0.00	0.00
0.23	1.64	1.15	8.19	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.15	6.19	U	ND	ND	Y	0.00	0.00
0.23	1.54	1.15	7.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.92	3.47	1.15	4.34	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.22	14.90	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	3.92	1.15	9.81	U	ND	ND	Y	0.00	0.00
0.46	3.54	1.15	8.85	U	ND	ND	Y	0.00	0.00
0.12	0.78	1.15	7.81	U	ND	ND	Y	0.00	0.00
0.46	2.12	1.15	5.30	U	ND	ND	Y	0.00	0.00
0.46	3.16	1.15	7.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.42	1.15	6.04	U	ND	ND	Y	0.00	0.00
0.69	2.94	1.15	4.91	U	ND	ND	Y	0.00	0.00
0.46	4.76	1.15	11.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.92	6.32	2.30	15.81	U	ND	ND	Y	0.00	0.00
0.92	5.55	2.76	16.66	U	ND	ND	Y	0.00	0.00
0.92	4.71	2.76	14.13	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	7.36	36.23	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.36	2.76	16.08	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00

0.92	5.06	3.22	17.70	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.68	22.16	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.77	2.30	11.93	U	ND	ND	Y	0.00	0.00
0.92	5.54	2.30	13.85	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.22	19.39	U	ND	ND	Y	0.00	0.00
1.38	13.36	3.22	31.16	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
2.30	12.08	0.46	2.42	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
1.15	12.28	1.38	14.74	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 32
Sample ID: T-514

Can Factor: 1.38
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:
1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**32**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.38
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	13663386	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	13663386	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	49331	20.0	13663386	0.334	1.53	2.01
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	13663386	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	13663386	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	13663386	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	13663386	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	13663386	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	13663386	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	13663386	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	13663386	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	13663386	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	62113	20.0	13663386	0.447	2.06	4.90
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	13663386	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	13663386	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	13663386	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	13663386	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	13663386	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	13663386	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	13663386	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	13663386	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	12836	20.0	13663386	0.029	0.13	0.41
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	13663386	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	13663386	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	13663386	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	13663386	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	13663386	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	13663386	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	13663386	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	13663386	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	13663386	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	13663386	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	13663386	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	13663386	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	13663386	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	13663386	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	13663386	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	13663386	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	13663386	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	13663386	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	13823701	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	13823701	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	13823701	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	13823701	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	0	20.0	13823701	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	13823701	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	13823701	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	13823701	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	13823701	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	13823701	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	13823701	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	13823701	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	13823701	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	13823701	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	13823701	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	13823701	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	13823701	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	0	20.0	13823701	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	13823701	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	13823701	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	13823701	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	13823701	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	13823701	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	13823701	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	13823701	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	13823701	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	13823701	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18290004	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18290004	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	18290004	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	18290004	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18290004	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	18290004	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18290004	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	18290004	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18290004	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18290004	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18290004	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18290004	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18290004	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	18290004	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	18290004	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18290004	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18290004	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	445	20.0	18290004	0.000	0.00	0.01
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18290004	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18290004	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18290004	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	18290004	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	464	20.0	18290004	0.001	0.00	0.02
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18290004	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18290004	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18290004	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18290004	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18290004	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18290004	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18290004	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18290004	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	13663386	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	13823701	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18290004	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8712673	10.0		10.616	106.16	106

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443532A.D
Acq Time : 10 Dec 124 3:54 pm
Sample : T-514
Misc : SCHMIDT, 300 ML
Quant Time: Dec 11 15:53 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.56	168	13663386	20.00	ppbV	-0.26
42) 1,4-Difluorobenzene	10.72	114	13823701	20.00	ppbV	-0.28
71) Chlorobenzene-d5	15.21	117	18290004	20.00	ppbV	-0.36
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	8712673	10.62	ppbV	106.16
Target Compounds						Qvalue
4) Methanol	4.76	31	49331	0.33	ppbV m	97
14) Acetone	6.28	58	62113	0.45	ppbV m	1
23) Carbon disulfide	7.40	76	12836	0.03	ppbV m	73
89) 1,2,4-Trimethylbenzene	18.80	105	445	0.00	ppbV m	87
94) Benzyl chloride	19.34	91	464	0.00	ppbV m	94

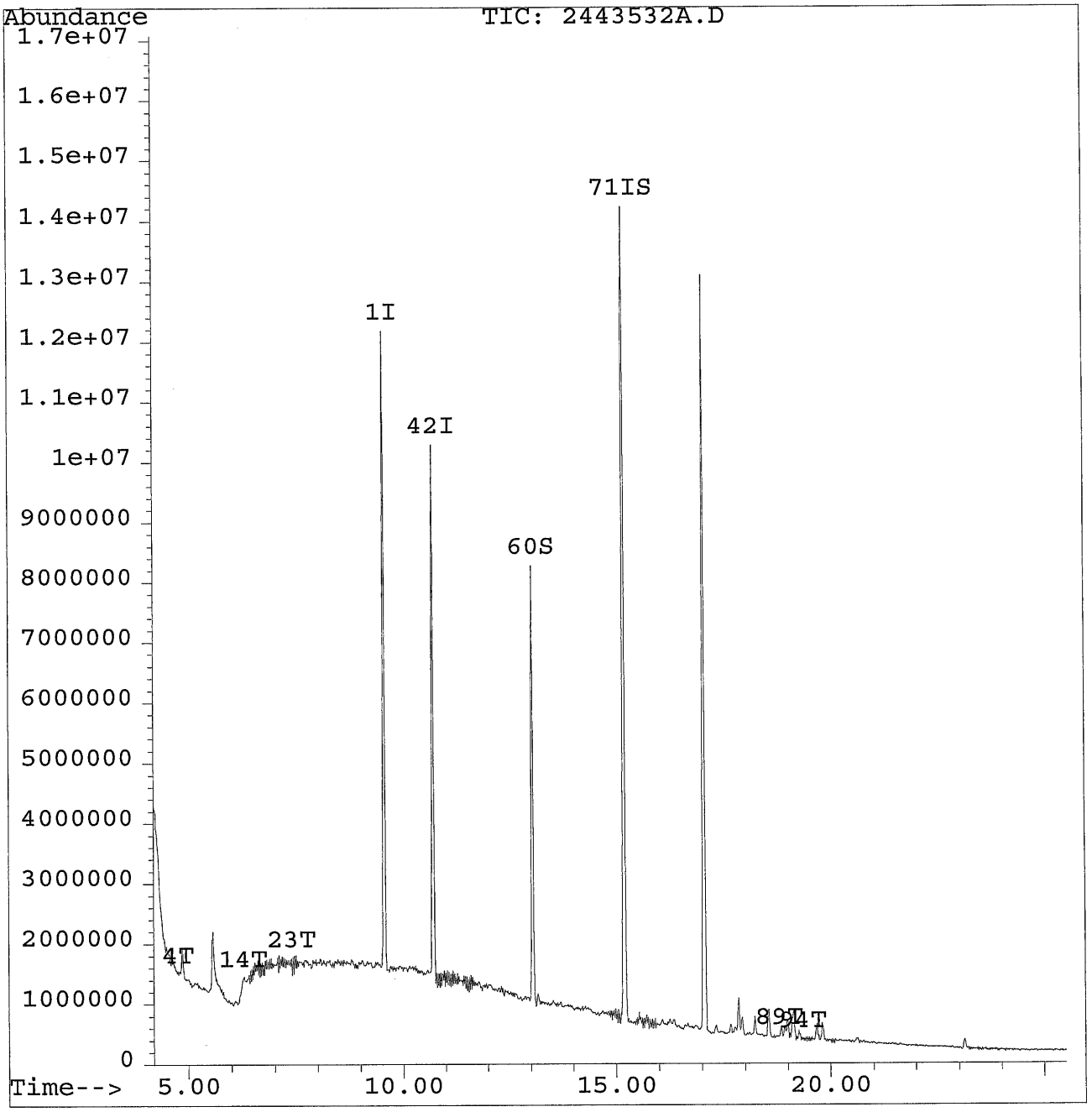
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443532A.D
Acq Time : 10 Dec 124 3:54 pm
Sample : T-514
Misc : SCHMIDT, 300 ML
Quant Time: Dec 11 15:53 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Sample Data Packages

SDG Number 224435

Lab Id Number 33

Client ID T-601

Analytical Method TO-15

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Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 33**

File Name: 2443533A.D **Date Sampled:** 11/21/24 **Time:** 08:18
Description: T-601 **Date Analyzed:** 12/12/24 **Time:** 22:00
Canister: 700 **Can Dilution Factor:** 1.30
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.08	12.70	0.75	1.87	21.88	
75-71-8	Dichlorodifluoromethane	0.65	1.08	ND	3.22	5.36	ND	
67-56-1	Methanol	2.17	2.60	3.12	2.84	3.41	4.09	
74-87-3	Chloromethane	0.65	1.08	ND	1.34	2.24	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.08	ND	3.03	7.58	ND	
75-01-4	Vinyl chloride	0.22	1.08	ND	0.56	2.77	ND	
106-99-0	1,3-Butadiene	0.22	1.08	ND	0.48	2.40	ND	
74-83-9	Bromomethane	0.43	1.08	ND	1.68	4.21	ND	
75-00-3	Chloroethane	0.43	1.08	ND	1.14	2.86	ND	
64-17-5	Ethanol	2.17	13.91	ND	4.09	26.26	ND	
107-02-8	Acrolein	0.43	1.30	ND	1.00	2.99	ND	
75-69-4	Trichlorofluoromethane	0.43	1.08	ND	2.44	6.10	ND	
67-64-1	Acetone	2.17	2.60	6.95	5.16	6.19	16.53	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.42	ND	2.13	13.33	ND	
75-65-0	t-Butyl alcohol	0.43	4.33	ND	1.32	13.15	ND	
4227-95-6	Methyl iodide	0.43	1.30	ND	2.54	7.61	ND	
75-35-4	1,1-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	
107-13-1	Acrylonitrile	0.87	1.30	ND	1.88	2.83	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.08	ND	1.66	8.31	ND	
107-05-1	Allyl chloride	0.22	4.33	ND	0.68	13.58	ND	
75-09-2	Methylene chloride	0.22	1.08	ND	0.75	3.77	ND	
75-15-0	Carbon disulfide	0.43	1.08	1.51	1.35	3.38	4.70	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.86	3.44	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.87	ND	1.56	3.13	ND	
107-12-0	Propionitrile	1.08	1.73	ND	2.44	3.91	ND	
75-34-3	1,1-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.08	ND	1.81	4.53	ND	
108-05-4	Vinyl acetate	0.22	4.33	ND	0.76	15.28	ND	
78-93-3	2-Butanone (MEK)	0.43	1.30	ND	1.28	3.84	ND	
108-20-3	Diisopropyl ether	0.43	2.60	ND	1.81	10.88	ND	
110-54-3	Hexane	0.43	1.08	ND	1.53	3.82	ND	
126-98-7	Methacrylonitrile	0.43	1.08	ND	1.19	2.98	ND	
141-78-6	Ethyl acetate	0.43	1.08	ND	1.56	3.91	ND	
74-97-5	Bromochloromethane	0.22	1.08	ND	1.15	5.74	ND	
96-33-3	Methyl acrylate	0.43	2.17	ND	1.53	7.64	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.30	0.65	0.64	3.84	1.91	J
78-83-1	Isobutyl alcohol	0.87	3.47	ND	2.63	10.52	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.08	ND	0.86	4.30	ND	
594-20-7	2,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
67-66-3	Chloroform	0.22	1.08	ND	1.06	5.30	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
107-06-2	1,2-Dichloroethane	0.22	1.08	ND	0.88	4.39	ND	
563-58-6	1,1-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
110-82-7	Cyclohexane	0.22	1.08	ND	0.75	3.74	ND	
71-43-2	Benzene	1.52	2.17	ND	4.85	6.93	ND	
56-23-5	Carbon tetrachloride	0.22	1.08	ND	1.36	6.82	ND	
994-05-8	t-Amyl methyl ether	0.43	2.17	ND	1.81	9.07	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.08	ND	1.01	5.07	ND	
142-82-5	n-Heptane	0.43	1.08	ND	1.78	4.45	ND	
78-87-5	1,2-Dichloropropane	0.22	1.08	ND	1.00	5.01	ND	
123-91-1	1,4 Dioxane	0.43	2.17	ND	1.56	7.82	ND	
74-95-3	Dibromomethane	0.22	1.08	ND	1.54	7.71	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.08	ND	0.58	5.83	ND	
75-27-4	Bromodichloromethane	0.22	1.08	ND	1.45	7.27	ND	
80-62-6	Methyl methacrylate	0.43	1.08	ND	1.78	4.44	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.47	ND	1.78	14.23	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
108-88-3	Toluene	0.87	1.08	ND	3.27	4.09	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.08	ND	0.98	4.92	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.08	ND	1.18	5.92	ND	
97-63-2	Ethyl methacrylate	0.43	1.08	ND	2.03	5.07	ND	
591-78-6	2-Hexanone	0.43	3.47	ND	1.78	14.23	ND	
142-28-9	1,3-Dichloropropane	0.22	3.03	ND	1.00	14.04	ND	
111-65-9	Octane	0.43	1.08	ND	2.03	5.07	ND	
124-48-1	Dibromochloromethane	0.43	1.08	ND	3.70	9.24	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.08	ND	3.33	8.34	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.08	ND	0.74	7.36	ND	
108-90-7	Chlorobenzene	0.43	1.08	ND	2.00	5.00	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.08	ND	2.98	7.44	ND	
100-41-4	Ethylbenzene	0.43	1.08	ND	1.88	4.71	ND	
1330-20-7	m,p-Xylenes	0.43	1.08	ND	1.88	4.71	ND	
111-84-2	Nonane	0.43	1.08	ND	2.28	5.69	ND	
100-42-5	Styrene	0.65	1.08	ND	2.77	4.62	ND	
75-25-2	Bromoform	0.43	1.08	ND	4.48	11.21	ND	
95-47-6	o-Xylene	0.43	1.08	ND	1.88	4.71	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.17	ND	5.96	14.89	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.60	ND	5.23	15.70	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.60	ND	4.44	13.31	ND	
103-65-1	n-Propylbenzene	0.87	3.03	ND	4.27	14.93	ND	
98-82-8	Isopropylbenzene	0.87	3.03	ND	4.27	14.93	ND	
622-96-8	4-Ethyltoluene	0.87	6.93	ND	4.27	34.13	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
124-18-5	Decane	0.87	2.60	ND	5.05	15.15	ND	
98-06-6	tert-butyl benzene	0.87	2.60	ND	4.76	14.29	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.87	3.90	ND	4.27	19.20	ND	
538-93-2	i-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
135-98-8	sec-butylbenzene	0.87	3.03	ND	4.76	16.67	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.47	ND	5.22	20.87	ND	
99-87-6	Isopropyltoluene	0.87	2.60	ND	4.76	14.29	ND	
100-44-7	Benzyl chloride	0.87	2.17	ND	4.49	11.23	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.17	ND	5.22	13.04	ND	
104-51-8	n-Butylbenzene	0.87	2.60	ND	4.76	14.29	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.03	ND	5.22	18.26	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.30	3.03	ND	12.58	29.36	ND	
120-82-1	1,2,4-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
91-20-3	Naphthalene	2.17	0.43	ND	11.38	2.28	ND	
87-61-6	1,2,3-Trichlorobenzene	1.30	2.17	ND	9.66	16.10	ND	
87-68-3	Hexachlorobutadiene	1.08	1.30	ND	11.57	13.89	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	132	70	130	Q

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 33

File Name: 224435
Descriptio 33
Canister: 700
QC_Batch: 121224-MA1

Date Sampled: 11/21/24 **Time:** 08:18
Date Analyzed: 12/12/24 **Time:** 22:00
Can Dilution Factor: 1.30
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.03	6.50	ND	12.42	26.62	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**33**		
File Name:	2443533A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**8:18**
Sample ID:	T-601	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**22:00**
Anal Date:	12 Dec 124 10:00 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**700**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.30**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	2.930	4.41	42.00	529559
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.721	4.86	31.00	143453
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.603	6.42	58.00	299510
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.073	6.45	45.00	26467
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.348	7.61	76.00	210164
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.149	9.72	72.00	18868
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.032	10.70	78.00	25572
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.071	13.50	91.00	81224
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.012	15.90	106	22843
1330-20-7	m,p-Xylenes	75	TRG	0.017	16.06	91.00	26312
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.018	16.61	104.00	22444
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.013	16.37	91.00	21863
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.022	18.23	105.00	52362
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.016	18.31	105.00	40342
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.023	18.95	105.00	45094
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**18388191**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**20441237**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**26110828**
2037-26-5	Toluene-d8	60	SURR	13.166	13.40	98.00	**15978453**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**224435**
Laboratory Number:	**33**
File Name:	2443533A.D
Run Method:	A1563_L.M
Can Factor:	1.30
Air Volume:	300.0 ml
Can/Tube Number:	700
Dilution Factor:	0.3900
Base Volume:	1000 ml
Unit Factor (ppbv):	1000 PPBV

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3900
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

UG/M3 Fixed Fixed Fixed Fixed (1) (2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	2.93	12.70	21.88	12.70	21.88	21.88	21.88	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.72	3.12	4.09	3.12	4.09	4.09	4.09	**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.60	6.95	16.53	6.95	16.53	16.53	16.53	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.07	0.32	0.78	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.35	1.51	4.70	1.51	4.70	4.70	4.70	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.15	0.65	1.91	0.65	1.91	1.91	1.91	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.03	0.14	0.44	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.07	0.31	1.16	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.01	0.05	0.22	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.02	0.07	0.31	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.02	0.08	0.33	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.01	0.05	0.24	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.02	0.09	0.46	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.02	0.07	0.34	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.02	0.10	0.48	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		13.17	132	132	132	132	132	132	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.75	1.08	1.87				=		Y	12.70	21.88
0.65	3.22	1.08	5.36	U	ND		ND		Y	0.00	0.00
2.17	2.84	2.60	3.41				=		Y	3.12	4.09
0.65	1.34	1.08	2.24	U	ND		ND		Y	0.00	0.00
0.43	3.03	1.08	7.58	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.08	2.77	U	ND		ND		Y	0.00	0.00
0.22	0.48	1.08	2.40	U	ND		ND		Y	0.00	0.00
0.43	1.68	1.08	4.21	U	ND		ND		Y	0.00	0.00
0.43	1.14	1.08	2.86	U	ND		ND		Y	0.00	0.00
2.17	4.09	13.91	26.26	U	ND		ND		Y	0.00	0.00
0.43	1.00	1.30	2.99	U	ND		ND		Y	0.00	0.00
0.43	2.44	1.08	6.10	U	ND		ND		Y	0.00	0.00
2.17	5.16	2.60	6.19				=		Y	6.95	16.53
0.87	2.13	5.42	13.33	U	ND		ND		Y	0.00	0.00
0.43	1.32	4.33	13.15	U	ND		ND		Y	0.00	0.00
0.43	2.54	1.30	7.61	U	ND		ND		Y	0.00	0.00
0.22	0.86	1.08	4.30	U	ND		ND		Y	0.00	0.00
0.87	1.88	1.30	2.83	U	ND		ND		Y	0.00	0.00
0.22	1.66	1.08	8.31	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.33	13.58	U	ND		ND		Y	0.00	0.00
0.22	0.75	1.08	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.35	1.08	3.38				=		Y	1.51	4.70
0.22	0.86	0.87	3.44	U	ND		ND		Y	0.00	0.00
0.43	1.56	0.87	3.13	U	ND		ND		Y	0.00	0.00
1.08	2.44	1.73	3.91	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.08	4.39	U	ND		ND		Y	0.00	0.00
0.43	1.81	1.08	4.53	U	ND		ND		Y	0.00	0.00
0.22	0.76	4.33	15.28	U	ND		ND		Y	0.00	0.00
0.43	1.28	1.30	3.84	U	ND		ND		Y	0.00	0.00
0.43	1.81	2.60	10.88	U	ND		ND		Y	0.00	0.00
0.43	1.53	1.08	3.82	U	ND		ND		Y	0.00	0.00
0.43	1.19	1.08	2.98	U	ND		ND		Y	0.00	0.00
0.43	1.56	1.08	3.91	U	ND		ND		Y	0.00	0.00
0.22	1.15	1.08	5.74	U	ND		ND		Y	0.00	0.00

0.43	1.53	2.17	7.64	U	ND	ND	Y	0.00	0.00
0.22	0.64	1.30	3.84	J	J	=	Y	0.65	1.91
0.87	2.63	3.47	10.52	U	ND	ND	Y	0.00	0.00
0.22	0.86	1.08	4.30	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.08	5.01	U	ND	ND	Y	0.00	0.00
0.22	1.06	1.08	5.30	U	ND	ND	Y	0.00	0.00
0.22	1.18	1.08	5.92	U	ND	ND	Y	0.00	0.00
0.22	0.88	1.08	4.39	U	ND	ND	Y	0.00	0.00
0.22	0.98	1.08	4.92	U	ND	ND	Y	0.00	0.00
0.22	0.75	1.08	3.74	U	ND	ND	Y	0.00	0.00
1.52	4.85	2.17	6.93	U	ND	ND	Y	0.00	0.00
0.22	1.36	1.08	6.82	U	ND	ND	Y	0.00	0.00
0.43	1.81	2.17	9.07	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.08	5.07	U	ND	ND	Y	0.00	0.00
0.43	1.78	1.08	4.45	U	ND	ND	Y	0.00	0.00
0.22	1.00	1.08	5.01	U	ND	ND	Y	0.00	0.00
0.43	1.56	2.17	7.82	U	ND	ND	Y	0.00	0.00
0.22	1.54	1.08	7.71	U	ND	ND	Y	0.00	0.00
0.11	0.58	1.08	5.83	U	ND	ND	Y	0.00	0.00
0.22	1.45	1.08	7.27	U	ND	ND	Y	0.00	0.00
0.43	1.78	1.08	4.44	U	ND	ND	Y	0.00	0.00
0.43	1.78	3.47	14.23	U	ND	ND	Y	0.00	0.00
0.22	0.98	1.08	4.92	U	ND	ND	Y	0.00	0.00
0.87	3.27	1.08	4.09	U	ND	ND	Y	0.00	0.00
0.22	0.98	1.08	4.92	U	ND	ND	Y	0.00	0.00
0.22	1.18	1.08	5.92	U	ND	ND	Y	0.00	0.00
0.43	2.03	1.08	5.07	U	ND	ND	Y	0.00	0.00
0.43	1.78	3.47	14.23	U	ND	ND	Y	0.00	0.00
0.22	1.00	3.03	14.04	U	ND	ND	Y	0.00	0.00
0.43	2.03	1.08	5.07	U	ND	ND	Y	0.00	0.00
0.43	3.70	1.08	9.24	U	ND	ND	Y	0.00	0.00
0.43	3.33	1.08	8.34	U	ND	ND	Y	0.00	0.00
0.11	0.74	1.08	7.36	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.08	5.00	U	ND	ND	Y	0.00	0.00
0.43	2.98	1.08	7.44	U	ND	ND	Y	0.00	0.00
0.43	1.88	1.08	4.71	U	ND	ND	Y	0.00	0.00
0.43	1.88	1.08	4.71	U	ND	ND	Y	0.00	0.00
0.43	2.28	1.08	5.69	U	ND	ND	Y	0.00	0.00
0.65	2.77	1.08	4.62	U	ND	ND	Y	0.00	0.00
0.43	4.48	1.08	11.21	U	ND	ND	Y	0.00	0.00
0.43	1.88	1.08	4.71	U	ND	ND	Y	0.00	0.00
0.87	5.96	2.17	14.89	U	ND	ND	Y	0.00	0.00
0.87	5.23	2.60	15.70	U	ND	ND	Y	0.00	0.00
0.87	4.44	2.60	13.31	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.03	14.93	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.03	14.93	U	ND	ND	Y	0.00	0.00
0.87	4.27	6.93	34.13	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.90	19.20	U	ND	ND	Y	0.00	0.00
0.87	5.05	2.60	15.15	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00
0.87	4.27	3.90	19.20	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00

0.87	4.76	3.03	16.67	U	ND	ND	Y	0.00	0.00
0.87	5.22	3.47	20.87	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00
0.87	4.49	2.17	11.23	U	ND	ND	Y	0.00	0.00
0.87	5.22	2.17	13.04	U	ND	ND	Y	0.00	0.00
0.87	4.76	2.60	14.29	U	ND	ND	Y	0.00	0.00
0.87	5.22	3.03	18.26	U	ND	ND	Y	0.00	0.00
1.30	12.58	3.03	29.36	U	ND	ND	Y	0.00	0.00
1.30	9.66	2.17	16.10	U	ND	ND	Y	0.00	0.00
2.17	11.38	0.43	2.28	U	ND	ND	Y	0.00	0.00
1.30	9.66	2.17	16.10	U	ND	ND	Y	0.00	0.00
1.08	11.57	1.30	13.89	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
				Q		=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 33
Sample ID: T-601

Can Factor: 1.30
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	
ND	**0.7**	**1.5**	3.0	6.50	3.03	12.42	6.50	26.62	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**33**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.30
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	529559	20.0	18388191	2.930	12.70	21.88
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	18388191	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	143453	20.0	18388191	0.721	3.12	4.09
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	18388191	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	18388191	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	18388191	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	18388191	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	18388191	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	18388191	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	18388191	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	18388191	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	18388191	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	299510	20.0	18388191	1.603	6.95	16.53
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	26467	20.0	18388191	0.073	0.32	0.78
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	18388191	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	18388191	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	18388191	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	18388191	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	18388191	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	18388191	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	18388191	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	210164	20.0	18388191	0.348	1.51	4.70
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	18388191	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	18388191	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	18388191	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	18388191	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	18388191	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	18388191	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	18388191	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	18388191	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	18388191	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	18388191	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	18388191	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	18388191	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	18388191	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	18868	20.0	18388191	0.149	0.65	1.91
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	18388191	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	18388191	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	18388191	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	18388191	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	20441237	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	20441237	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	20441237	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	20441237	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	25572	20.0	20441237	0.032	0.14	0.44
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	20441237	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	20441237	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	20441237	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	20441237	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	20441237	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	20441237	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	20441237	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	20441237	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	20441237	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	20441237	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	20441237	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	20441237	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	81224	20.0	20441237	0.071	0.31	1.16
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	20441237	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	20441237	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	20441237	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	20441237	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	20441237	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	20441237	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	20441237	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	20441237	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	20441237	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	26110828	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	26110828	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	22843	20.0	26110828	0.012	0.05	0.22
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	26312	20.0	26110828	0.017	0.07	0.31
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	26110828	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	22444	20.0	26110828	0.018	0.08	0.33
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	26110828	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	21863	20.0	26110828	0.013	0.05	0.24
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	26110828	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	26110828	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	26110828	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	26110828	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	26110828	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	52362	20.0	26110828	0.022	0.09	0.46
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	40342	20.0	26110828	0.016	0.07	0.34
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	26110828	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	26110828	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	45094	20.0	26110828	0.023	0.10	0.48
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	26110828	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	26110828	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	26110828	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	26110828	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	26110828	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	26110828	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	26110828	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	26110828	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	26110828	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	26110828	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	26110828	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	26110828	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	26110828	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	18388191	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	20441237	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	26110828	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	15978453	10.0		13.166	131.66	132

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443533A.D
Acq Time : 12 Dec 124 10:00 pm
Sample : T-601
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 15:42 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.58	168	18388191	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	20441237	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.23	117	26110828	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	15978453	13.17	ppbV		131.66
Target Compounds							Qvalue
2) Propylene	4.24	42	529559	2.93	ppbV		90
4) Methanol	4.74	31	143453	0.72	ppbV	#	85
14) Acetone	6.21	58	299510	1.60	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.29	45	26467	0.07	ppbV	#	93
23) Carbon disulfide	7.37	76	210164	0.35	ppbV	#	81
37) Tetrahydrofuran	9.47	72	18868	0.15	ppbV		92
47) Benzene	10.41	78	25572	0.03	ppbV	#	72
61) Toluene	13.20	91	81224	0.07	ppbV		98
74) Ethylbenzene	15.57	91	22843	0.01	ppbV	#	89
75) m,p-Xylenes	15.74	91	26312	0.02	ppbV	#	80
77) Styrene	16.29	104	22444	0.02	ppbV	#	73
79) o-Xylene	16.37	91	21863	0.01	ppbV	#	73
85) 4-Ethyltoluene	17.89	105	52362	0.02	ppbV	m	25
86) 1,3,5-Trimethylbenzene	17.98	105	40342	0.02	ppbV	m	88
89) 1,2,4-Trimethylbenzene	18.61	105	45094	0.02	ppbV		96

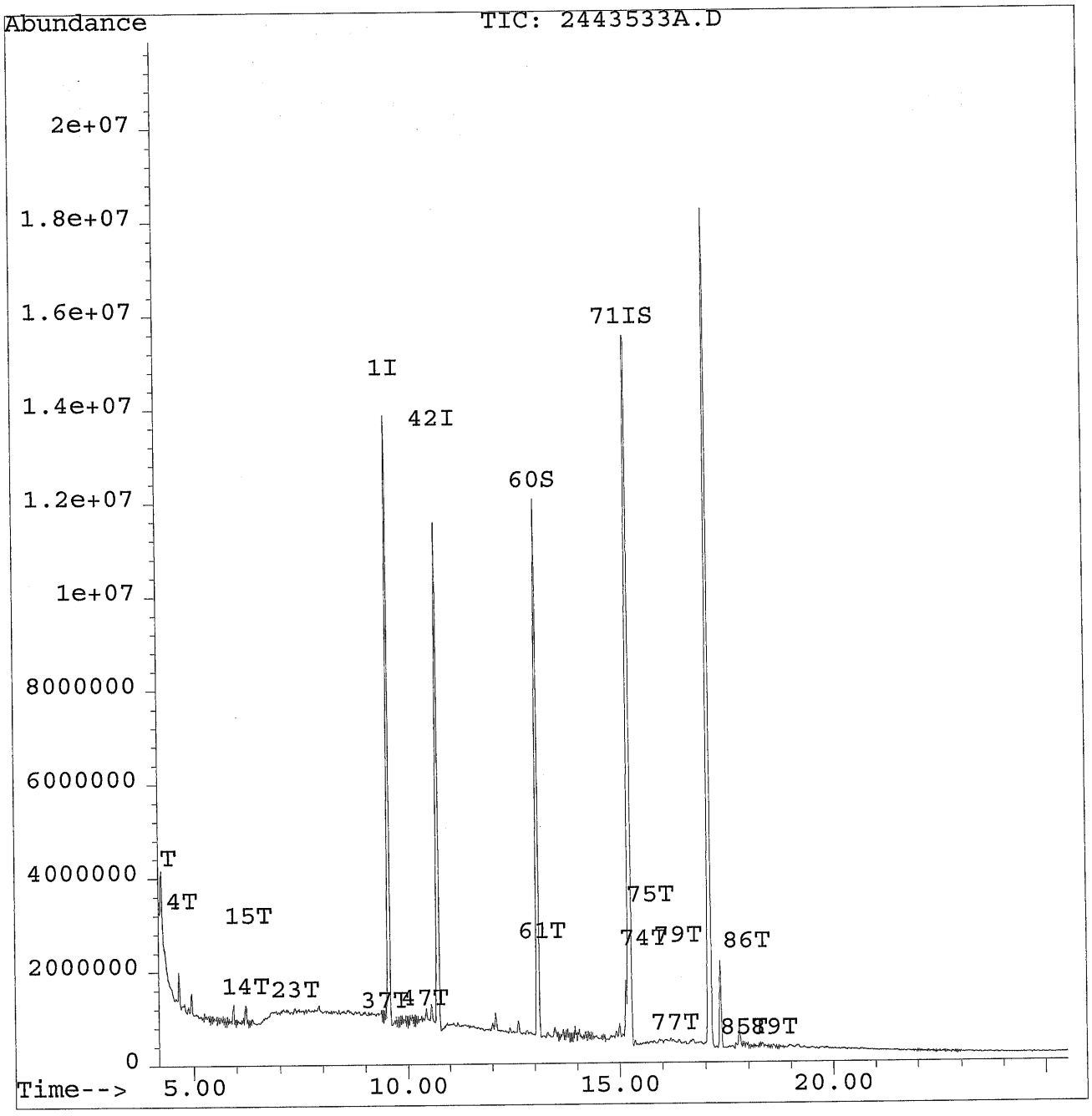
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443533A.D
Acq Time : 12 Dec 124 10:00 pm
Sample : T-601
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 15:42 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443533A.D
Acq Time : 12 Dec 124 10:00 pm
Sample : T-601
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.09	20.49 ppbV	68935735	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
3	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	32
4	3-Pyridinol	964	000109-00-2	14
5	2-Furancarbonyl chloride	4649	000527-69-5	8

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
17.34	1.53 ppbV	5158702	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	.alpha.-Pinene	5805	000080-56-8	91
2	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	83
3	Bicyclo[3.1.0]hexane, 4-methylene-1	5745	003387-41-5	72
4	Cyclohexene, 4-methylene-1-(1-methy	5732	000099-84-3	64
5	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5	5773	002867-05-2	64

Sample Data Packages

SDG Number 224435

Lab Id Number 34

Client ID T-602

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 34**

File Name: 2443534A.D **Date Sampled:** 11/21/24 **Time:** 08:29
Description: T-602 **Date Analyzed:** 12/12/24 **Time:** 22:38
Canister: 673 **Can Dilution Factor:** 1.28
QC_Batch: 121224-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.43	1.07	139.95	0.74	1.84	241.19	
75-71-8	Dichlorodifluoromethane	0.64	1.07	ND	3.17	5.28	ND	
67-56-1	Methanol	2.13	2.56	ND	2.80	3.36	ND	
74-87-3	Chloromethane	0.64	1.07	ND	1.32	2.21	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.43	1.07	ND	2.99	7.47	ND	
75-01-4	Vinyl chloride	0.21	1.07	ND	0.55	2.73	ND	
106-99-0	1,3-Butadiene	0.21	1.07	ND	0.48	2.36	ND	
74-83-9	Bromomethane	0.43	1.07	ND	1.66	4.15	ND	
75-00-3	Chloroethane	0.43	1.07	ND	1.13	2.82	ND	
64-17-5	Ethanol	2.13	13.70	ND	4.03	25.86	ND	
107-02-8	Acrolein	0.43	1.28	ND	0.98	2.94	ND	
75-69-4	Trichlorofluoromethane	0.43	1.07	ND	2.40	6.00	ND	
67-64-1	Acetone	2.13	2.56	6.33	5.08	6.09	15.06	
67-63-0	2-propanol (isopropylalcohol)	0.85	5.33	ND	2.10	13.13	ND	
75-65-0	t-Butyl alcohol	0.43	4.27	ND	1.29	12.95	ND	
4227-95-6	Methyl iodide	0.43	1.28	ND	2.50	7.49	ND	
75-35-4	1,1-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
107-13-1	Acrylonitrile	0.85	1.28	ND	1.86	2.78	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.07	ND	1.64	8.19	ND	
107-05-1	Allyl chloride	0.21	4.27	ND	0.67	13.37	ND	
75-09-2	Methylene chloride	0.21	1.07	ND	0.74	3.71	ND	
75-15-0	Carbon disulfide	0.43	1.07	2.20	1.33	3.32	6.85	
156-60-5	trans-1,2-Dichloroethene	0.21	0.85	ND	0.85	3.39	ND	
1634-04-4	Methyl tert butyl ether	0.43	0.85	ND	1.54	3.08	ND	
107-12-0	Propionitrile	1.07	1.71	ND	2.41	3.85	ND	
75-34-3	1,1-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
637-92-3	Ethyl tert butyl ether	0.43	1.07	ND	1.79	4.46	ND	
108-05-4	Vinyl acetate	0.21	4.27	ND	0.75	15.05	ND	
78-93-3	2-Butanone (MEK)	0.43	1.28	ND	1.26	3.78	ND	
108-20-3	Diisopropyl ether	0.43	2.56	ND	1.79	10.72	ND	
110-54-3	Hexane	0.43	1.07	ND	1.51	3.77	ND	
126-98-7	Methacrylonitrile	0.43	1.07	ND	1.17	2.93	ND	
141-78-6	Ethyl acetate	0.43	1.07	ND	1.54	3.85	ND	
74-97-5	Bromochloromethane	0.21	1.07	ND	1.13	5.65	ND	
96-33-3	Methyl acrylate	0.43	2.13	ND	1.50	7.52	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.28	ND	0.63	3.78	ND	
78-83-1	Isobutyl alcohol	0.85	3.41	ND	2.59	10.36	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.07	ND	0.85	4.23	ND	
594-20-7	2,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
67-66-3	Chloroform	0.21	1.07	ND	1.05	5.22	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
107-06-2	1,2-Dichloroethane	0.21	1.07	ND	0.86	4.32	ND	
563-58-6	1,1-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
110-82-7	Cyclohexane	0.21	1.07	0.76	0.74	3.68	2.63	J
71-43-2	Benzene	1.49	2.13	ND	4.78	6.82	ND	
56-23-5	Carbon tetrachloride	0.21	1.07	ND	1.34	6.72	ND	
994-05-8	t-Amyl methyl ether	0.43	2.13	ND	1.79	8.93	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.07	ND	1.00	4.99	ND	
142-82-5	n-Heptane	0.43	1.07	ND	1.75	4.38	ND	
78-87-5	1,2-Dichloropropane	0.21	1.07	ND	0.99	4.94	ND	
123-91-1	1,4 Dioxane	0.43	2.13	ND	1.54	7.70	ND	
74-95-3	Dibromomethane	0.21	1.07	ND	1.52	7.59	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.07	0.15	0.57	5.74	0.83	J
75-27-4	Bromodichloromethane	0.21	1.07	ND	1.43	7.16	ND	
80-62-6	Methyl methacrylate	0.43	1.07	ND	1.75	4.37	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.43	3.41	ND	1.75	14.01	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
108-88-3	Toluene	0.85	1.07	0.87	3.22	4.02	3.29	J
10061-02-6	trans-1,3-Dichloropropene	0.21	1.07	ND	0.97	4.85	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.07	ND	1.17	5.83	ND	
97-63-2	Ethyl methacrylate	0.43	1.07	ND	2.00	4.99	ND	
591-78-6	2-Hexanone	0.43	3.41	ND	1.75	14.01	ND	
142-28-9	1,3-Dichloropropane	0.21	2.99	ND	0.99	13.82	ND	
111-65-9	Octane	0.43	1.07	ND	2.00	4.99	ND	
124-48-1	Dibromochloromethane	0.43	1.07	ND	3.64	9.10	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.43	1.07	ND	3.28	8.21	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.07	0.20	0.72	7.24	1.36	J
108-90-7	Chlorobenzene	0.43	1.07	ND	1.97	4.92	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.43	1.07	ND	2.93	7.33	ND	
100-41-4	Ethylbenzene	0.43	1.07	ND	1.86	4.64	ND	
1330-20-7	m,p-Xylenes	0.43	1.07	ND	1.86	4.64	ND	
111-84-2	Nonane	0.43	1.07	ND	2.24	5.60	ND	
100-42-5	Styrene	0.64	1.07	ND	2.73	4.55	ND	
75-25-2	Bromoform	0.43	1.07	ND	4.42	11.04	ND	
95-47-6	o-Xylene	0.43	1.07	0.62	1.86	4.64	2.69	J
79-34-5	1,1,2,2-Tetrachloroethane	0.85	2.13	ND	5.86	14.66	ND	
96-18-4	1,2,3-Trichloropropane	0.85	2.56	ND	5.15	15.45	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.85	2.56	ND	4.37	13.11	ND	
103-65-1	n-Propylbenzene	0.85	2.99	ND	4.20	14.70	ND	
98-82-8	Isopropylbenzene	0.85	2.99	ND	4.20	14.70	ND	
622-96-8	4-Ethyltoluene	0.85	6.83	ND	4.20	33.61	ND	
108-67-8	1,3,5-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
124-18-5	Decane	0.85	2.56	ND	4.97	14.92	ND	
98-06-6	tert-butyl benzene	0.85	2.56	ND	4.69	14.07	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.85	3.84	ND	4.20	18.90	ND	
538-93-2	i-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
135-98-8	sec-butylbenzene	0.85	2.99	ND	4.69	16.42	ND	
541-73-1	1,3-Dichlorobenzene	0.85	3.41	ND	5.14	20.55	ND	
99-87-6	Isopropyltoluene	0.85	2.56	ND	4.69	14.07	ND	
100-44-7	Benzyl chloride	0.85	2.13	ND	4.42	11.06	ND	
106-46-7	1,4-Dichlorobenzene	0.85	2.13	ND	5.14	12.84	ND	
104-51-8	n-Butylbenzene	0.85	2.56	ND	4.69	14.07	ND	
95-50-1	1,2-Dichlorobenzene	0.85	2.99	ND	5.14	17.98	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.28	2.99	ND	12.39	28.90	ND	
120-82-1	1,2,4-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
91-20-3	Naphthalene	2.13	0.43	ND	11.20	2.24	ND	
87-61-6	1,2,3-Trichlorobenzene	1.28	2.13	ND	9.51	15.85	ND	
87-68-3	Hexachlorobutadiene	1.07	1.28	ND	11.39	13.67	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	125	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 34

File Name: 224435
Descriptio 34
Canister: 673
QC_Batch: 121224-MA1

Date Sampled: 11/21/24 **Time:** 08:29
Date Analyzed: 12/12/24 **Time:** 22:38
Can Dilution Factor: 1.28
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.99	6.40	ND	12.23	26.21	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**34**		
File Name:	2443534A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**8:29**
Sample ID:	T-602	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**22:38**
Anal Date:	12 Dec 124 10:38 pm	**SF:**	**2**	**QCbatch:**	**121224-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**673**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.28**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	UG	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	32.801	4.41	42.00	7415715
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.380	4.86	31.00	94502
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.484	6.42	58.00	346722
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.040	6.45	45.00	18178
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.515	7.61	76.00	389272
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.050	9.72	72.00	7927
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.178	10.74	56.00	71681
71-43-2	Benzene	47	TRG	0.241	10.70	78.00	231342
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.036	10.70	130.00	21271
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.205	13.50	91.00	275611
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.047	14.69	166.00	47327
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.027	15.90	106	66155
1330-20-7	m,p-Xylenes	75	TRG	0.041	16.06	91.00	81399
111-84-2	Nonane	76	TRG	0.018	16.43	57.00	21561
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.145	16.37	91.00	315091
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.085	18.23	105.00	258368
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.059	18.31	105.00	185731
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.092	18.95	105.00	230922
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.055	19.53	119.00	211108
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.049	20.20	91.00	180061
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.002	21.02	75.00	679
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**23002858**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**24126308**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**32826056**
2037-26-5	Toluene-d8	60	SURR	12.452	13.40	98.00	**17835712**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 34
File Name: 2443534A.D
Run Method: A1563_L.M
Can Factor: 1.28
Air Volume: 300.0 ml
Can/Tube Number: 673
Dilution Factor: 0.3840
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3840
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	32.80	139.95	241.19	139.95	241.19	241.19	241.19	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.38	1.62	2.12	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.48	6.33	15.06	6.33	15.06	15.06	15.06	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.04	0.17	0.42	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.52	2.20	6.85	2.20	6.85	6.85	6.85	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.05	0.21	0.63	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.18	0.76	2.63	0.76	2.63	2.63	2.63	**0.050**	**0.250**
Benzene	78.1	0.24	1.03	3.30	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.04	0.15	0.83	0.15	0.83	0.83	0.83	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.20	0.87	3.29	0.87	3.29	3.29	3.29	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.05	0.20	1.36	0.20	1.36	1.36	1.36	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.12	0.50	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.04	0.17	0.76	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.02	0.08	0.41	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.15	0.62	2.69	0.62	2.69	2.69	2.69	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.08	0.36	1.78	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.06	0.25	1.24	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.09	0.39	1.94	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.05	0.23	1.28	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.05	0.21	1.15	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.01	0.09	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.45	125	125	125	125	125	125	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.43	0.74	1.07	1.84				=		Y	139.95	241.19
0.64	3.17	1.07	5.28	U	ND		ND		Y	0.00	0.00
2.13	2.80	2.56	3.36	U	ND		ND		Y	0.00	0.00
0.64	1.32	1.07	2.21	U	ND		ND		Y	0.00	0.00
0.43	2.99	1.07	7.47	U	ND		ND		Y	0.00	0.00
0.21	0.55	1.07	2.73	U	ND		ND		Y	0.00	0.00
0.21	0.48	1.07	2.36	U	ND		ND		Y	0.00	0.00
0.43	1.66	1.07	4.15	U	ND		ND		Y	0.00	0.00
0.43	1.13	1.07	2.82	U	ND		ND		Y	0.00	0.00
2.13	4.03	13.70	25.86	U	ND		ND		Y	0.00	0.00
0.43	0.98	1.28	2.94	U	ND		ND		Y	0.00	0.00
0.43	2.40	1.07	6.00	U	ND		ND		Y	0.00	0.00
2.13	5.08	2.56	6.09				=		Y	6.33	15.06
0.85	2.10	5.33	13.13	U	ND		ND		Y	0.00	0.00
0.43	1.29	4.27	12.95	U	ND		ND		Y	0.00	0.00
0.43	2.50	1.28	7.49	U	ND		ND		Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND		ND		Y	0.00	0.00
0.85	1.86	1.28	2.78	U	ND		ND		Y	0.00	0.00
0.21	1.64	1.07	8.19	U	ND		ND		Y	0.00	0.00
0.21	0.67	4.27	13.37	U	ND		ND		Y	0.00	0.00
0.21	0.74	1.07	3.71	U	ND		ND		Y	0.00	0.00
0.43	1.33	1.07	3.32				=		Y	2.20	6.85
0.21	0.85	0.85	3.39	U	ND		ND		Y	0.00	0.00
0.43	1.54	0.85	3.08	U	ND		ND		Y	0.00	0.00
1.07	2.41	1.71	3.85	U	ND		ND		Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND		ND		Y	0.00	0.00
0.43	1.79	1.07	4.46	U	ND		ND		Y	0.00	0.00
0.21	0.75	4.27	15.05	U	ND		ND		Y	0.00	0.00
0.43	1.26	1.28	3.78	U	ND		ND		Y	0.00	0.00
0.43	1.79	2.56	10.72	U	ND		ND		Y	0.00	0.00
0.43	1.51	1.07	3.77	U	ND		ND		Y	0.00	0.00
0.43	1.17	1.07	2.93	U	ND		ND		Y	0.00	0.00
0.43	1.54	1.07	3.85	U	ND		ND		Y	0.00	0.00
0.21	1.13	1.07	5.65	U	ND		ND		Y	0.00	0.00

0.43	1.50	2.13	7.52	U	ND	ND	Y	0.00	0.00
0.21	0.63	1.28	3.78	U	ND	ND	Y	0.00	0.00
0.85	2.59	3.41	10.36	U	ND	ND	Y	0.00	0.00
0.21	0.85	1.07	4.23	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.21	1.05	1.07	5.22	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.21	0.86	1.07	4.32	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	0.74	1.07	3.68	J	J	=	Y	0.76	2.63
1.49	4.78	2.13	6.82	U	ND	ND	Y	0.00	0.00
0.21	1.34	1.07	6.72	U	ND	ND	Y	0.00	0.00
0.43	1.79	2.13	8.93	U	ND	ND	Y	0.00	0.00
0.21	1.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.38	U	ND	ND	Y	0.00	0.00
0.21	0.99	1.07	4.94	U	ND	ND	Y	0.00	0.00
0.43	1.54	2.13	7.70	U	ND	ND	Y	0.00	0.00
0.21	1.52	1.07	7.59	U	ND	ND	Y	0.00	0.00
0.11	0.57	1.07	5.74	J	J	=	Y	0.15	0.83
0.21	1.43	1.07	7.16	U	ND	ND	Y	0.00	0.00
0.43	1.75	1.07	4.37	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.85	3.22	1.07	4.02	J	J	=	Y	0.87	3.29
0.21	0.97	1.07	4.85	U	ND	ND	Y	0.00	0.00
0.21	1.17	1.07	5.83	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	1.75	3.41	14.01	U	ND	ND	Y	0.00	0.00
0.21	0.99	2.99	13.82	U	ND	ND	Y	0.00	0.00
0.43	2.00	1.07	4.99	U	ND	ND	Y	0.00	0.00
0.43	3.64	1.07	9.10	U	ND	ND	Y	0.00	0.00
0.43	3.28	1.07	8.21	U	ND	ND	Y	0.00	0.00
0.11	0.72	1.07	7.24	J	J	=	Y	0.20	1.36
0.43	1.97	1.07	4.92	U	ND	ND	Y	0.00	0.00
0.43	2.93	1.07	7.33	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	U	ND	ND	Y	0.00	0.00
0.43	2.24	1.07	5.60	U	ND	ND	Y	0.00	0.00
0.64	2.73	1.07	4.55	U	ND	ND	Y	0.00	0.00
0.43	4.42	1.07	11.04	U	ND	ND	Y	0.00	0.00
0.43	1.86	1.07	4.64	J	J	=	Y	0.62	2.69
0.85	5.86	2.13	14.66	U	ND	ND	Y	0.00	0.00
0.85	5.15	2.56	15.45	U	ND	ND	Y	0.00	0.00
0.85	4.37	2.56	13.11	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	2.99	14.70	U	ND	ND	Y	0.00	0.00
0.85	4.20	6.83	33.61	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.97	2.56	14.92	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.20	3.84	18.90	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00

0.85	4.69	2.99	16.42	U	ND	ND	Y	0.00	0.00
0.85	5.14	3.41	20.55	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	4.42	2.13	11.06	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.13	12.84	U	ND	ND	Y	0.00	0.00
0.85	4.69	2.56	14.07	U	ND	ND	Y	0.00	0.00
0.85	5.14	2.99	17.98	U	ND	ND	Y	0.00	0.00
1.28	12.39	2.99	28.90	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
2.13	11.20	0.43	2.24	U	ND	ND	Y	0.00	0.00
1.28	9.51	2.13	15.85	U	ND	ND	Y	0.00	0.00
1.07	11.39	1.28	13.67	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 34
Sample ID: T-602

Can Factor: 1.28
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	
ND	**0.7**	**1.5**	3.0	6.40	2.99	12.23	6.40	26.21	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**34**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.28	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	7415715	20.0	23002858	32.801	139.95	241.19
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	23002858	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	94502	20.0	23002858	0.380	1.62	2.12
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	23002858	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	23002858	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	23002858	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	23002858	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	23002858	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	23002858	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	23002858	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	23002858	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	23002858	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	346722	20.0	23002858	1.484	6.33	15.06
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	18178	20.0	23002858	0.040	0.17	0.42
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	23002858	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	23002858	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	23002858	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	23002858	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	23002858	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	23002858	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	23002858	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	389272	20.0	23002858	0.515	2.20	6.85
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	23002858	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	23002858	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	23002858	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	23002858	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	23002858	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	23002858	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	23002858	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	23002858	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	23002858	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	23002858	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	23002858	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	23002858	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	23002858	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	7927	20.0	23002858	0.050	0.21	0.63
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	23002858	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	23002858	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	23002858	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	23002858	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	24126308	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	24126308	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	24126308	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	71681	20.0	24126308	0.178	0.76	2.63
47	Benzene	14DF	TRG	78.1	0.794	231342	20.0	24126308	0.241	1.03	3.30
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	24126308	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	24126308	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	24126308	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	24126308	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	24126308	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	24126308	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	24126308	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	21271	20.0	24126308	0.036	0.15	0.83
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	24126308	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	24126308	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	24126308	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	24126308	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	275611	20.0	24126308	0.205	0.87	3.29
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	24126308	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	24126308	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	24126308	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	24126308	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	24126308	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	24126308	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	24126308	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	24126308	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	47327	20.0	24126308	0.047	0.20	1.36
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	32826056	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	32826056	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	66155	20.0	32826056	0.027	0.12	0.50
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	81399	20.0	32826056	0.041	0.17	0.76
76	Nonane	d5CB	TRG	128.3	0.711	21561	20.0	32826056	0.018	0.08	0.41
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	32826056	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	32826056	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	315091	20.0	32826056	0.145	0.62	2.69
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	32826056	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	32826056	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	32826056	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	32826056	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	32826056	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	258368	20.0	32826056	0.085	0.36	1.78
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	185731	20.0	32826056	0.059	0.25	1.24
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	32826056	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	32826056	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	230922	20.0	32826056	0.092	0.39	1.94
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	32826056	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	32826056	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	32826056	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	211108	20.0	32826056	0.055	0.23	1.28
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	32826056	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	32826056	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	180061	20.0	32826056	0.049	0.21	1.15
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	32826056	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	679	20.0	32826056	0.002	0.01	0.09
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	32826056	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	32826056	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	32826056	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	32826056	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	23002858	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	24126308	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	32826056	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	17835712	10.0		12.452	124.52	125

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443534A.D
Acq Time : 12 Dec 124 10:38 pm
Sample : T-602
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 16:01 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	23002858	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.74	114	24126308	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.24	117	32826056	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	17835712	12.45	ppbV		124.52
Target Compounds							Qvalue
2) Propylene	4.24	42	7415715	32.80	ppbV	#	81
4) Methanol	4.76	31	94502	0.38	ppbV	#	94
14) Acetone	6.23	58	346722	1.48	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.31	45	18178	0.04	ppbV	#	59
23) Carbon disulfide	7.37	76	389272	0.52	ppbV	#	79
37) Tetrahydrofuran	9.49	72	7927	0.05	ppbV	m	0
46) Cyclohexane	10.45	56	71681	0.18	ppbV	#	66
47) Benzene	10.41	78	231342	0.24	ppbV	m	65
55) Trichloroethene (TCE)	11.37	130	21271	0.04	ppbV	#	67
61) Toluene	13.20	91	275611	0.20	ppbV		99
70) Tetrachloroethene (PCE)	14.36	166	47327	0.05	ppbV		96
74) Ethylbenzene	15.57	91	66155	0.03	ppbV		91
75) m,p-Xylenes	15.74	91	81399	0.04	ppbV	#	67
76) Nonane	16.10	57	21561	0.02	ppbV	#	1
79) o-Xylene	16.37	91	315091	0.15	ppbV	#	78
85) 4-Ethyltoluene	17.89	105	258368	0.08	ppbV	m	88
86) 1,3,5-Trimethylbenzene	17.97	105	185731	0.06	ppbV	m	79
89) 1,2,4-Trimethylbenzene	18.59	105	230922	0.09	ppbV	#	83
93) Isopropyltoluene	19.17	119	211108	0.05	ppbV	#	87
96) n-Butylbenzene	19.85	91	180061	0.05	ppbV	#	96
98) 1,2-Dibromo-3-chloropropan	20.89	75	679	0.00	ppbV	m	39

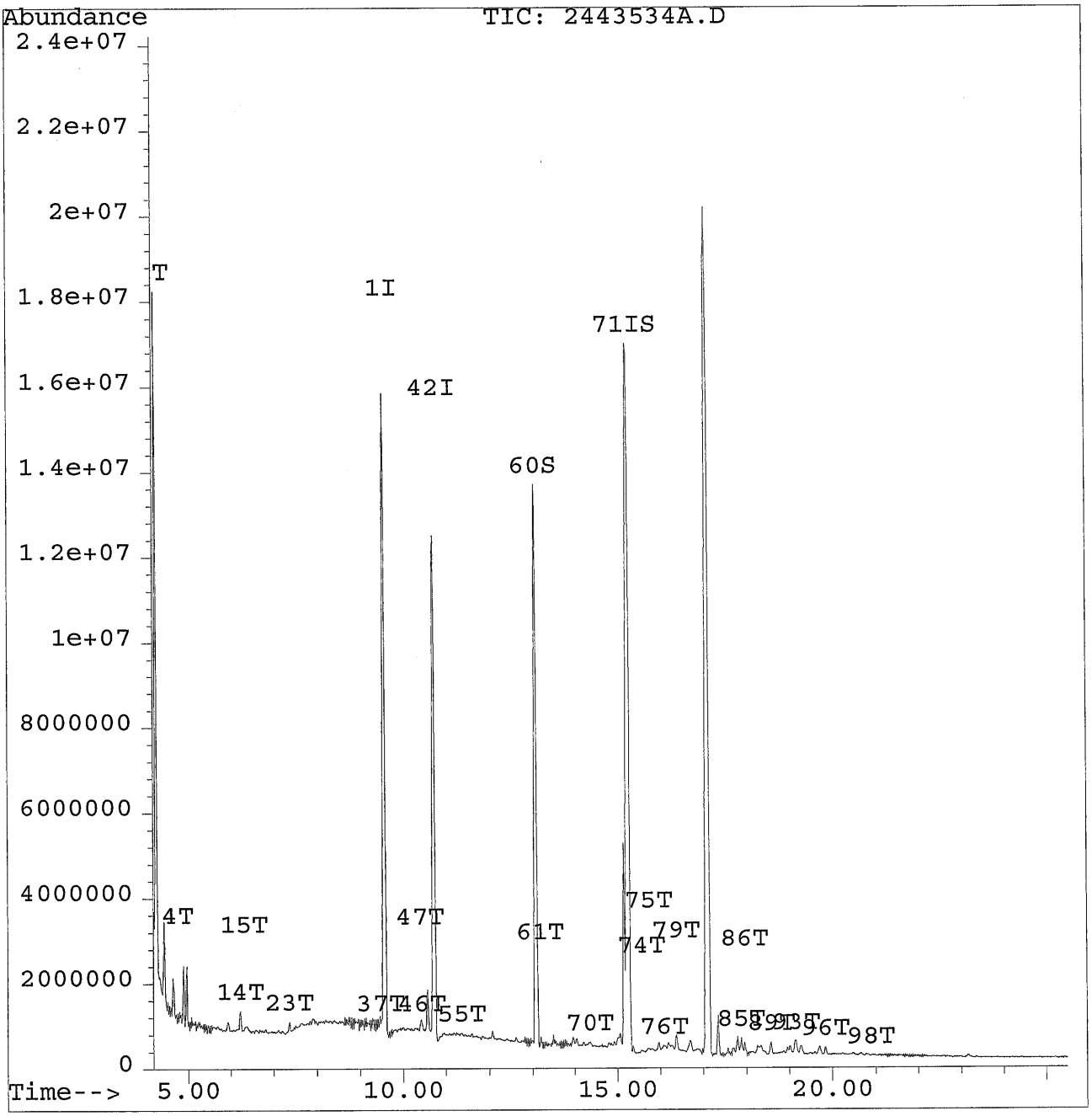
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\2443534A.D
Acq Time : 12 Dec 124 10:38 pm
Sample : T-602
Misc : SCHMIDT, 300 ML
Quant Time: Dec 17 16:01 19124

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\2443534A.D
Acq Time : 12 Dec 124 10:38 pm
Sample : T-602
Misc : SCHMIDT, 300 ML

Operator: UG
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
15.16	3.17 ppbV	12987316	Chlorobenzene-d5	15

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-chloro-4-(trifluoromethy	14995	000098-56-6	96

****

Peak Number 2 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.10	24.44 ppbV	100059229	Chlorobenzene-d5	15

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	90
4	Bicyclo[2.2.1]heptane-2-carboxaldeh	3691	003574-55-8	7
5	3-Pyridinol	964	000109-00-2	7

****

Peak Number 3 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
17.36	0.65 ppbV	2652311	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5	5773	002867-05-2	86
2	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	72
3	.beta.-Pinene	5794	000127-91-3	59
4	.alpha.-Phellandrene	5822	000099-83-2	59
5	Bicyclo[3.1.0]hexan-2-ol, 2-methyl-	9414	017699-16-0	45

Sample Data Packages

SDG Number 224435
Lab Id Number 35

Client ID T-603

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 35

File Name: 2443535A.D
Description: T-603
Canister: 550
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 08:31
Date Analyzed: 12/13/24 **Time:** 16:00
Can Dilution Factor: 1.24
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.41	1.03	5.25	0.71	1.78	9.05	
75-71-8	Dichlorodifluoromethane	0.62	1.03	ND	3.07	5.12	ND	
67-56-1	Methanol	2.07	2.48	ND	2.71	3.25	ND	
74-87-3	Chloromethane	0.62	1.03	ND	1.28	2.14	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.41	1.03	ND	2.89	7.23	ND	
75-01-4	Vinyl chloride	0.21	1.03	ND	0.53	2.65	ND	
106-99-0	1,3-Butadiene	0.21	1.03	ND	0.46	2.29	ND	
74-83-9	Bromomethane	0.41	1.03	ND	1.61	4.02	ND	
75-00-3	Chloroethane	0.41	1.03	ND	1.09	2.73	ND	
64-17-5	Ethanol	2.07	13.27	ND	3.90	25.05	ND	
107-02-8	Acrolein	0.41	1.24	ND	0.95	2.85	ND	
75-69-4	Trichlorofluoromethane	0.41	1.03	ND	2.33	5.81	ND	
67-64-1	Acetone	2.07	2.48	2.93	4.92	5.90	6.97	
67-63-0	2-propanol (isopropylalcohol)	0.83	5.17	ND	2.03	12.72	ND	
75-65-0	t-Butyl alcohol	0.41	4.13	ND	1.25	12.54	ND	
4227-95-6	Methyl iodide	0.41	1.24	ND	2.42	7.26	ND	
75-35-4	1,1-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	
107-13-1	Acrylonitrile	0.83	1.24	ND	1.80	2.70	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	1.03	ND	1.59	7.93	ND	
107-05-1	Allyl chloride	0.21	4.13	ND	0.65	12.95	ND	
75-09-2	Methylene chloride	0.21	1.03	ND	0.72	3.59	ND	
75-15-0	Carbon disulfide	0.41	1.03	ND	1.29	3.22	ND	
156-60-5	trans-1,2-Dichloroethene	0.21	0.83	ND	0.82	3.28	ND	
1634-04-4	Methyl tert butyl ether	0.41	0.83	ND	1.49	2.98	ND	
107-12-0	Propionitrile	1.03	1.65	ND	2.33	3.73	ND	
75-34-3	1,1-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
637-92-3	Ethyl tert butyl ether	0.41	1.03	ND	1.73	4.33	ND	
108-05-4	Vinyl acetate	0.21	4.13	ND	0.73	14.58	ND	
78-93-3	2-Butanone (MEK)	0.41	1.24	ND	1.22	3.66	ND	
108-20-3	Diisopropyl ether	0.41	2.48	ND	1.73	10.38	ND	
110-54-3	Hexane	0.41	1.03	ND	1.46	3.65	ND	
126-98-7	Methacrylonitrile	0.41	1.03	ND	1.14	2.84	ND	
141-78-6	Ethyl acetate	0.41	1.03	ND	1.49	3.73	ND	
74-97-5	Bromochloromethane	0.21	1.03	ND	1.10	5.48	ND	
96-33-3	Methyl acrylate	0.41	2.07	ND	1.46	7.29	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.21	1.24	ND	0.61	3.66	ND	
78-83-1	Isobutyl alcohol	0.83	3.31	ND	2.51	10.03	ND	
156-59-2	cis-1,2-Dichloroethene	0.21	1.03	ND	0.82	4.10	ND	
594-20-7	2,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
67-66-3	Chloroform	0.21	1.03	ND	1.01	5.05	ND	
71-55-6	1,1,1-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
107-06-2	1,2-Dichloroethane	0.21	1.03	ND	0.84	4.19	ND	
563-58-6	1,1-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
110-82-7	Cyclohexane	0.21	1.03	ND	0.71	3.56	ND	
71-43-2	Benzene	1.45	2.07	ND	4.63	6.61	ND	
56-23-5	Carbon tetrachloride	0.21	1.03	ND	1.30	6.51	ND	
994-05-8	t-Amyl methyl ether	0.41	2.07	ND	1.73	8.65	ND	
540-84-1	2,2,4-Trimethylpentane	0.21	1.03	ND	0.97	4.83	ND	
142-82-5	n-Heptane	0.41	1.03	ND	1.70	4.24	ND	
78-87-5	1,2-Dichloropropane	0.21	1.03	ND	0.96	4.78	ND	
123-91-1	1,4 Dioxane	0.41	2.07	ND	1.49	7.46	ND	
74-95-3	Dibromomethane	0.21	1.03	ND	1.47	7.36	ND	
79-01-6	Trichloroethene (TCE)	0.10	1.03	ND	0.56	5.56	ND	
75-27-4	Bromodichloromethane	0.21	1.03	ND	1.39	6.93	ND	
80-62-6	Methyl methacrylate	0.41	1.03	ND	1.69	4.24	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.41	3.31	ND	1.70	13.57	ND	
10061-01-5	cis-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
108-88-3	Toluene	0.83	1.03	ND	3.12	3.90	ND	
10061-02-6	trans-1,3-Dichloropropene	0.21	1.03	ND	0.94	4.70	ND	
79-00-5	1,1,2-Trichloroethane	0.21	1.03	ND	1.13	5.65	ND	
97-63-2	Ethyl methacrylate	0.41	1.03	ND	1.93	4.83	ND	
591-78-6	2-Hexanone	0.41	3.31	ND	1.70	13.57	ND	
142-28-9	1,3-Dichloropropane	0.21	2.89	ND	0.96	13.39	ND	
111-65-9	Octane	0.41	1.03	ND	1.93	4.83	ND	
124-48-1	Dibromochloromethane	0.41	1.03	ND	3.53	8.82	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.41	1.03	ND	3.18	7.95	ND	
127-18-4	Tetrachloroethene (PCE)	0.10	1.03	ND	0.70	7.02	ND	
108-90-7	Chlorobenzene	0.41	1.03	ND	1.91	4.77	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.41	1.03	ND	2.84	7.10	ND	
100-41-4	Ethylbenzene	0.41	1.03	ND	1.80	4.49	ND	
1330-20-7	m,p-Xylenes	0.41	1.03	ND	1.80	4.49	ND	
111-84-2	Nonane	0.41	1.03	ND	2.17	5.43	ND	
100-42-5	Styrene	0.62	1.03	ND	2.65	4.41	ND	
75-25-2	Bromoform	0.41	1.03	ND	4.28	10.69	ND	
95-47-6	o-Xylene	0.41	1.03	ND	1.80	4.49	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.83	2.07	ND	5.68	14.20	ND	
96-18-4	1,2,3-Trichloropropane	0.83	2.48	ND	4.99	14.97	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.83	2.48	ND	4.23	12.70	ND	
103-65-1	n-Propylbenzene	0.83	2.89	ND	4.07	14.24	ND	
98-82-8	Isopropylbenzene	0.83	2.89	ND	4.07	14.24	ND	
622-96-8	4-Ethyltoluene	0.83	6.61	ND	4.07	32.56	ND	
108-67-8	1,3,5-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
124-18-5	Decane	0.83	2.48	ND	4.82	14.45	ND	
98-06-6	tert-butyl benzene	0.83	2.48	ND	4.54	13.63	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.83	3.72	ND	4.07	18.31	ND	
538-93-2	i-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
135-98-8	sec-butylbenzene	0.83	2.89	ND	4.54	15.90	ND	
541-73-1	1,3-Dichlorobenzene	0.83	3.31	ND	4.98	19.91	ND	
99-87-6	Isopropyltoluene	0.83	2.48	ND	4.54	13.63	ND	
100-44-7	Benzyl chloride	0.83	2.07	ND	4.29	10.72	ND	
106-46-7	1,4-Dichlorobenzene	0.83	2.07	ND	4.98	12.44	ND	
104-51-8	n-Butylbenzene	0.83	2.48	ND	4.54	13.63	ND	
95-50-1	1,2-Dichlorobenzene	0.83	2.89	ND	4.98	17.42	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.24	2.89	ND	12.00	28.00	ND	
120-82-1	1,2,4-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
91-20-3	Naphthalene	2.07	0.41	ND	10.85	2.17	ND	
87-61-6	1,2,3-Trichlorobenzene	1.24	2.07	ND	9.21	15.35	ND	
87-68-3	Hexachlorobutadiene	1.03	1.24	ND	11.04	13.24	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 35

File Name: 224435
Descriptio 35
Canister: 550
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 08:31
Date Analyzed: 12/13/24 **Time:** 16:00
Can Dilution Factor: 1.24
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.89	6.20	ND	11.85	25.39	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**35**		
File Name:	2443535A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**8:31**
Sample ID:	T-603	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**16:00**
Anal Date:	13 Dec 124 4:00 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**550**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.24**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	1.270	4.41	42.00	95382
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.709	6.42	58.00	55043
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.090	10.70	78.00	32273
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.033	13.50	91.00	16845
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.009	15.90	106	10417
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.021	16.61	104.00	16215
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	0.00	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.029	18.95	105.00	35280
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.017	23.15	225.00	15134
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7640242**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**9049686**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**15933415**
2037-26-5	Toluene-d8	60	SURR	11.975	13.40	98.00	**6434014**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 35
File Name: 2443535A.D
Run Method: A1563_L.M
Can Factor: 1.24
Air Volume: 300.0 ml
Can/Tube Number: 550
Dilution Factor: 0.3720
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT	
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3720
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	2.0

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	1.27	5.25	9.05	5.25	9.05	9.05	9.05	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.71	2.93	6.97	2.93	6.97	6.97	6.97	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.09	0.37	1.19	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.03	0.14	0.52	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.01	0.04	0.16	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.02	0.09	0.37	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.03	0.12	0.59	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.02	0.07	0.77	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.98	120	120	120	120	120	120	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.41	0.71	1.03	1.78				=		Y	5.25	9.05
0.62	3.07	1.03	5.12	U	ND		ND		Y	0.00	0.00
2.07	2.71	2.48	3.25	U	ND		ND		Y	0.00	0.00
0.62	1.28	1.03	2.14	U	ND		ND		Y	0.00	0.00
0.41	2.89	1.03	7.23	U	ND		ND		Y	0.00	0.00
0.21	0.53	1.03	2.65	U	ND		ND		Y	0.00	0.00
0.21	0.46	1.03	2.29	U	ND		ND		Y	0.00	0.00
0.41	1.61	1.03	4.02	U	ND		ND		Y	0.00	0.00
0.41	1.09	1.03	2.73	U	ND		ND		Y	0.00	0.00
2.07	3.90	13.27	25.05	U	ND		ND		Y	0.00	0.00
0.41	0.95	1.24	2.85	U	ND		ND		Y	0.00	0.00
0.41	2.33	1.03	5.81	U	ND		ND		Y	0.00	0.00
2.07	4.92	2.48	5.90				=		Y	2.93	6.97
0.83	2.03	5.17	12.72	U	ND		ND		Y	0.00	0.00
0.41	1.25	4.13	12.54	U	ND		ND		Y	0.00	0.00
0.41	2.42	1.24	7.26	U	ND		ND		Y	0.00	0.00
0.21	0.82	1.03	4.10	U	ND		ND		Y	0.00	0.00
0.83	1.80	1.24	2.70	U	ND		ND		Y	0.00	0.00
0.21	1.59	1.03	7.93	U	ND		ND		Y	0.00	0.00
0.21	0.65	4.13	12.95	U	ND		ND		Y	0.00	0.00
0.21	0.72	1.03	3.59	U	ND		ND		Y	0.00	0.00
0.41	1.29	1.03	3.22	U	ND		ND		Y	0.00	0.00
0.21	0.82	0.83	3.28	U	ND		ND		Y	0.00	0.00
0.41	1.49	0.83	2.98	U	ND		ND		Y	0.00	0.00
1.03	2.33	1.65	3.73	U	ND		ND		Y	0.00	0.00
0.21	0.84	1.03	4.19	U	ND		ND		Y	0.00	0.00
0.41	1.73	1.03	4.33	U	ND		ND		Y	0.00	0.00
0.21	0.73	4.13	14.58	U	ND		ND		Y	0.00	0.00
0.41	1.22	1.24	3.66	U	ND		ND		Y	0.00	0.00
0.41	1.73	2.48	10.38	U	ND		ND		Y	0.00	0.00
0.41	1.46	1.03	3.65	U	ND		ND		Y	0.00	0.00
0.41	1.14	1.03	2.84	U	ND		ND		Y	0.00	0.00
0.41	1.49	1.03	3.73	U	ND		ND		Y	0.00	0.00
0.21	1.10	1.03	5.48	U	ND		ND		Y	0.00	0.00

0.41	1.46	2.07	7.29	U	ND	ND	Y	0.00	0.00
0.21	0.61	1.24	3.66	U	ND	ND	Y	0.00	0.00
0.83	2.51	3.31	10.03	U	ND	ND	Y	0.00	0.00
0.21	0.82	1.03	4.10	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.03	4.78	U	ND	ND	Y	0.00	0.00
0.21	1.01	1.03	5.05	U	ND	ND	Y	0.00	0.00
0.21	1.13	1.03	5.65	U	ND	ND	Y	0.00	0.00
0.21	0.84	1.03	4.19	U	ND	ND	Y	0.00	0.00
0.21	0.94	1.03	4.70	U	ND	ND	Y	0.00	0.00
0.21	0.71	1.03	3.56	U	ND	ND	Y	0.00	0.00
1.45	4.63	2.07	6.61	U	ND	ND	Y	0.00	0.00
0.21	1.30	1.03	6.51	U	ND	ND	Y	0.00	0.00
0.41	1.73	2.07	8.65	U	ND	ND	Y	0.00	0.00
0.21	0.97	1.03	4.83	U	ND	ND	Y	0.00	0.00
0.41	1.70	1.03	4.24	U	ND	ND	Y	0.00	0.00
0.21	0.96	1.03	4.78	U	ND	ND	Y	0.00	0.00
0.41	1.49	2.07	7.46	U	ND	ND	Y	0.00	0.00
0.21	1.47	1.03	7.36	U	ND	ND	Y	0.00	0.00
0.10	0.56	1.03	5.56	U	ND	ND	Y	0.00	0.00
0.21	1.39	1.03	6.93	U	ND	ND	Y	0.00	0.00
0.41	1.69	1.03	4.24	U	ND	ND	Y	0.00	0.00
0.41	1.70	3.31	13.57	U	ND	ND	Y	0.00	0.00
0.21	0.94	1.03	4.70	U	ND	ND	Y	0.00	0.00
0.83	3.12	1.03	3.90	U	ND	ND	Y	0.00	0.00
0.21	0.94	1.03	4.70	U	ND	ND	Y	0.00	0.00
0.21	1.13	1.03	5.65	U	ND	ND	Y	0.00	0.00
0.41	1.93	1.03	4.83	U	ND	ND	Y	0.00	0.00
0.41	1.70	3.31	13.57	U	ND	ND	Y	0.00	0.00
0.21	0.96	2.89	13.39	U	ND	ND	Y	0.00	0.00
0.41	1.93	1.03	4.83	U	ND	ND	Y	0.00	0.00
0.41	3.53	1.03	8.82	U	ND	ND	Y	0.00	0.00
0.41	3.18	1.03	7.95	U	ND	ND	Y	0.00	0.00
0.10	0.70	1.03	7.02	U	ND	ND	Y	0.00	0.00
0.41	1.91	1.03	4.77	U	ND	ND	Y	0.00	0.00
0.41	2.84	1.03	7.10	U	ND	ND	Y	0.00	0.00
0.41	1.80	1.03	4.49	U	ND	ND	Y	0.00	0.00
0.41	1.80	1.03	4.49	U	ND	ND	Y	0.00	0.00
0.41	2.17	1.03	5.43	U	ND	ND	Y	0.00	0.00
0.62	2.65	1.03	4.41	U	ND	ND	Y	0.00	0.00
0.41	4.28	1.03	10.69	U	ND	ND	Y	0.00	0.00
0.41	1.80	1.03	4.49	U	ND	ND	Y	0.00	0.00
0.83	5.68	2.07	14.20	U	ND	ND	Y	0.00	0.00
0.83	4.99	2.48	14.97	U	ND	ND	Y	0.00	0.00
0.83	4.23	2.48	12.70	U	ND	ND	Y	0.00	0.00
0.83	4.07	2.89	14.24	U	ND	ND	Y	0.00	0.00
0.83	4.07	2.89	14.24	U	ND	ND	Y	0.00	0.00
0.83	4.07	6.61	32.56	U	ND	ND	Y	0.00	0.00
0.83	4.07	3.72	18.31	U	ND	ND	Y	0.00	0.00
0.83	4.82	2.48	14.45	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00
0.83	4.07	3.72	18.31	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00

0.83	4.54	2.89	15.90	U	ND	ND	Y	0.00	0.00
0.83	4.98	3.31	19.91	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00
0.83	4.29	2.07	10.72	U	ND	ND	Y	0.00	0.00
0.83	4.98	2.07	12.44	U	ND	ND	Y	0.00	0.00
0.83	4.54	2.48	13.63	U	ND	ND	Y	0.00	0.00
0.83	4.98	2.89	17.42	U	ND	ND	Y	0.00	0.00
1.24	12.00	2.89	28.00	U	ND	ND	Y	0.00	0.00
1.24	9.21	2.07	15.35	U	ND	ND	Y	0.00	0.00
2.07	10.85	0.41	2.17	U	ND	ND	Y	0.00	0.00
1.24	9.21	2.07	15.35	U	ND	ND	Y	0.00	0.00
1.03	11.04	1.24	13.24	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 35
Sample ID: T-603

Can Factor: 1.24
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	
ND	**0.7**	**1.5**	2.9	6.20	2.89	11.85	6.20	25.39	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**35**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.24	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) / (Avg RFn) × (Cistdi) / (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) × 1000 / (SV) × (CDF)

4) Amount ug/m3 = (amt(ppbv) × MW) / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	95382	20.0	7640242	1.270	5.25	9.05
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7640242	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	7640242	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	7640242	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7640242	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7640242	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7640242	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7640242	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7640242	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	7640242	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7640242	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7640242	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	55043	20.0	7640242	0.709	2.93	6.97
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	7640242	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7640242	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7640242	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7640242	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7640242	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7640242	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7640242	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7640242	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	7640242	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7640242	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7640242	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7640242	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7640242	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7640242	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7640242	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	7640242	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7640242	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7640242	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7640242	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	7640242	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7640242	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7640242	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	7640242	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7640242	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7640242	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7640242	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	7640242	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	9049686	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	9049686	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	9049686	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	9049686	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	32273	20.0	9049686	0.090	0.37	1.19
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	9049686	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	9049686	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	9049686	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	9049686	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	9049686	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	9049686	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	9049686	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	9049686	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	9049686	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	9049686	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	9049686	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	9049686	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	16845	20.0	9049686	0.033	0.14	0.52
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	9049686	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	9049686	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	9049686	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	9049686	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	9049686	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	9049686	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	9049686	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	9049686	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	9049686	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	15933415	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	15933415	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	10417	20.0	15933415	0.009	0.04	0.16
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	15933415	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	15933415	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	16215	20.0	15933415	0.021	0.09	0.37
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	15933415	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	15933415	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	15933415	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	15933415	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	15933415	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	15933415	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	15933415	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	15933415	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	15933415	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	15933415	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	15933415	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	35280	20.0	15933415	0.029	0.12	0.59
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	15933415	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	15933415	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	15933415	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	15933415	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	15933415	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	15933415	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	15933415	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	15933415	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	15933415	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	15933415	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	15933415	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	15933415	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	15134	20.0	15933415	0.017	0.07	0.77
1	Pentafluorobenzene	0	IS	0.0	0.000	7640242	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	9049686	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	15933415	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6434014	10.0		11.975	119.75	120

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443535A.D
Acq Time : 13 Dec 124 4:00 pm
Sample : T-603
Misc : SCHMIDT
Quant Time: Dec 19 14:59 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.59	168	7640242	20.00	ppbV	-0.23
42) 1,4-Difluorobenzene	10.74	114	9049686	20.00	ppbV	-0.27
71) Chlorobenzene-d5	15.23	117	15933415	20.00	ppbV	-0.35
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.08	98	6434014	11.98	ppbV	119.75
Target Compounds						Qvalue
2) Propylene	4.38	42	95382	1.27	ppbV #	37
14) Acetone	6.31	58	55043	0.71	ppbV #	1
47) Benzene	10.45	78	32273	0.09	ppbV #	64
61) Toluene	13.19	91	16845	0.03	ppbV	91
74) Ethylbenzene	15.57	91	10417	0.01	ppbV m	52
77) Styrene	16.29	104	16215	0.02	ppbV #	72
89) 1,2,4-Trimethylbenzene	18.57	105	35280	0.03	ppbV #	91
102) Hexachlorobutadiene	23.15	225	15134	0.02	ppbV #	91

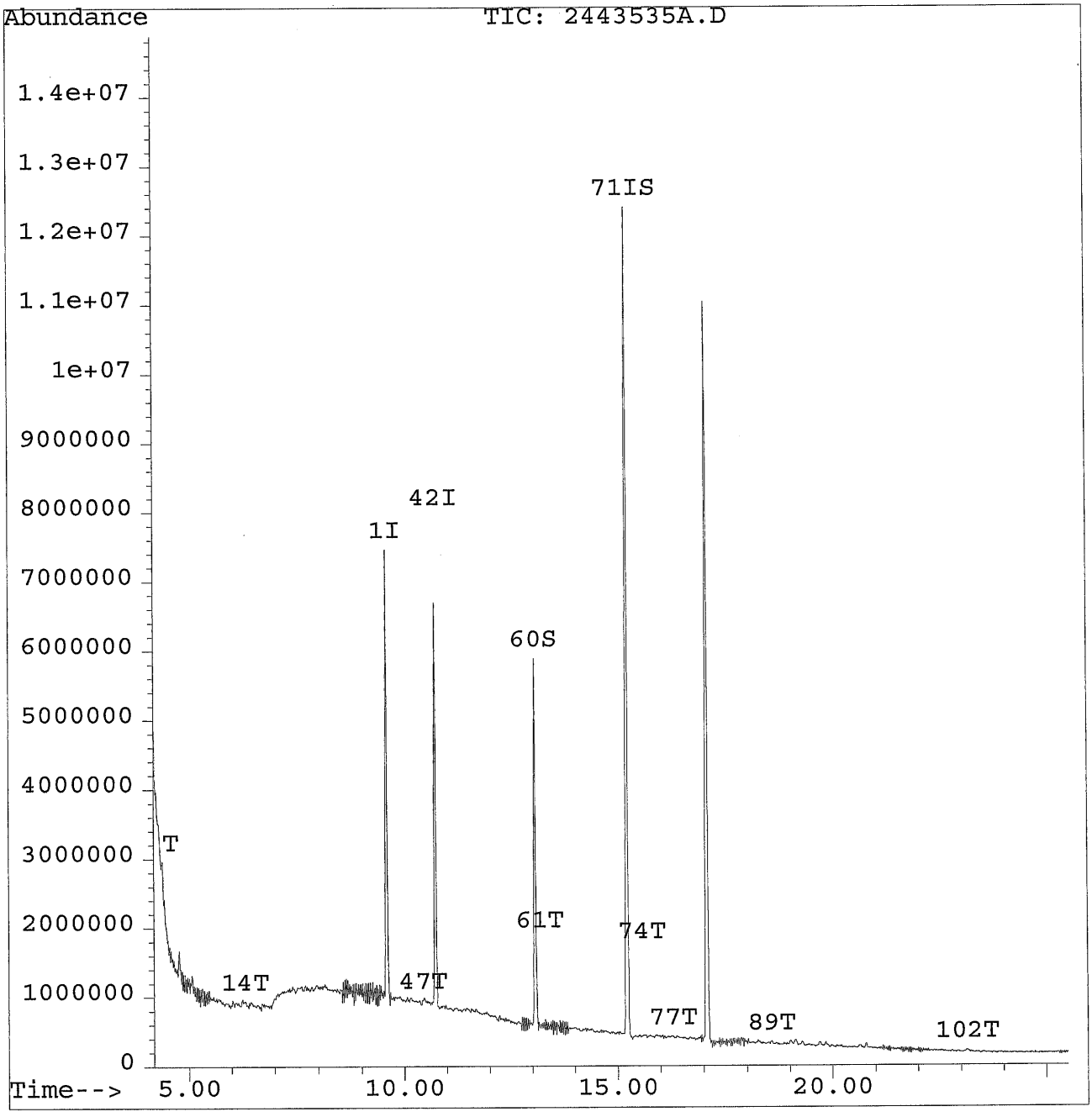
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443535A.D
Acq Time : 13 Dec 124 4:00 pm
Sample : T-603
Misc : SCHMIDT
Quant Time: Dec 19 14:59 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



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Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443535A.D
Acq Time : 13 Dec 124 4:00 pm
Sample : T-603
Misc : SCHMIDT

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	18.34 ppbV	33573988	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	37
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 36

Client ID T-604

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 36**

File Name: 2443536A.D **Date Sampled:** 11/21/24 **Time:** 08:18
Description: T-604 **Date Analyzed:** 12/13/24 **Time:** 16:39
Canister: 738 **Can Dilution Factor:** 1.33
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.11	1.21	0.76	1.91	2.08	
75-71-8	Dichlorodifluoromethane	0.67	1.11	ND	3.29	5.49	ND	
67-56-1	Methanol	2.22	2.66	3.64	2.91	3.49	4.77	
74-87-3	Chloromethane	0.67	1.11	ND	1.38	2.29	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.11	ND	3.10	7.76	ND	
75-01-4	Vinyl chloride	0.22	1.11	ND	0.57	2.84	ND	
106-99-0	1,3-Butadiene	0.22	1.11	ND	0.49	2.46	ND	
74-83-9	Bromomethane	0.44	1.11	ND	1.72	4.31	ND	
75-00-3	Chloroethane	0.44	1.11	ND	1.17	2.93	ND	
64-17-5	Ethanol	2.22	14.23	ND	4.19	26.87	ND	
107-02-8	Acrolein	0.44	1.33	ND	1.02	3.06	ND	
75-69-4	Trichlorofluoromethane	0.44	1.11	ND	2.49	6.24	ND	
67-64-1	Acetone	2.22	2.66	4.36	5.27	6.33	10.37	
67-63-0	2-propanol (isopropylalcohol)	0.89	5.54	ND	2.18	13.64	ND	
75-65-0	t-Butyl alcohol	0.44	4.43	ND	1.35	13.45	ND	
4227-95-6	Methyl iodide	0.44	1.33	ND	2.59	7.78	ND	
75-35-4	1,1-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	
107-13-1	Acrylonitrile	0.89	1.33	ND	1.93	2.89	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.11	ND	1.70	8.51	ND	
107-05-1	Allyl chloride	0.22	4.43	ND	0.69	13.89	ND	
75-09-2	Methylene chloride	0.22	1.11	ND	0.77	3.85	ND	
75-15-0	Carbon disulfide	0.44	1.11	ND	1.38	3.45	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.89	ND	0.88	3.52	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.89	ND	1.60	3.20	ND	
107-12-0	Propionitrile	1.11	1.77	ND	2.50	4.00	ND	
75-34-3	1,1-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.11	ND	1.86	4.64	ND	
108-05-4	Vinyl acetate	0.22	4.43	ND	0.78	15.63	ND	
78-93-3	2-Butanone (MEK)	0.44	1.33	ND	1.31	3.93	ND	
108-20-3	Diisopropyl ether	0.44	2.66	ND	1.86	11.13	ND	
110-54-3	Hexane	0.44	1.11	ND	1.57	3.91	ND	
126-98-7	Methacrylonitrile	0.44	1.11	ND	1.22	3.05	ND	
141-78-6	Ethyl acetate	0.44	1.11	ND	1.60	4.00	ND	
74-97-5	Bromochloromethane	0.22	1.11	ND	1.17	5.87	ND	
96-33-3	Methyl acrylate	0.44	2.22	ND	1.56	7.82	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.33	ND	0.66	3.93	ND	
78-83-1	Isobutyl alcohol	0.89	3.55	ND	2.69	10.76	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.11	ND	0.88	4.40	ND	
594-20-7	2,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
67-66-3	Chloroform	0.22	1.11	ND	1.09	5.42	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
107-06-2	1,2-Dichloroethane	0.22	1.11	ND	0.90	4.49	ND	
563-58-6	1,1-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
110-82-7	Cyclohexane	0.22	1.11	ND	0.76	3.82	ND	
71-43-2	Benzene	1.55	2.22	ND	4.96	7.09	ND	
56-23-5	Carbon tetrachloride	0.22	1.11	ND	1.40	6.98	ND	
994-05-8	t-Amyl methyl ether	0.44	2.22	ND	1.86	9.28	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.11	ND	1.04	5.18	ND	
142-82-5	n-Heptane	0.44	1.11	ND	1.82	4.55	ND	
78-87-5	1,2-Dichloropropane	0.22	1.11	ND	1.03	5.13	ND	
123-91-1	1,4 Dioxane	0.44	2.22	ND	1.60	8.00	ND	
74-95-3	Dibromomethane	0.22	1.11	ND	1.58	7.89	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.11	ND	0.60	5.96	ND	
75-27-4	Bromodichloromethane	0.22	1.11	ND	1.49	7.44	ND	
80-62-6	Methyl methacrylate	0.44	1.11	ND	1.82	4.54	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.55	ND	1.82	14.55	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
108-88-3	Toluene	0.89	1.11	ND	3.34	4.18	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.11	ND	1.01	5.04	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.11	ND	1.21	6.06	ND	
97-63-2	Ethyl methacrylate	0.44	1.11	ND	2.07	5.18	ND	
591-78-6	2-Hexanone	0.44	3.55	ND	1.82	14.55	ND	
142-28-9	1,3-Dichloropropane	0.22	3.10	ND	1.03	14.36	ND	
111-65-9	Octane	0.44	1.11	ND	2.07	5.18	ND	
124-48-1	Dibromochloromethane	0.44	1.11	ND	3.78	9.46	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.11	ND	3.41	8.53	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.11	ND	0.75	7.53	ND	
108-90-7	Chlorobenzene	0.44	1.11	ND	2.04	5.11	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.11	ND	3.05	7.62	ND	
100-41-4	Ethylbenzene	0.44	1.11	ND	1.93	4.82	ND	
1330-20-7	m,p-Xylenes	0.44	1.11	ND	1.93	4.82	ND	
111-84-2	Nonane	0.44	1.11	ND	2.33	5.82	ND	
100-42-5	Styrene	0.67	1.11	ND	2.84	4.73	ND	
75-25-2	Bromoform	0.44	1.11	ND	4.59	11.47	ND	
95-47-6	o-Xylene	0.44	1.11	ND	1.93	4.82	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.89	2.22	ND	6.09	15.23	ND	
96-18-4	1,2,3-Trichloropropane	0.89	2.66	ND	5.35	16.06	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.89	2.66	ND	4.54	13.62	ND	
103-65-1	n-Propylbenzene	0.89	3.10	ND	4.36	15.28	ND	
98-82-8	Isopropylbenzene	0.89	3.10	ND	4.36	15.28	ND	
622-96-8	4-Ethyltoluene	0.89	7.09	ND	4.36	34.92	ND	
108-67-8	1,3,5-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
124-18-5	Decane	0.89	2.66	ND	5.17	15.50	ND	
98-06-6	tert-butyl benzene	0.89	2.66	ND	4.87	14.62	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.89	3.99	ND	4.36	19.64	ND	
538-93-2	i-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
135-98-8	sec-butylbenzene	0.89	3.10	ND	4.87	17.06	ND	
541-73-1	1,3-Dichlorobenzene	0.89	3.55	ND	5.34	21.35	ND	
99-87-6	Isopropyltoluene	0.89	2.66	ND	4.87	14.62	ND	
100-44-7	Benzyl chloride	0.89	2.22	ND	4.60	11.49	ND	
106-46-7	1,4-Dichlorobenzene	0.89	2.22	ND	5.34	13.35	ND	
104-51-8	n-Butylbenzene	0.89	2.66	ND	4.87	14.62	ND	
95-50-1	1,2-Dichlorobenzene	0.89	3.10	ND	5.34	18.68	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.33	3.10	ND	12.87	30.03	ND	
120-82-1	1,2,4-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
91-20-3	Naphthalene	2.22	0.44	ND	11.64	2.33	ND	
87-61-6	1,2,3-Trichlorobenzene	1.33	2.22	ND	9.88	16.47	ND	
87-68-3	Hexachlorobutadiene	1.11	1.33	ND	11.84	14.21	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 36

File Name: 224435
Descriptio 36
Canister: 738
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 08:18
Date Analyzed: 12/13/24 **Time:** 16:39
Can Dilution Factor: 1.33
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.10	6.65	ND	12.71	27.24	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**36**		
File Name:	2443536A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**8:18**
Sample ID:	T-604	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**16:39**
Anal Date:	13 Dec 124 4:39 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**738**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.33**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.273	4.41	42.00	19926
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.821	4.86	31.00	66125
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.983	6.42	58.00	74272
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.114	10.70	78.00	38613
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.067	13.50	91.00	32020
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.010	15.90	106	11323
1330-20-7	m,p-Xylenes	75	TRG	0.024	16.06	91.00	22770
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.029	16.61	104.00	22264
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	0.00	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.017	18.23	105.00	25107
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.014	18.31	105.00	21348
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.022	18.95	105.00	26107
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	311
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7437252**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8508619**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**15861283**
2037-26-5	Toluene-d8	60	SURR	12.328	13.40	98.00	**6227433**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 36
File Name: 2443536A.D
Run Method: A1563_L.M
Can Factor: 1.33
Air Volume: 300.0 ml
Can/Tube Number: 738
Dilution Factor: 0.3990
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3990
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	2.0

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	UG/M3 ResultV PPBV	UG/M3 Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.27	1.21	2.08	1.21	2.08	2.08	2.08	0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.82	3.64	4.77	3.64	4.77	4.77	4.77	0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.98	4.36	10.37	4.36	10.37	10.37	10.37	0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.11	0.51	1.62	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.07	0.30	1.13	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.01	0.04	0.18	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.02	0.10	0.46	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.03	0.13	0.54	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.02	0.08	0.37	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.01	0.06	0.31	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.02	0.10	0.47	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.33	123	123	123	123	123	123	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.44	0.76	1.11	1.91				=		Y	1.21	2.08
0.67	3.29	1.11	5.49	U	ND		ND		Y	0.00	0.00
2.22	2.91	2.66	3.49				=		Y	3.64	4.77
0.67	1.38	1.11	2.29	U	ND		ND		Y	0.00	0.00
0.44	3.10	1.11	7.76	U	ND		ND		Y	0.00	0.00
0.22	0.57	1.11	2.84	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.11	2.46	U	ND		ND		Y	0.00	0.00
0.44	1.72	1.11	4.31	U	ND		ND		Y	0.00	0.00
0.44	1.17	1.11	2.93	U	ND		ND		Y	0.00	0.00
2.22	4.19	14.23	26.87	U	ND		ND		Y	0.00	0.00
0.44	1.02	1.33	3.06	U	ND		ND		Y	0.00	0.00
0.44	2.49	1.11	6.24	U	ND		ND		Y	0.00	0.00
2.22	5.27	2.66	6.33				=		Y	4.36	10.37
0.89	2.18	5.54	13.64	U	ND		ND		Y	0.00	0.00
0.44	1.35	4.43	13.45	U	ND		ND		Y	0.00	0.00
0.44	2.59	1.33	7.78	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.11	4.40	U	ND		ND		Y	0.00	0.00
0.89	1.93	1.33	2.89	U	ND		ND		Y	0.00	0.00
0.22	1.70	1.11	8.51	U	ND		ND		Y	0.00	0.00
0.22	0.69	4.43	13.89	U	ND		ND		Y	0.00	0.00
0.22	0.77	1.11	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.38	1.11	3.45	U	ND		ND		Y	0.00	0.00
0.22	0.88	0.89	3.52	U	ND		ND		Y	0.00	0.00
0.44	1.60	0.89	3.20	U	ND		ND		Y	0.00	0.00
1.11	2.50	1.77	4.00	U	ND		ND		Y	0.00	0.00
0.22	0.90	1.11	4.49	U	ND		ND		Y	0.00	0.00
0.44	1.86	1.11	4.64	U	ND		ND		Y	0.00	0.00
0.22	0.78	4.43	15.63	U	ND		ND		Y	0.00	0.00
0.44	1.31	1.33	3.93	U	ND		ND		Y	0.00	0.00
0.44	1.86	2.66	11.13	U	ND		ND		Y	0.00	0.00
0.44	1.57	1.11	3.91	U	ND		ND		Y	0.00	0.00
0.44	1.22	1.11	3.05	U	ND		ND		Y	0.00	0.00
0.44	1.60	1.11	4.00	U	ND		ND		Y	0.00	0.00
0.22	1.17	1.11	5.87	U	ND		ND		Y	0.00	0.00

0.44	1.56	2.22	7.82	U	ND	ND	Y	0.00	0.00
0.22	0.66	1.33	3.93	U	ND	ND	Y	0.00	0.00
0.89	2.69	3.55	10.76	U	ND	ND	Y	0.00	0.00
0.22	0.88	1.11	4.40	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.11	5.13	U	ND	ND	Y	0.00	0.00
0.22	1.09	1.11	5.42	U	ND	ND	Y	0.00	0.00
0.22	1.21	1.11	6.06	U	ND	ND	Y	0.00	0.00
0.22	0.90	1.11	4.49	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.11	5.04	U	ND	ND	Y	0.00	0.00
0.22	0.76	1.11	3.82	U	ND	ND	Y	0.00	0.00
1.55	4.96	2.22	7.09	U	ND	ND	Y	0.00	0.00
0.22	1.40	1.11	6.98	U	ND	ND	Y	0.00	0.00
0.44	1.86	2.22	9.28	U	ND	ND	Y	0.00	0.00
0.22	1.04	1.11	5.18	U	ND	ND	Y	0.00	0.00
0.44	1.82	1.11	4.55	U	ND	ND	Y	0.00	0.00
0.22	1.03	1.11	5.13	U	ND	ND	Y	0.00	0.00
0.44	1.60	2.22	8.00	U	ND	ND	Y	0.00	0.00
0.22	1.58	1.11	7.89	U	ND	ND	Y	0.00	0.00
0.11	0.60	1.11	5.96	U	ND	ND	Y	0.00	0.00
0.22	1.49	1.11	7.44	U	ND	ND	Y	0.00	0.00
0.44	1.82	1.11	4.54	U	ND	ND	Y	0.00	0.00
0.44	1.82	3.55	14.55	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.11	5.04	U	ND	ND	Y	0.00	0.00
0.89	3.34	1.11	4.18	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.11	5.04	U	ND	ND	Y	0.00	0.00
0.22	1.21	1.11	6.06	U	ND	ND	Y	0.00	0.00
0.44	2.07	1.11	5.18	U	ND	ND	Y	0.00	0.00
0.44	1.82	3.55	14.55	U	ND	ND	Y	0.00	0.00
0.22	1.03	3.10	14.36	U	ND	ND	Y	0.00	0.00
0.44	2.07	1.11	5.18	U	ND	ND	Y	0.00	0.00
0.44	3.78	1.11	9.46	U	ND	ND	Y	0.00	0.00
0.44	3.41	1.11	8.53	U	ND	ND	Y	0.00	0.00
0.11	0.75	1.11	7.53	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.11	5.11	U	ND	ND	Y	0.00	0.00
0.44	3.05	1.11	7.62	U	ND	ND	Y	0.00	0.00
0.44	1.93	1.11	4.82	U	ND	ND	Y	0.00	0.00
0.44	1.93	1.11	4.82	U	ND	ND	Y	0.00	0.00
0.44	2.33	1.11	5.82	U	ND	ND	Y	0.00	0.00
0.67	2.84	1.11	4.73	U	ND	ND	Y	0.00	0.00
0.44	4.59	1.11	11.47	U	ND	ND	Y	0.00	0.00
0.44	1.93	1.11	4.82	U	ND	ND	Y	0.00	0.00
0.89	6.09	2.22	15.23	U	ND	ND	Y	0.00	0.00
0.89	5.35	2.66	16.06	U	ND	ND	Y	0.00	0.00
0.89	4.54	2.66	13.62	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.10	15.28	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.10	15.28	U	ND	ND	Y	0.00	0.00
0.89	4.36	7.09	34.92	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.99	19.64	U	ND	ND	Y	0.00	0.00
0.89	5.17	2.66	15.50	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00
0.89	4.36	3.99	19.64	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00

0.89	4.87	3.10	17.06	U	ND	ND	Y	0.00	0.00
0.89	5.34	3.55	21.35	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00
0.89	4.60	2.22	11.49	U	ND	ND	Y	0.00	0.00
0.89	5.34	2.22	13.35	U	ND	ND	Y	0.00	0.00
0.89	4.87	2.66	14.62	U	ND	ND	Y	0.00	0.00
0.89	5.34	3.10	18.68	U	ND	ND	Y	0.00	0.00
1.33	12.87	3.10	30.03	U	ND	ND	Y	0.00	0.00
1.33	9.88	2.22	16.47	U	ND	ND	Y	0.00	0.00
2.22	11.64	0.44	2.33	U	ND	ND	Y	0.00	0.00
1.33	9.88	2.22	16.47	U	ND	ND	Y	0.00	0.00
1.11	11.84	1.33	14.21	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 36
Sample ID: T-604

Can Factor: 1.33
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	
ND	**0.7**	**1.5**	3.1	6.65	3.10	12.71	6.65	27.24	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**36**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.33
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	19926	20.0	7437252	0.273	1.21	2.08
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7437252	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	66125	20.0	7437252	0.821	3.64	4.77
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	7437252	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7437252	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7437252	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7437252	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7437252	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7437252	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	7437252	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7437252	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7437252	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	74272	20.0	7437252	0.983	4.36	10.37
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	7437252	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7437252	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7437252	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7437252	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7437252	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7437252	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7437252	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7437252	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	7437252	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7437252	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7437252	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7437252	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7437252	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7437252	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7437252	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	7437252	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7437252	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7437252	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7437252	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	7437252	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7437252	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7437252	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	7437252	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7437252	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7437252	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7437252	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	7437252	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	8508619	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	8508619	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	8508619	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	8508619	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	38613	20.0	8508619	0.114	0.51	1.62
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	8508619	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	8508619	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	8508619	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	8508619	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	8508619	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	8508619	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	8508619	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	8508619	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	8508619	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	8508619	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	8508619	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	8508619	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	32020	20.0	8508619	0.067	0.30	1.13
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	8508619	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	8508619	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	8508619	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	8508619	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	8508619	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	8508619	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	8508619	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	8508619	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	8508619	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	15861283	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	15861283	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	11323	20.0	15861283	0.010	0.04	0.18
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	22770	20.0	15861283	0.024	0.10	0.46
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	15861283	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	22264	20.0	15861283	0.029	0.13	0.54
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	15861283	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	15861283	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	15861283	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	15861283	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	15861283	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	15861283	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	15861283	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	25107	20.0	15861283	0.017	0.08	0.37
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	21348	20.0	15861283	0.014	0.06	0.31
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	15861283	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	15861283	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	26107	20.0	15861283	0.022	0.10	0.47
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	311	20.0	15861283	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	15861283	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	15861283	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	15861283	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	15861283	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	15861283	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	15861283	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	15861283	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	15861283	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	15861283	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	15861283	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	15861283	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	15861283	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	7437252	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	8508619	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	15861283	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6227433	10.0		12.328	123.28	123

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443536A.D
Acq Time : 13 Dec 124 4:39 pm Operator: DA
Sample : T-604 Inst : 5970 - M
Misc : SCHMIDT Multiplr: 1.00
Quant Time: Dec 19 15:16 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	7437252	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.75	114	8508619	20.00	ppbV		-0.25
71) Chlorobenzene-d5	15.23	117	15861283	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	6227433	12.33	ppbV		123.28
Target Compounds							Qvalue
2) Propylene	4.36	42	19926	0.27	ppbV		94
4) Methanol	4.81	31	66125	0.82	ppbV	#	90
14) Acetone	6.33	58	74272	0.98	ppbV	#	1
47) Benzene	10.44	78	38613	0.11	ppbV	m	72
61) Toluene	13.19	91	32020	0.07	ppbV	#	85
74) Ethylbenzene	15.57	91	11323	0.01	ppbV	m	81
75) m,p-Xylenes	15.72	91	22770	0.02	ppbV		93
77) Styrene	16.27	104	22264	0.03	ppbV	#	66
85) 4-Ethyltoluene	17.87	105	25107	0.02	ppbV	m	88
86) 1,3,5-Trimethylbenzene	17.96	105	21348	0.01	ppbV	m	80
89) 1,2,4-Trimethylbenzene	18.59	105	26107	0.02	ppbV	#	78
90) i-Butylbenzene	19.37	91	311	0.00	ppbV	m	33

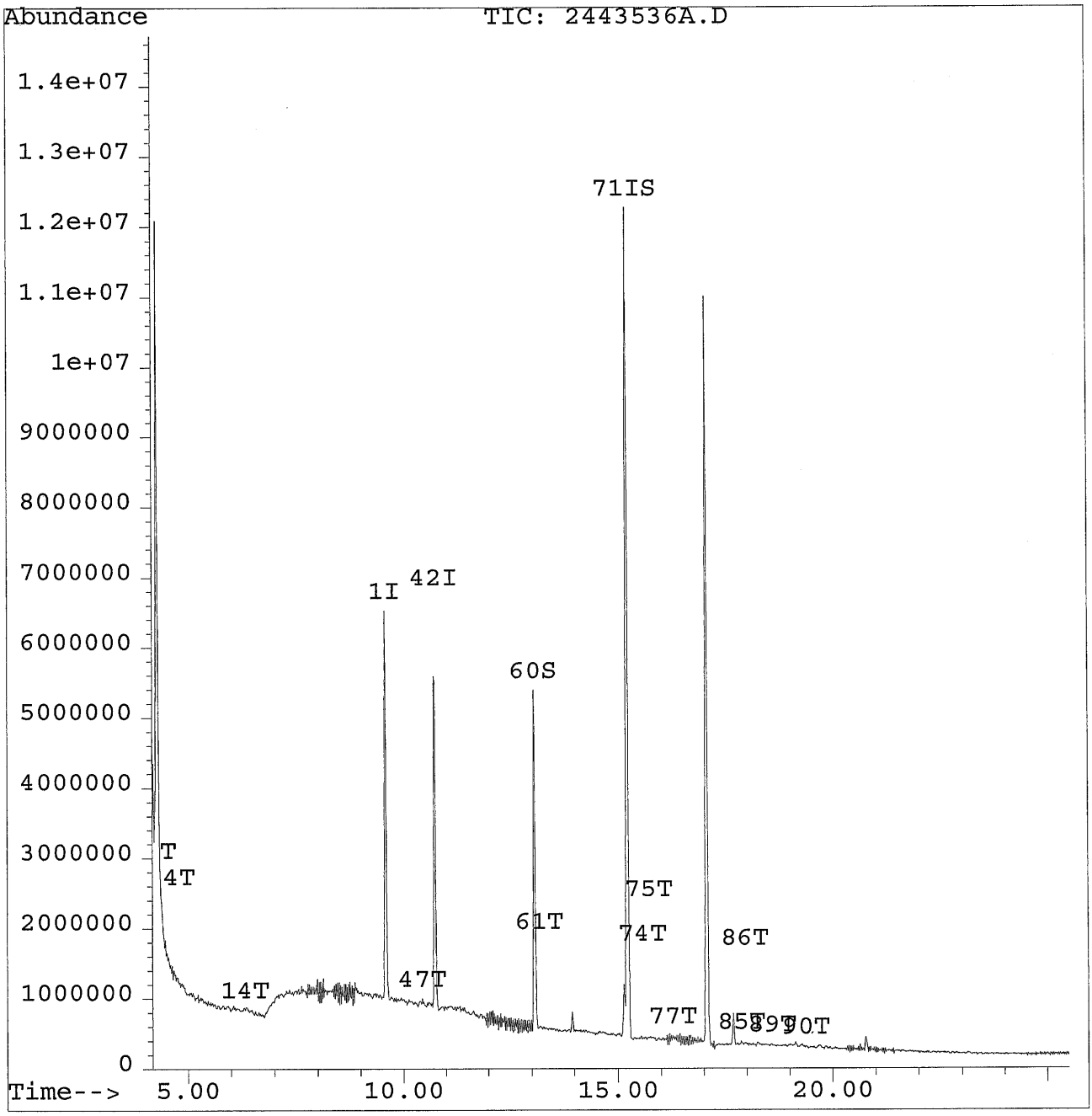
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443536A.D
Acq Time : 13 Dec 124 4:39 pm
Sample : T-604
Misc : SCHMIDT
Quant Time: Dec 19 15:16 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443536A.D
Acq Time : 13 Dec 124 4:39 pm
Sample : T-604
Misc : SCHMIDT

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
4.29	60.10 ppbV	43622625	Pentafluorobenzene	9

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Ethane, 1,1-difluoro-	150	000075-37-6	50

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	16.72 ppbV	31492953	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	86
4	2-Furancarbonyl chloride	4649	000527-69-5	8

****

Peak Number 3 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
17.68	0.57 ppbV	1066724	Chlorobenzene-d5	15

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	35637	000556-67-2	40

Sample Data Packages

SDG Number 224435

Lab Id Number 37

Client ID T-605

Analytical Method TO-15

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Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 37**

File Name: 2443537A.D **Date Sampled:** 11/21/24 **Time:** 09:41
Description: T-605 **Date Analyzed:** 12/16/24 **Time:** 15:45
Canister: 892 **Can Dilution Factor:** 1.31
QC_Batch: 121624-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	28.95	2.86	3.43	37.94	
74-87-3	Chloromethane	0.66	1.09	26.44	1.35	2.26	54.68	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	28.41	1.70	4.24	110.42	
75-00-3	Chloroethane	0.44	1.09	13.79	1.15	2.88	36.43	
107-02-8	Acrolein	0.44	1.31	3.52	1.00	3.01	8.09	
75-69-4	Trichlorofluoromethane	0.44	1.09	2.69	2.46	6.14	15.15	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	0.73	2.56	7.67	4.28	J
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	6.91	0.76	3.80	24.02	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	0.57	0.88	4.43	2.31	J
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	6.58	0.87	4.33	26.11	
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	1.27	1.07	5.34	6.19	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	76.52	0.89	4.43	310.26	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	78.41	0.75	3.76	270.40	
71-43-2	Benzene	1.53	2.18	44.20	4.89	6.98	141.37	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	21.70	1.02	5.11	101.49	
142-82-5	n-Heptane	0.44	1.09	141.13	1.79	4.48	579.17	
78-87-5	1,2-Dichloropropane	0.22	1.09	7.00	1.01	5.05	32.39	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	3.96	0.59	5.87	21.32	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	45.74	1.79	14.34	187.69	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	48.14	2.04	5.11	225.15	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	6.26	0.74	7.41	42.52	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	136.76	1.90	4.75	594.85	
111-84-2	Nonane	0.44	1.09	108.02	2.29	5.74	567.57	
100-42-5	Styrene	0.66	1.09	23.75	2.80	4.66	101.34	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	106.83	1.90	4.75	464.63	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	11.89	4.30	34.39	58.55	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	3.37	4.30	19.35	16.60	J
124-18-5	Decane	0.87	2.62	32.10	5.09	15.27	187.10	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	5.77	4.30	19.35	28.43	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	47.29	4.80	14.40	259.91	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	2.27	11.46	2.29	11.94	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	97	70	130	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 37**

File Name: 2443537B.D **Date Sampled:** 11/21/24 **Time:** 09:41
Description: T-605 **Date Analyzed:** 12/16/24 **Time:** 16:58
Canister: 892 **Can Dilution Factor:** 1.31
QC_Batch: 121624-MA1 **Air Volume:** 5 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	26.20	65.50	963.74	45.15	112.88	1,660.90	
64-17-5	Ethanol	131.00	841.02	311.94	247.33	1,587.87	588.96	J
67-64-1	Acetone	131.00	157.20	5,090.20	311.71	374.06	12,112.05	
67-63-0	2-propanol (isopropylalcohol)	52.40	327.50	1,208.68	128.98	806.11	2,975.04	
75-15-0	Carbon disulfide	26.20	65.50	378.07	81.66	204.14	1,178.32	
78-93-3	2-Butanone (MEK)	26.20	78.60	5,258.46	77.36	232.09	15,527.46	
109-99-9	Tetrahydrofuran	13.18	78.60	208.13	38.92	232.09	614.58	
108-88-3	Toluene	52.40	65.50	722.35	197.65	247.06	2,724.67	
1330-20-7	m,p-Xylenes	26.20	65.50	365.32	113.95	284.89	1,588.95	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	111	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 37

File Name: 224435
Descriptio 37
Canister: 892
QC_Batch: 121624-MA1

Date Sampled: 11/21/24 **Time:** 09:41
Date Analyzed: 12/16/24 **Time:** 15:45
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
Unknown Hydrocarbon	3.06	6.55	133.71	12.52	26.83	547.60
Butane	3.06	6.55	61.74	12.52	26.83	252.88
2-Methyl butane	3.06	6.55	83.67	12.52	26.83	342.65
Thiobis methane	3.06	6.55	78.08	12.52	26.83	319.76
Hexamethyl disiloxane	3.06	6.55	102.44	12.52	26.83	419.55
Methyl cyclohexane	3.06	6.55	67.25	12.52	26.83	275.41
Dimethyl disulfide	3.06	6.55	148.77	12.52	26.83	609.30
4-Methyl heptane	3.06	6.55	64.41	12.52	26.83	263.78
a-Pinene	3.06	6.55	103.80	12.52	26.83	425.10
Limonene	3.06	6.55	66.20	12.52	26.83	271.12

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**37**		
File Name:	2443537A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**9:41**
Sample ID:	T-605	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/16/24**	**Time:**	**15:45**
Anal Date:	16 Dec 124 3:45 pm	**SF:**	**2**	**QCbatch:**	**121624-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**892**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.31**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	124.916	4.41	42.00	11367512
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	6.630	4.86	31.00	664347
74-87-3	Chloromethane	5	TRG	6.055	4.77	50.00	656088
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	6.506	5.56	94.00	735469
75-00-3	Chloroethane	10	TRG	3.158	5.72	64.00	188277
64-17-5	Ethanol	11	TRG	47.250	5.72	46.00	1354999
107-02-8	Acrolein	12	TRG	0.806	6.32	56.00	31974
75-69-4	Trichlorofluoromethane	13	TRG	0.617	6.38	101.00	135774
67-64-1	Acetone	14	TRG	251.455	6.42	58.00	23652646
67-63-0	2-propanol (isopropylalcoh	15	TRG	92.545	6.45	45.00	16856446
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.168	7.19	142.00	54305
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	1.582	7.35	84.00	163286
75-15-0	Carbon disulfide	23	TRG	69.891	7.61	76.00	21247662
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.130	8.41	63.00	29439
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	401.925	8.75	72.00	24696812
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	56.147	9.72	72.00	3573512
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	1.507	9.16	96.00	203381
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.290	9.42	83.00	**60662**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	17.524	10.27	61.95	3755001
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	17.957	10.74	56.00	4320357
71-43-2	Benzene	47	TRG	10.121	10.70	78.00	5806571
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	4.970	11.25	57.00	4066906
142-82-5	n-Heptane	51	TRG	32.321	11.48	71.00	5924888
78-87-5	1,2-Dichloropropane	52	TRG	1.603	11.64	63.00	342665
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.907	10.70	130.00	319443
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	10.474	12.55	58.00	1793977
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	42.316	13.50	91.00	34125425
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	11.024	14.04	85.00	3458213
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	1.434	14.69	166.00	868854
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	31.320	15.90	106	24264870
1330-20-7	m,p-Xylenes	75	TRG	47.685	16.06	91.00	30119115
111-84-2	Nonane	76	TRG	24.736	16.43	57.00	9139622
100-42-5	Styrene	77	TRG	5.438	16.61	104.00	2762808
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	24.464	16.36	91.00	16821747
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	2.724	18.23	105.00	2629459
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.772	18.31	105.00	771040
124-18-5	Decane	87	TRG	7.352	18.60	57.00	4774523
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	1.323	18.95	105.00	1047293
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	10.829	19.53	119.00	13223372
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.521	23.23	128.00	17284
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**9258829**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**14448163**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**10387532**
2037-26-5	Toluene-d8	60	SURR	9.668	13.40	98.00	**8293352**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 37
File Name: 2443537A.D
Run Method: A1563_L.M
Can Factor: 1.31
Air Volume: 300.0 ml
Can/Tube Number: 892
Dilution Factor: 0.3930
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3930
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
		UG/M3			Fixed	Fixed	Fixed	Fixed	(1)	(2)
Propylene	42.08	124.92	545.47	940.05	545.47	940.05	940.05	940.05	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	6.63	28.95	37.94	28.95	37.94	37.94	37.94	**0.500**	**0.600**
Chloromethane	50.5	6.06	26.44	54.68	26.44	54.68	54.68	54.68	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	6.51	28.41	110.42	28.41	110.42	110.42	110.42	**0.100**	**0.250**
Chloroethane	64.5	3.16	13.79	36.43	13.79	36.43	36.43	36.43	**0.100**	**0.250**
Ethanol	46.1	47.25	206.33	389.55	206.33	389.55	389.55	389.55	**0.500**	**3.210**
Acrolein	56.1	0.81	3.52	8.09	3.52	8.09	8.09	8.09	**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.62	2.69	15.15	2.69	15.15	15.15	15.15	**0.100**	**0.250**
Acetone	58.1	251.46	1098.02	2612.73	,098.02	2,612.73	2612.73	2,612.73	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	92.55	404.11	994.68	404.11	994.68	994.68	994.68	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.17	0.73	4.28	0.73	4.28	4.28	4.28	**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	1.58	6.91	24.02	6.91	24.02	24.02	24.02	**0.050**	**0.250**
Carbon disulfide	76.1	69.89	305.19	951.17	305.19	951.17	951.17	951.17	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.13	0.57	2.31	0.57	2.31	2.31	2.31	**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	401.92	1755.07	5182.47	,755.07	5,182.47	5182.47	5,182.47	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	56.15	245.17	723.96	245.17	723.96	723.96	723.96	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	1.51	6.58	26.11	6.58	26.11	26.11	26.11	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.29	1.27	6.19	1.27	6.19	6.19	6.19	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	17.52	76.52	310.26	76.52	310.26	310.26	310.26	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	17.96	78.41	270.40	78.41	270.40	270.40	270.40	**0.050**	**0.250**
Benzene	78.1	10.12	44.20	141.37	44.20	141.37	141.37	141.37	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	4.97	21.70	101.49	21.70	101.49	101.49	101.49	**0.050**	**0.250**
n-Heptane	100.2	32.32	141.13	579.17	141.13	579.17	579.17	579.17	**0.100**	**0.250**
1,2-Dichloropropane	113.0	1.60	7.00	32.39	7.00	32.39	32.39	32.39	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.91	3.96	21.32	3.96	21.32	21.32	21.32	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	10.47	45.74	187.69	45.74	187.69	187.69	187.69	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	42.32	184.78	696.98	184.78	696.98	696.98	696.98	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	11.02	48.14	225.15	48.14	225.15	225.15	225.15	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	1.43	6.26	42.52	6.26	42.52	42.52	42.52	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	31.32	136.76	594.85	136.76	594.85	594.85	594.85	**0.100**	**0.250**
m,p-Xylenes	106.2	47.68	208.22	905.65	208.22	905.65	905.65	905.65	**0.100**	**0.250**
Nonane	128.3	24.74	108.02	567.57	108.02	567.57	567.57	567.57	**0.100**	**0.250**
Styrene	104.2	5.44	23.75	101.34	23.75	101.34	101.34	101.34	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	24.46	106.83	464.63	106.83	464.63	464.63	464.63	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	2.72	11.89	58.55	11.89	58.55	58.55	58.55	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.77	3.37	16.60	3.37	16.60	16.60	16.60	**0.200**	**0.900**
Decane	142.3	7.35	32.10	187.10	32.10	187.10	187.10	187.10	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	1.32	5.77	28.43	5.77	28.43	28.43	28.43	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	10.83	47.29	259.91	47.29	259.91	259.91	259.91	**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.52	2.27	11.94	2.27	11.94	11.94	11.94	**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		9.67	97	97	97	97	97	97	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.75	1.09	1.88				=	E	Y	545.47	940.05
0.66	3.24	1.09	5.41	U	ND		ND		Y	0.00	0.00
2.18	2.86	2.62	3.43				=		Y	28.95	37.94
0.66	1.35	1.09	2.26				=		Y	26.44	54.68
0.44	3.06	1.09	7.64	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.09	2.79	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.09	2.42	U	ND		ND		Y	0.00	0.00
0.44	1.70	1.09	4.24				=		Y	28.41	110.42
0.44	1.15	1.09	2.88				=		Y	13.79	36.43
2.18	4.12	14.02	26.46				=	E	Y	206.33	389.55
0.44	1.00	1.31	3.01				=		Y	3.52	8.09
0.44	2.46	1.09	6.14				=		Y	2.69	15.15
2.18	5.20	2.62	6.23				=	E	Y	1098.02	2612.73
0.87	2.15	5.46	13.44				=	E	Y	404.11	994.68
0.44	1.33	4.37	13.25	U	ND		ND		Y	0.00	0.00
0.44	2.56	1.31	7.67	J	J		=		Y	0.73	4.28
0.22	0.87	1.09	4.33	U	ND		ND		Y	0.00	0.00
0.87	1.90	1.31	2.85	U	ND		ND		Y	0.00	0.00
0.22	1.68	1.09	8.38	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.37	13.68	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.09	3.80				=		Y	6.91	24.02
0.44	1.36	1.09	3.40				=	E	Y	305.19	951.17
0.22	0.87	0.87	3.47	U	ND		ND		Y	0.00	0.00
0.44	1.58	0.87	3.15	U	ND		ND		Y	0.00	0.00
1.09	2.46	1.75	3.94	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.09	4.43	J	J		=		Y	0.57	2.31
0.44	1.83	1.09	4.57	U	ND		ND		Y	0.00	0.00
0.22	0.77	4.37	15.40	U	ND		ND		Y	0.00	0.00
0.44	1.29	1.31	3.87				=	E	Y	1755.07	5182.47
0.44	1.83	2.62	10.97	U	ND		ND		Y	0.00	0.00
0.44	1.54	1.09	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.20	1.09	3.00	U	ND		ND		Y	0.00	0.00
0.44	1.58	1.09	3.94	U	ND		ND		Y	0.00	0.00
0.22	1.16	1.09	5.79	U	ND		ND		Y	0.00	0.00

0.44	1.54	2.18	7.70	U	ND	ND		Y	0.00	0.00
0.22	0.65	1.31	3.87			=	E	Y	245.17	723.96
0.87	2.65	3.49	10.60	U	ND	ND		Y	0.00	0.00
0.22	0.87	1.09	4.33			=		Y	6.58	26.11
0.22	1.01	1.09	5.05	U	ND	ND		Y	0.00	0.00
0.22	1.07	1.09	5.34			=		Y	1.27	6.19
0.22	1.19	1.09	5.96	U	ND	ND		Y	0.00	0.00
0.22	0.89	1.09	4.43			=		Y	76.52	310.26
0.22	0.99	1.09	4.96	U	ND	ND		Y	0.00	0.00
0.22	0.75	1.09	3.76			=		Y	78.41	270.40
1.53	4.89	2.18	6.98			=		Y	44.20	141.37
0.22	1.38	1.09	6.88	U	ND	ND		Y	0.00	0.00
0.44	1.83	2.18	9.14	U	ND	ND		Y	0.00	0.00
0.22	1.02	1.09	5.11			=		Y	21.70	101.49
0.44	1.79	1.09	4.48			=		Y	141.13	579.17
0.22	1.01	1.09	5.05			=		Y	7.00	32.39
0.44	1.58	2.18	7.88	U	ND	ND		Y	0.00	0.00
0.22	1.55	1.09	7.77	U	ND	ND		Y	0.00	0.00
0.11	0.59	1.09	5.87			=		Y	3.96	21.32
0.22	1.46	1.09	7.32	U	ND	ND		Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND		Y	0.00	0.00
0.44	1.79	3.49	14.34			=		Y	45.74	187.69
0.22	0.99	1.09	4.96	U	ND	ND		Y	0.00	0.00
0.87	3.29	1.09	4.12			=	E	Y	184.78	696.98
0.22	0.99	1.09	4.96	U	ND	ND		Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND		Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND		Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND		Y	0.00	0.00
0.22	1.01	3.06	14.15	U	ND	ND		Y	0.00	0.00
0.44	2.04	1.09	5.11			=		Y	48.14	225.15
0.44	3.73	1.09	9.31	U	ND	ND		Y	0.00	0.00
0.44	3.36	1.09	8.40	U	ND	ND		Y	0.00	0.00
0.11	0.74	1.09	7.41			=		Y	6.26	42.52
0.44	2.01	1.09	5.03	U	ND	ND		Y	0.00	0.00
0.44	3.00	1.09	7.50	U	ND	ND		Y	0.00	0.00
0.44	1.90	1.09	4.75			=		Y	136.76	594.85
0.44	1.90	1.09	4.75			=	E	Y	208.22	905.65
0.44	2.29	1.09	5.74			=		Y	108.02	567.57
0.66	2.80	1.09	4.66			=		Y	23.75	101.34
0.44	4.52	1.09	11.30	U	ND	ND		Y	0.00	0.00
0.44	1.90	1.09	4.75			=		Y	106.83	464.63
0.87	6.00	2.18	15.00	U	ND	ND		Y	0.00	0.00
0.87	5.27	2.62	15.82	U	ND	ND		Y	0.00	0.00
0.87	4.47	2.62	13.41	U	ND	ND		Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND		Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND		Y	0.00	0.00
0.87	4.30	6.99	34.39			=		Y	11.89	58.55
0.87	4.30	3.93	19.35	J	J	=		Y	3.37	16.60
0.87	5.09	2.62	15.27			=		Y	32.10	187.10
0.87	4.80	2.62	14.40	U	ND	ND		Y	0.00	0.00
0.87	4.30	3.93	19.35			=		Y	5.77	28.43
0.87	4.80	2.62	14.40	U	ND	ND		Y	0.00	0.00

0.87	4.80	3.06	16.80	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.49	21.03	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40			=	Y	47.29	259.91
0.87	4.53	2.18	11.32	U	ND	ND	Y	0.00	0.00
0.87	5.26	2.18	13.14	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.06	18.40	U	ND	ND	Y	0.00	0.00
1.31	12.68	3.06	29.58	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
2.18	11.46	0.44	2.29			=	Y	2.27	11.94
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
1.09	11.66	1.31	13.99	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 37
Sample ID: T-605

Can Factor: 1.31
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	Unknown	**4.7**	**50**	**30.62**	**100**	TIC	133.7	547.6	133.71
	Butane	5.01	42	**14.14**	**100**	TIC	61.7	252.9	61.74
	2-Methyl b	5.97	91	**19.16**	**100**	TIC	83.7	342.7	83.67
	Thiobis m	6.89	87	**17.88**	**100**	TIC	78.1	319.8	78.08
	Hexameth	10.58	64	**23.46**	**100**	TIC	102.4	419.6	102.44
	Methyl cyc	12.08	90	**15.40**	**100**	TIC	67.2	275.4	67.25
	Dimethyl d	12.66	94	**34.07**	**100**	TIC	148.8	609.3	148.77
	4-Methyl h	12.81	72	**14.75**	**100**	TIC	64.4	263.8	64.41
	a-Pinene	17.38	95	**23.77**	**100**	TIC	103.8	425.1	103.80
	Limonene	19.31	86	**15.16**	**100**	TIC	66.2	271.1	66.20
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 910.1 3727.1

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
547.60	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
252.88	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
342.65	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
319.76	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
419.55	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
275.41	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
609.30	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
263.78	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
425.10	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
271.12	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**37**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.31
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) / (Avg RFn) × (Cistdi) / (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) × 1000 / (SV) × (CDF)

4) Amount ug/m3 = (amt(ppbv) × MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	11367512	20.0	9258829	124.916	545.47	940.05
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	9258829	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	664347	20.0	9258829	6.630	28.95	37.94
5	Chloromethane	PFB	TRG	50.5	0.234	656088	20.0	9258829	6.055	26.44	54.68
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	9258829	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	9258829	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	9258829	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	735469	20.0	9258829	6.506	28.41	110.42
10	Chloroethane	PFB	TRG	64.5	0.129	188277	20.0	9258829	3.158	13.79	36.43
11	Ethanol	PFB	TRG	46.1	0.062	1354999	20.0	9258829	47.250	206.33	389.55
12	Acrolein	PFB	TRG	56.1	0.086	31974	20.0	9258829	0.806	3.52	8.09
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	135774	20.0	9258829	0.617	2.69	15.15
14	Acetone	PFB	TRG	58.1	0.203	23652646	20.0	9258829	251.455	1098.02	2612.73
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	16856446	20.0	9258829	92.545	404.11	994.68
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	9258829	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	54305	20.0	9258829	0.168	0.73	4.28
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	9258829	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	9258829	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	9258829	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	9258829	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	163286	20.0	9258829	1.582	6.91	24.02
23	Carbon disulfide	PFB	TRG	76.1	0.657	21247662	20.0	9258829	69.891	305.19	951.17
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	9258829	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	9258829	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	9258829	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	29439	20.0	9258829	0.130	0.57	2.31
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	9258829	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	9258829	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	24696812	20.0	9258829	401.925	1755.07	5182.47
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	9258829	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	9258829	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	9258829	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	9258829	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	9258829	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	9258829	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	3573512	20.0	9258829	56.147	245.17	723.96
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	9258829	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	203381	20.0	9258829	1.507	6.58	26.11
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	9258829	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	60662	20.0	9258829	0.290	1.27	6.19
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	14448163	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	3755001	20.0	14448163	17.524	76.52	310.26
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	14448163	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	4320357	20.0	14448163	17.957	78.41	270.40
47	Benzene	14DF	TRG	78.1	0.794	5806571	20.0	14448163	10.121	44.20	141.37
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	14448163	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	14448163	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	4066906	20.0	14448163	4.970	21.70	101.49
51	n-Heptane	14DF	TRG	100.2	0.254	5924888	20.0	14448163	32.321	141.13	579.17
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	342665	20.0	14448163	1.603	7.00	32.39
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	14448163	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	14448163	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	319443	20.0	14448163	0.907	3.96	21.32
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	14448163	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	14448163	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	1793977	20.0	14448163	10.474	45.74	187.69
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	14448163	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	34125425	20.0	14448163	42.316	184.78	696.98
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	14448163	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	14448163	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	14448163	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	14448163	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	14448163	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	3458213	20.0	14448163	11.024	48.14	225.15
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	14448163	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	14448163	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	868854	20.0	14448163	1.434	6.26	42.52
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	10387532	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	10387532	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	24264870	20.0	10387532	31.320	136.76	594.85
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	30119115	20.0	10387532	47.685	208.22	905.65
76	Nonane	d5CB	TRG	128.3	0.711	9139622	20.0	10387532	24.736	108.02	567.57
77	Styrene	d5CB	TRG	104.2	0.978	2762808	20.0	10387532	5.438	23.75	101.34
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	10387532	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	16821747	20.0	10387532	24.464	106.83	464.63
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	10387532	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	10387532	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	10387532	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	10387532	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	10387532	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	2629459	20.0	10387532	2.724	11.89	58.55
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	771040	20.0	10387532	0.772	3.37	16.60
87	Decane	d5CB	TRG	142.3	1.250	4774523	20.0	10387532	7.352	32.10	187.10
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	10387532	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	1047293	20.0	10387532	1.323	5.77	28.43
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	10387532	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	10387532	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	10387532	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	13223372	20.0	10387532	10.829	47.29	259.91
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	10387532	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	10387532	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	10387532	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	10387532	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	10387532	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	10387532	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	17284	20.0	10387532	0.521	2.27	11.94
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	10387532	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	10387532	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	9258829	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	14448163	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	10387532	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8293352	10.0		9.668	96.68	97

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm
Sample : T-605
Misc : SCHMIDT, 300 ML
Quant Time: Dec 20 15:43 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	9258829	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.73	114	14448163	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.23	117	10387532	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8293352	9.67	ppbV		96.68
Target Compounds							Qvalue
2) Propylene	4.31	42	11367512	124.92	ppbV		84
4) Methanol	4.77	31	664347	6.63	ppbV	#	100
5) Chloromethane	4.65	50	656088	6.06	ppbV	#	90
9) Bromomethane	5.42	94	735469	6.51	ppbV		99
10) Chloroethane	5.58	64	188277	3.16	ppbV		95
11) Ethanol	5.63	46	1354999	47.25	ppbV		86
12) Acrolein	6.16	56	31974	0.81	ppbV	m	52
13) Trichlorofluoromethane	6.19	101	135774	0.62	ppbV		95
14) Acetone	6.26	58	23652646	251.46	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.34	45	16856446	92.55	ppbV	#	97
17) Methyl iodide	6.98	142	54305	0.17	ppbV	#	86
22) Methylene chloride	7.15	84	163286	1.58	ppbV		94
23) Carbon disulfide	7.39	76	21247662	69.89	ppbV	#	87
27) 1,1-Dichloroethane	8.17	63	29439	0.13	ppbV	#	94
30) 2-Butanone (MEK)	8.55	72	24696812	401.92	ppbV	#	64
37) Tetrahydrofuran	9.47	72	3573512	56.15	ppbV		98
39) cis-1,2-Dichloroethene	8.94	96	203381	1.51	ppbV		84
41) Chloroform	9.18	83	60662	0.29	ppbV		99
44) 1,2-Dichloroethane	10.01	62	3755001	17.52	ppbV	#	89
46) Cyclohexane	10.46	56	4320357	17.96	ppbV	#	74
47) Benzene	10.42	78	5806571	10.12	ppbV	m	85
50) 2,2,4-Trimethylpentane	10.97	57	4066906	4.97	ppbV	#	59
51) n-Heptane	11.19	71	5924888	32.32	ppbV		95
52) 1,2-Dichloropropane	11.34	63	342665	1.60	ppbV		97
55) Trichloroethene (TCE)	11.38	130	319443	0.91	ppbV	#	86
58) 4-Methyl-2-pentanone (MIBK	12.25	58	1793977	10.47	ppbV		83
61) Toluene	13.20	91	34125425	42.32	ppbV	#	48
67) Octane	13.73	85	3458213	11.02	ppbV	#	83
70) Tetrachloroethene (PCE)	14.35	166	868854	1.43	ppbV		91
74) Ethylbenzene	15.57	91	24264870	31.32	ppbV	#	60
75) m,p-Xylenes	15.76	91	30119115	47.68	ppbV	#	47
76) Nonane	16.10	57	9139622	24.74	ppbV	#	85
77) Styrene	16.27	104	2762808	5.44	ppbV	#	71
79) o-Xylene	16.36	91	16821747	24.46	ppbV	#	82
85) 4-Ethyltoluene	17.82	105	2629459	2.72	ppbV	m	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm Operator: TR
Sample : T-605 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00
Quant Time: Dec 20 15:43 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
86)	1,3,5-Trimethylbenzene	17.96	105	771040	0.77	ppbV	#	84
87)	Decane	18.27	57	4774523	7.35	ppbV	#	69
89)	1,2,4-Trimethylbenzene	18.57	105	1047293	1.32	ppbV	#	89
93)	Isopropyltoluene	19.17	119	13223372	10.83	ppbV	#	91
100)	Naphthalene	22.87	128	17284	0.52	ppbV	m	94

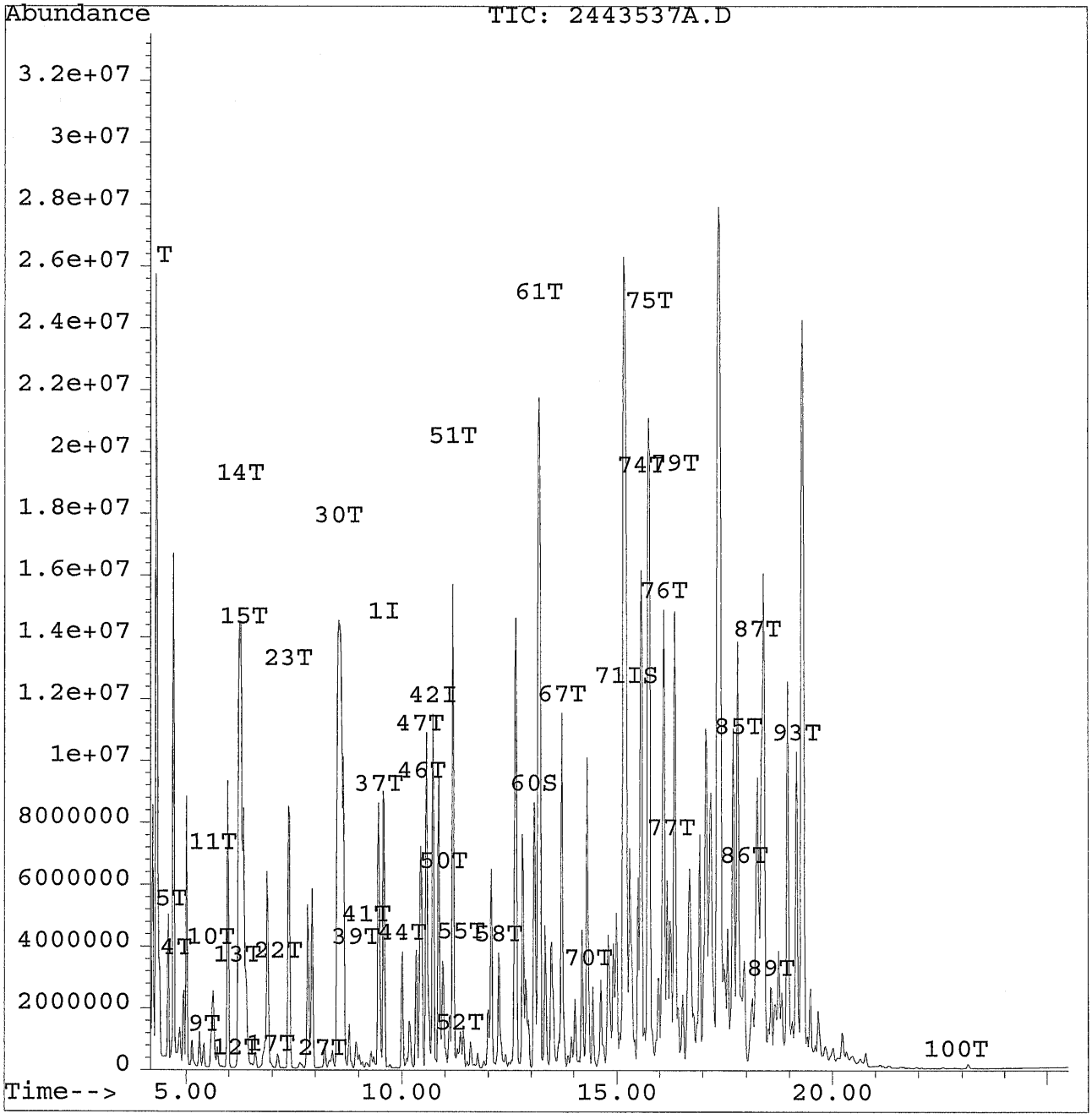
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm
Sample : T-605
Misc : SCHMIDT, 300 ML
Quant Time: Dec 20 15:43 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm Operator: TR
Sample : T-605 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

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Peak Number 4 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
6.89	17.88 ppbV	21583354	Pentafluorobenzene	9

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Methane, thiobis-	136	000075-18-3	87
2	Ethanethiol	135	000075-08-1	56
3	Ethene, chloro-	132	000075-01-4	40

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Peak Number 5 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
10.58	23.46 ppbV	34948295	1,4-Difluorobenzene	10

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Silane, 1,4-phenylenebis[trimethyl-	23816	013183-70-5	64
2	Disiloxane, hexamethyl-	11012	000107-46-0	32

****

Peak Number 6 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
10.86	16.45 ppbV	24505913	1,4-Difluorobenzene	10

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm Operator: TR
Sample : T-605 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

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Peak Number 7 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
12.08	15.40 ppbV	22940038	1,4-Difluorobenzene	10

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, methyl-	1211	000108-87-2	90
2	1H-Pyrazole, 4,5-dihydro-1,5-dimeth	1120	005775-96-2	59
3	2-Pentene, 3,4-dimethyl-, (E)-	1240	004914-92-5	58
4	1H-Pyrazole, 4,5-dihydro-4,5-dimeth	1126	028019-94-5	53
5	2-Pentene, 2,3-dimethyl-	1208	010574-37-5	50

****

Peak Number 8 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
12.66	34.07 ppbV	50756059	1,4-Difluorobenzene	10

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Disulfide, dimethyl	913	000624-92-0	94

****

Peak Number 9 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
12.81	14.75 ppbV	21969928	1,4-Difluorobenzene	10

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 4-methyl-	2753	000589-53-7	72
2	Pentane, 3-ethyl-	1444	000617-78-7	59
3	Pentane, 3-ethyl-2-methyl-	2755	000609-26-7	56
4	Pentane, 2,3,3-trimethyl-	2745	000560-21-4	53
5	Pentane, 2,3,4-trimethyl-	2757	000565-75-3	52

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm Operator: TR
Sample : T-605 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

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Peak Number 10 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
15.16	20.00 ppbV	141312259	Chlorobenzene-d5	15

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-chloro-4-(trifluoromethy	14995	000098-56-6	96
2	1,3-Benzenedicarboxylic acid, monom	15056	001877-71-0	22
3	2-Piperidinecarboxylic acid, 1-(tri	33592	054965-28-5	10

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Peak Number 11 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
17.38	23.77 ppbV	167952052	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	.alpha.-Pinene	5805	000080-56-8	95
2	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	91
3	Cyclohexene, 4-methylene-1-(1-methy	5732	000099-84-3	81
4	Cyclohexene, 1-methyl-5-(1-methylet	5818	013898-73-2	72
5	Bicyclo[3.1.0]hexane, 4-methyl-1-(1	5777	058037-87-9	72

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Peak Number 12 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
19.31	15.16 ppbV	107093061	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[2.2.1]hept-2-ene, 1,7,7-tri	5755	000464-17-5	94
2	Limonene	5774	000138-86-3	86
3	Cyclohexene, 1-methyl-4-(1-methylet	5760	007705-14-8	81
4	Cyclohexene, 1-methyl-4-(1-methylet	5798	005989-54-8	81
5	D-Limonene	5790	005989-27-5	81

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537B.D
Acq Time : 16 Dec 124 4:58 pm
Sample : T-605
Misc : SCHMIDT, 5 ML
Quant Time: Dec 29 14:47 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	10752622	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.73	114	15598961	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.22	117	18580312	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	10298959	11.12	ppbV		111.21
Target Compounds							Qvalue
2) Propylene	4.35	42	388743	3.68	ppbV		92
4) Methanol	4.81	31	37284	0.32	ppbV	#	87
5) Chloromethane	4.69	50	40663	0.32	ppbV	#	83
9) Bromomethane	5.46	94	40586	0.31	ppbV		95
11) Ethanol	5.63	46	39652	1.19	ppbV		99
14) Acetone	6.28	58	2122319	19.43	ppbV	#	24
15) 2-propanol (isopropylalcoh	6.33	45	975844	4.61	ppbV	#	90
23) Carbon disulfide	7.42	76	509475	1.44	ppbV	#	91
29) Vinyl acetate	8.41	43	18612	0.34	ppbV	#	58
30) 2-Butanone (MEK)	8.55	72	1432226	20.07	ppbV	#	64
37) Tetrahydrofuran	9.50	72	58717	0.79	ppbV	m	95
44) 1,2-Dichloroethane	10.02	62	71583	0.31	ppbV	#	83
46) Cyclohexane	10.48	56	84211	0.32	ppbV	#	67
47) Benzene	10.44	78	183599	0.30	ppbV		98
51) n-Heptane	11.19	71	116873	0.59	ppbV	#	84
61) Toluene	13.19	91	2400529	2.76	ppbV		96
74) Ethylbenzene	15.56	91	815480	0.59	ppbV		92
75) m,p-Xylenes	15.73	91	1575354	1.39	ppbV	#	83
76) Nonane	16.09	57	325837	0.49	ppbV	#	92
79) o-Xylene	16.34	91	453490	0.37	ppbV		87
80) 1,1,2,2-Tetrachloroethane	16.68	83	21940	0.02	ppbV	#	86
91) sec-butylbenzene	18.95	105	48349	0.02	ppbV	#	1
92) 1,3-Dichlorobenzene	19.02	146	44798	0.04	ppbV		92
93) Isopropyltoluene	19.16	119	498474	0.23	ppbV		98
94) Benzyl chloride	18.95	91	118237	0.20	ppbV	#	74
95) 1,4-Dichlorobenzene	19.02	146	44798	0.04	ppbV		92
96) n-Butylbenzene	19.84	91	53395	0.03	ppbV		97
97) 1,2-Dichlorobenzene	19.70	146	46017	0.04	ppbV		96

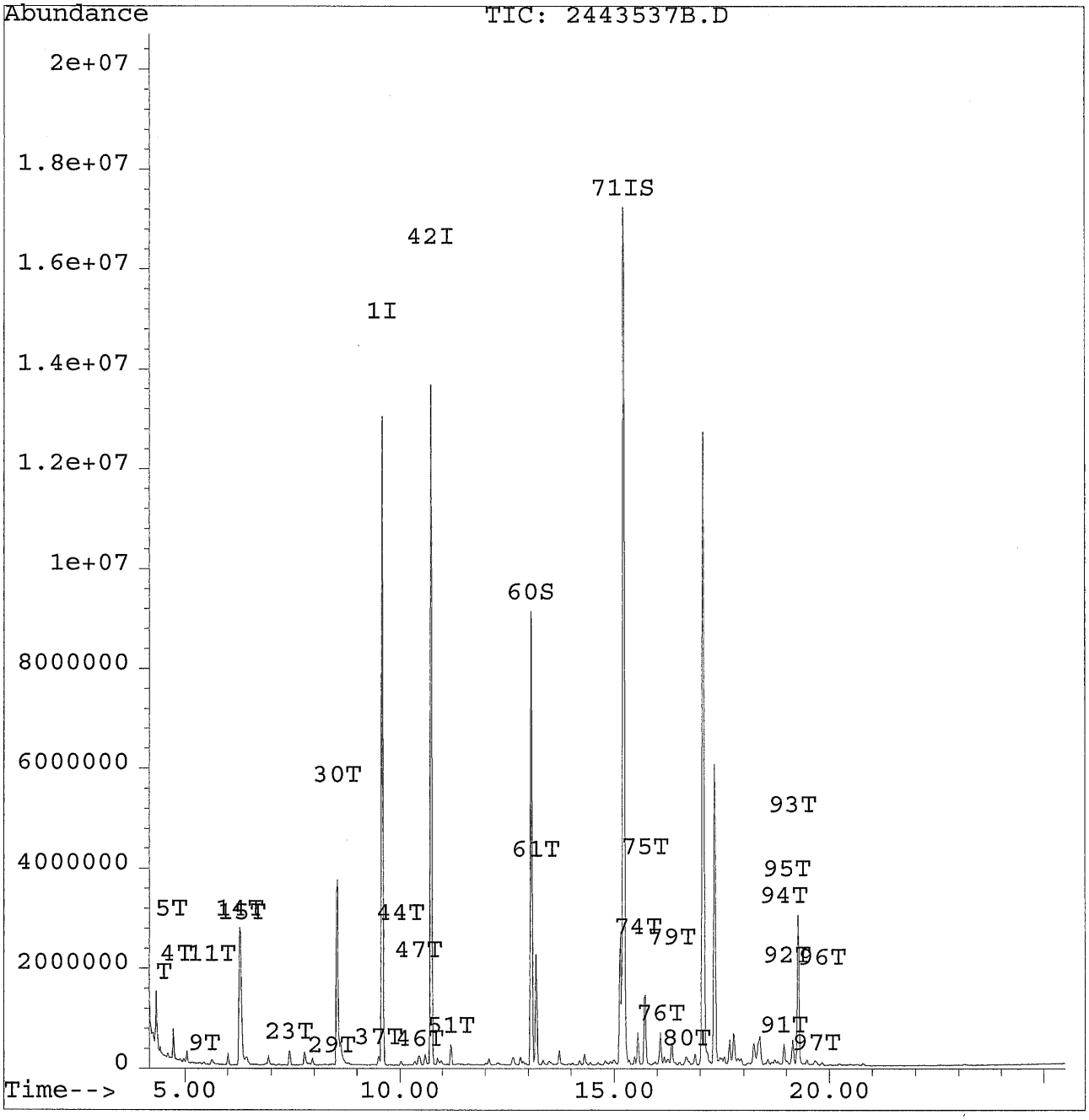
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537B.D
Acq Time : 16 Dec 124 4:58 pm
Sample : T-605
Misc : SCHMIDT, 5 ML
Quant Time: Dec 29 14:47 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12164A\2443537A.D
Acq Time : 16 Dec 124 3:45 pm Operator: TR
Sample : T-605 Inst : 5970 - M
Misc : SCHMIDT, 300 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
4.70	30.62 ppbV	36948646	Pentafluorobenzene	9

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0

****

Peak Number 2 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
5.01	14.14 ppbV	17058724	Pentafluorobenzene	9

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Butane	98	000106-97-8	42

****

Peak Number 3 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
5.97	19.16 ppbV	23120956	Pentafluorobenzene	9

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-methyl-	272	000078-78-4	91
2	Propane, 2-methyl-2-nitro-	1633	000594-70-7	7

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**37**		
File Name:	2443537B.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**9:41**
Sample ID:	T-605	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 5 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/16/24**	**Time:**	**16:58**
Anal Date:	16 Dec 124 4:58 pm	**SF:**	**2**	**QCbatch:**	**121624-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**5.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**892**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.31**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	3.678	4.41	42.00	388743
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.320	4.86	31.00	37284
74-87-3	Chloromethane	5	TRG	0.323	4.77	50.00	40663
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.309	5.56	94.00	40586
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	1.191	5.72	46.00	39652
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	19.428	6.42	58.00	2122319
67-63-0	2-propanol (isopropylalcoh	15	TRG	4.613	6.45	45.00	975844
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	1.443	7.61	76.00	509475
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.335	8.39	43.00	18612
78-93-3	2-Butanone (MEK)	30	TRG	20.070	8.75	72.00	1432226
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.794	9.72	72.00	58717
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.309	10.27	61.95	71583
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.324	10.74	56.00	84211
71-43-2	Benzene	47	TRG	0.296	10.70	78.00	183599
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.591	11.48	71.00	116873
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	2.757	13.50	91.00	2400529
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.588	15.90	106	815480
1330-20-7	m,p-Xylenes	75	TRG	1.394	16.06	91.00	1575354
111-84-2	Nonane	76	TRG	0.493	16.43	57.00	325837
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.369	16.34	91.00	453490
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.019	17.02	83.00	21940
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.020	19.32	105.00	48349
541-73-1	1,3-Dichlorobenzene	92	TRG	0.039	19.39	146.00	44798
99-87-6	Isopropyltoluene	93	TRG	0.228	19.53	119.00	498474
100-44-7	Benzyl chloride	94	TRG	0.202	19.46	91.00	118237
106-46-7	1,4-Dichlorobenzene	95	TRG	0.038	19.39	146.00	44798
104-51-8	n-Butylbenzene	96	TRG	0.026	20.20	91.00	53395
95-50-1	1,2-Dichlorobenzene	97	TRG	0.038	20.07	146.00	46017
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**10752622**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**15598961**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18580312**
2037-26-5	Toluene-d8	60	SURR	11.121	13.40	98.00	**10298959**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 37
File Name: 2443537B.D
Run Method: A1563_L.M
Can Factor: 1.31
Air Volume: 5.0 ml
Can/Tube Number: 892
Dilution Factor: 0.0066
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.0066
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	2.0

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	3.68	963.74	1660.90	963.74	1,660.90	1660.90	1,660.90	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.32	83.94	110.01	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.32	84.66	175.10	84.66	175.10	175.10	175.10	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.31	81.00	314.82	81.00	314.82	314.82	314.82	**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	1.19	311.94	588.96	311.94	588.96	588.96	588.96	**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	19.43	5090.20	12112.05	,090.20	12,112.05	12112.05	12,112.05	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	4.61	1208.68	2975.04	,208.68	2,975.04	2975.04	2,975.04	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	1.44	378.07	1178.32	378.07	1,178.32	1178.32	1,178.32	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.34	87.78	309.53	87.78	309.53	309.53	309.53	**0.050**	**1.000**
2-Butanone (MEK)	72.1	20.07	5258.46	15527.46	,258.46	15,527.46	15527.46	15,527.46	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.79	208.13	614.58	208.13	614.58	614.58	614.58	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.31	81.07	328.70	81.07	328.70	328.70	328.70	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.32	84.94	292.90	84.94	292.90	292.90	292.90	**0.050**	**0.250**
Benzene	78.1	0.30	77.66	248.41	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.59	154.71	634.90	154.71	634.90	634.90	634.90	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	2.76	722.35	2724.67	722.35	2,724.67	2724.67	2,724.67	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.59	154.18	670.58	154.18	670.58	670.58	670.58	**0.100**	**0.250**
m,p-Xylenes	106.2	1.39	365.32	1588.95	365.32	1,588.95	1588.95	1,588.95	**0.100**	**0.250**
Nonane	128.3	0.49	129.17	678.74	129.17	678.74	678.74	678.74	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.37	96.60	420.16	96.60	420.16	420.16	420.16	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.02	5.07	34.85	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.02	5.33	29.28	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.04	10.30	62.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.23	59.80	328.64	59.80	328.64	328.64	328.64	**0.200**	**0.600**
Benzyl chloride	126.6	0.20	52.80	273.76	52.80	273.76	273.76	273.76	**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.04	9.89	59.53	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.03	6.72	36.96	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.04	9.90	59.60	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.12	111	111	111	111	111	111	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
26.20	45.15	65.50	112.88				=		Y	963.74	1660.90
39.30	194.59	65.50	324.32	U	ND		ND		Y	0.00	0.00
131.00	171.68	157.20	206.02	U	ND		ND		Y	0.00	0.00
39.30	81.28	65.50	135.47				=		Y	84.66	175.10
26.20	183.38	65.50	458.45	U	ND		ND		Y	0.00	0.00
13.18	33.73	65.50	167.66	U	ND		ND		Y	0.00	0.00
13.18	29.20	65.50	145.13	U	ND		ND		Y	0.00	0.00
26.20	101.83	65.50	254.57				=		Y	81.00	314.82
26.20	69.21	65.50	173.02	U	ND		ND		Y	0.00	0.00
131.00	247.33	841.02	1587.87	J	J		=		Y	311.94	588.96
26.20	60.20	78.60	180.59	U	ND		ND		Y	0.00	0.00
26.20	147.43	65.50	368.58	U	ND		ND		Y	0.00	0.00
131.00	311.71	157.20	374.06				=		Y	5090.20	12112.05
52.40	128.98	327.50	806.11				=		Y	1208.68	2975.04
26.20	79.51	262.00	795.11	U	ND		ND		Y	0.00	0.00
26.20	153.33	78.60	460.00	U	ND		ND		Y	0.00	0.00
13.10	51.99	65.50	259.94	U	ND		ND		Y	0.00	0.00
52.40	113.95	78.60	170.93	U	ND		ND		Y	0.00	0.00
13.10	100.54	65.50	502.71	U	ND		ND		Y	0.00	0.00
13.10	41.04	262.00	820.86	U	ND		ND		Y	0.00	0.00
13.10	45.55	65.50	227.75	U	ND		ND		Y	0.00	0.00
26.20	81.66	65.50	204.14				=		Y	378.07	1178.32
13.10	51.99	52.40	207.95	U	ND		ND		Y	0.00	0.00
26.20	94.53	52.40	189.07	U	ND		ND		Y	0.00	0.00
65.50	147.81	104.80	236.49	U	ND		ND		Y	0.00	0.00
13.07	52.98	65.50	265.57	U	ND		ND		Y	0.00	0.00
26.20	109.66	65.50	274.16	U	ND		ND		Y	0.00	0.00
13.10	46.19	262.00	923.87	J	J		=		Y	87.78	309.53
26.20	77.36	78.60	232.09				=		Y	5258.46	15527.46
26.20	109.66	157.20	657.98	U	ND		ND		Y	0.00	0.00
26.20	92.49	65.50	231.24	U	ND		ND		Y	0.00	0.00
26.20	72.00	65.50	180.00	U	ND		ND		Y	0.00	0.00
26.20	94.53	65.50	236.33	U	ND		ND		Y	0.00	0.00
13.10	69.42	65.50	347.12	U	ND		ND		Y	0.00	0.00

26.20	92.39	131.00	461.94	U	ND	ND	Y	0.00	0.00
13.18	38.92	78.60	232.09			=	Y	208.13	614.58
52.40	159.02	209.60	636.09	U	ND	ND	Y	0.00	0.00
13.10	51.99	65.50	259.94	U	ND	ND	Y	0.00	0.00
13.10	60.63	65.50	303.13	U	ND	ND	Y	0.00	0.00
13.14	64.26	65.50	320.30	U	ND	ND	Y	0.00	0.00
13.10	71.57	65.50	357.85	U	ND	ND	Y	0.00	0.00
13.10	53.11	65.50	265.57			=	Y	81.07	328.70
13.10	59.55	65.50	297.76	U	ND	ND	Y	0.00	0.00
13.10	45.17	65.50	225.87			=	Y	84.94	292.90
91.70	293.31	131.00	419.01	U	ND	ND	Y	0.00	0.00
13.10	82.52	65.50	412.58	U	ND	ND	Y	0.00	0.00
26.20	109.66	131.00	548.31	U	ND	ND	Y	0.00	0.00
13.10	61.27	65.50	306.35	U	ND	ND	Y	0.00	0.00
26.20	107.52	65.50	268.79			=	Y	154.71	634.90
13.10	60.63	65.50	303.13	U	ND	ND	Y	0.00	0.00
26.20	94.53	131.00	472.67	U	ND	ND	Y	0.00	0.00
13.10	93.26	65.50	466.31	U	ND	ND	Y	0.00	0.00
6.55	35.25	65.50	352.49	U	ND	ND	Y	0.00	0.00
13.10	87.88	65.50	439.40	U	ND	ND	Y	0.00	0.00
26.20	107.41	65.50	268.52	U	ND	ND	Y	0.00	0.00
26.20	107.52	209.60	860.13	U	ND	ND	Y	0.00	0.00
13.10	59.55	65.50	297.76	U	ND	ND	Y	0.00	0.00
52.40	197.65	65.50	247.06			=	Y	722.35	2724.67
13.10	59.55	65.50	297.76	U	ND	ND	Y	0.00	0.00
13.10	71.57	65.50	357.85	U	ND	ND	Y	0.00	0.00
26.20	122.54	65.50	306.35	U	ND	ND	Y	0.00	0.00
26.20	107.52	209.60	860.13	U	ND	ND	Y	0.00	0.00
13.10	60.63	183.40	848.76	U	ND	ND	Y	0.00	0.00
26.20	122.54	65.50	306.35	U	ND	ND	Y	0.00	0.00
26.20	223.51	65.50	558.78	U	ND	ND	Y	0.00	0.00
26.20	201.62	65.50	504.05	U	ND	ND	Y	0.00	0.00
6.55	44.48	65.50	444.77	U	ND	ND	Y	0.00	0.00
26.20	120.82	65.50	302.06	U	ND	ND	Y	0.00	0.00
26.20	180.05	65.50	450.13	U	ND	ND	Y	0.00	0.00
26.20	113.95	65.50	284.89			=	Y	154.18	670.58
26.20	113.95	65.50	284.89			=	Y	365.32	1588.95
26.20	137.67	65.50	344.17			=	Y	129.17	678.74
39.30	167.71	65.50	279.52	U	ND	ND	Y	0.00	0.00
26.20	271.15	65.50	677.88	U	ND	ND	Y	0.00	0.00
26.20	113.95	65.50	284.89			=	Y	96.60	420.16
52.40	360.11	131.00	900.26	U	ND	ND	Y	0.00	0.00
52.40	316.33	157.20	948.98	U	ND	ND	Y	0.00	0.00
52.40	268.26	157.20	804.77	U	ND	ND	Y	0.00	0.00
52.40	257.95	183.40	902.84	U	ND	ND	Y	0.00	0.00
52.40	257.95	183.40	902.84	U	ND	ND	Y	0.00	0.00
52.40	257.95	419.20	2063.63	U	ND	ND	Y	0.00	0.00
52.40	257.95	235.80	1160.79	U	ND	ND	Y	0.00	0.00
52.40	305.38	157.20	916.15	U	ND	ND	Y	0.00	0.00
52.40	288.00	157.20	864.00	U	ND	ND	Y	0.00	0.00
52.40	257.95	235.80	1160.79	U	ND	ND	Y	0.00	0.00
52.40	288.00	157.20	864.00	U	ND	ND	Y	0.00	0.00

52.40	288.00	183.40	1008.00	U	ND	ND	Y	0.00	0.00
52.40	315.47	209.60	1261.87	U	ND	ND	Y	0.00	0.00
52.40	288.00	157.20	864.00	J	J	=	Y	59.80	328.64
52.40	271.69	131.00	679.22	J	J	=	Y	52.80	273.76
52.40	315.47	131.00	788.67	U	ND	ND	Y	0.00	0.00
52.40	288.00	157.20	864.00	U	ND	ND	Y	0.00	0.00
52.40	315.47	183.40	1104.14	U	ND	ND	Y	0.00	0.00
78.60	760.66	183.40	1774.88	U	ND	ND	Y	0.00	0.00
78.60	583.94	131.00	973.23	U	ND	ND	Y	0.00	0.00
131.00	687.81	26.20	137.56	U	ND	ND	Y	0.00	0.00
78.60	583.94	131.00	973.23	U	ND	ND	Y	0.00	0.00
65.50	699.61	78.60	839.53	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 37
Sample ID: T-605

Can Factor: 1.31
Gas Constant 24.417049
Volume: 5.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	
ND	**0.7**	**1.5**	183.4	393.00	183.40	751.11	393.00	1,609.53	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**37**
Standard Volume	STV	10.0 ml
Sample Volume	SV	5 ml
Can Dilution Factor	CDF	1.31
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni)(Cistdi) / (Cstdni)(Aistdi) Note: 1 i

2) Raw Amt = (Ansamp)(Cistdi) / (Avg RFn)(Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	388743	20.0	10752622	3.678	963.74	1660.90
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	10752622	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	37284	20.0	10752622	0.320	83.94	110.01
5	Chloromethane	PFB	TRG	50.5	0.234	40663	20.0	10752622	0.323	84.66	175.10
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	10752622	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	10752622	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	10752622	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	40586	20.0	10752622	0.309	81.00	314.82
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	10752622	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	39652	20.0	10752622	1.191	311.94	588.96
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	10752622	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	10752622	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	2122319	20.0	10752622	19.428	5090.20	12112.05
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	975844	20.0	10752622	4.613	1208.68	2975.04
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	10752622	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	10752622	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	10752622	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	10752622	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	10752622	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	10752622	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	10752622	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	509475	20.0	10752622	1.443	378.07	1178.32
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	10752622	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	10752622	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	10752622	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	10752622	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	10752622	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	18612	20.0	10752622	0.335	87.78	309.53
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	1432226	20.0	10752622	20.070	5258.46	15527.46
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	10752622	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	10752622	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	10752622	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	10752622	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	10752622	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	10752622	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	58717	20.0	10752622	0.794	208.13	614.58
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	10752622	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	10752622	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	10752622	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	10752622	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	15598961	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	71583	20.0	15598961	0.309	81.07	328.70
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	15598961	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	84211	20.0	15598961	0.324	84.94	292.90
47	Benzene	14DF	TRG	78.1	0.794	183599	20.0	15598961	0.296	77.66	248.41
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	15598961	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	15598961	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	15598961	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	116873	20.0	15598961	0.591	154.71	634.90
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	15598961	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	15598961	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	15598961	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	15598961	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	15598961	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	15598961	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	15598961	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	15598961	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	2400529	20.0	15598961	2.757	722.35	2724.67
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	15598961	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	15598961	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	15598961	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	15598961	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	15598961	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	15598961	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	15598961	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	15598961	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	15598961	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18580312	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18580312	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	815480	20.0	18580312	0.588	154.18	670.58
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	1575354	20.0	18580312	1.394	365.32	1588.95
76	Nonane	d5CB	TRG	128.3	0.711	325837	20.0	18580312	0.493	129.17	678.74
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	18580312	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18580312	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	453490	20.0	18580312	0.369	96.60	420.16
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	21940	20.0	18580312	0.019	5.07	34.85
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18580312	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18580312	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18580312	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18580312	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	18580312	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	18580312	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18580312	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18580312	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	18580312	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18580312	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	48349	20.0	18580312	0.020	5.33	29.28
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	44798	20.0	18580312	0.039	10.30	62.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	498474	20.0	18580312	0.228	59.80	328.64
94	Benzyl chloride	d5CB	TRG	126.6	0.632	118237	20.0	18580312	0.202	52.80	273.76
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	44798	20.0	18580312	0.038	9.89	59.53
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	53395	20.0	18580312	0.026	6.72	36.96
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	46017	20.0	18580312	0.038	9.90	59.60
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18580312	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18580312	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18580312	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18580312	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18580312	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	10752622	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	15598961	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18580312	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	10298959	10.0		11.121	111.21	111

Sample Data Packages

SDG Number 224435

Lab Id Number 38

Client ID T-606

Analytical Method TO-15

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ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 38**

File Name: 2443538A.D **Date Sampled:** 11/21/24 **Time:** 09:58
Description: T-606 **Date Analyzed:** 12/13/24 **Time:** 17:16
Canister: 608 **Can Dilution Factor:** 1.38
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	2.59	0.79	1.98	4.47	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	6.21	3.01	3.62	8.14	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	3.81	4.34	27.88	7.18	J
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	9.82	5.47	6.57	23.37	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	0.50	1.43	3.58	1.55	J
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	1.55	1.13	5.62	7.56	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	2.03	0.79	3.97	6.99	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 38

File Name: 224435
Descriptio 38
Canister: 608
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:58
Date Analyzed: 12/13/24 **Time:** 17:16
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**38**		
File Name:	2443538A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**9:58**
Sample ID:	T-606	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**17:16**
Anal Date:	13 Dec 124 5:16 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**608**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.38**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.564	4.41	42.00	39858
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.351	4.86	31.00	105172
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.827	5.72	46.00	18433
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	2.135	6.42	58.00	156055
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.108	7.61	76.00	25534
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.336	9.42	83.00	**54635**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.441	10.74	56.00	60569
71-43-2	Benzene	47	TRG	0.126	10.70	78.00	41333
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.182	13.50	91.00	83964
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.036	15.90	106	39174
1330-20-7	m,p-Xylenes	75	TRG	0.049	16.06	91.00	42965
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.022	16.36	91.00	20881
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.019	18.31	105.00	27082
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.025	18.95	105.00	27787
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.099	19.53	119.00	168541
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7194756**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8252690**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**14520265**
2037-26-5	Toluene-d8	60	SURR	12.309	13.40	98.00	**6030922**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 38
File Name: 2443538A.D
Run Method: A1563_L.M
Can Factor: 1.38
Air Volume: 300.0 ml
Can/Tube Number: 608
Dilution Factor: 0.4140
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4140
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	2.0

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.56	2.59	4.47	2.59	4.47	4.47	4.47	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.35	6.21	8.14	6.21	8.14	8.14	8.14	**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.83	3.81	7.18	3.81	7.18	7.18	7.18	**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	2.14	9.82	23.37	9.82	23.37	23.37	23.37	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.11	0.50	1.55	0.50	1.55	1.55	1.55	**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.34	1.55	7.56	1.55	7.56	7.56	7.56	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.44	2.03	6.99	2.03	6.99	6.99	6.99	**0.050**	**0.250**
Benzene	78.1	0.13	0.58	1.86	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.18	0.84	3.16	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.04	0.17	0.72	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.05	0.22	0.97	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.02	0.10	0.43	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.02	0.09	0.44	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.03	0.12	0.57	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.10	0.45	2.50	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.31	123	123	123	123	123	123	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.15	1.98				=		Y	2.59	4.47
0.69	3.42	1.15	5.69	U	ND		ND		Y	0.00	0.00
2.30	3.01	2.76	3.62				=		Y	6.21	8.14
0.69	1.43	1.15	2.38	U	ND		ND		Y	0.00	0.00
0.46	3.22	1.15	8.05	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.15	2.94	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.15	2.55	U	ND		ND		Y	0.00	0.00
0.46	1.79	1.15	4.47	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.15	3.04	U	ND		ND		Y	0.00	0.00
2.30	4.34	14.77	27.88	J	J		=		Y	3.81	7.18
0.46	1.06	1.38	3.17	U	ND		ND		Y	0.00	0.00
0.46	2.59	1.15	6.47	U	ND		ND		Y	0.00	0.00
2.30	5.47	2.76	6.57				=		Y	9.82	23.37
0.92	2.26	5.75	14.15	U	ND		ND		Y	0.00	0.00
0.46	1.40	4.60	13.96	U	ND		ND		Y	0.00	0.00
0.46	2.69	1.38	8.08	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND		ND		Y	0.00	0.00
0.92	2.00	1.38	3.00	U	ND		ND		Y	0.00	0.00
0.23	1.77	1.15	8.83	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.60	14.41	U	ND		ND		Y	0.00	0.00
0.23	0.80	1.15	4.00	U	ND		ND		Y	0.00	0.00
0.46	1.43	1.15	3.58	J	J		=		Y	0.50	1.55
0.23	0.91	0.92	3.65	U	ND		ND		Y	0.00	0.00
0.46	1.66	0.92	3.32	U	ND		ND		Y	0.00	0.00
1.15	2.60	1.84	4.15	U	ND		ND		Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND		ND		Y	0.00	0.00
0.46	1.93	1.15	4.81	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.60	16.22	U	ND		ND		Y	0.00	0.00
0.46	1.36	1.38	4.07	U	ND		ND		Y	0.00	0.00
0.46	1.93	2.76	11.55	U	ND		ND		Y	0.00	0.00
0.46	1.62	1.15	4.06	U	ND		ND		Y	0.00	0.00
0.46	1.26	1.15	3.16	U	ND		ND		Y	0.00	0.00
0.46	1.66	1.15	4.15	U	ND		ND		Y	0.00	0.00
0.23	1.22	1.15	6.09	U	ND		ND		Y	0.00	0.00

0.46	1.62	2.30	8.11	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.38	4.07	U	ND	ND	Y	0.00	0.00
0.92	2.79	3.68	11.17	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.23	1.13	1.15	5.62			=	Y	1.55	7.56
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.15	3.97			=	Y	2.03	6.99
1.61	5.15	2.30	7.36	U	ND	ND	Y	0.00	0.00
0.23	1.45	1.15	7.24	U	ND	ND	Y	0.00	0.00
0.46	1.93	2.30	9.63	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.72	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.46	1.66	2.30	8.30	U	ND	ND	Y	0.00	0.00
0.23	1.64	1.15	8.19	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.15	6.19	U	ND	ND	Y	0.00	0.00
0.23	1.54	1.15	7.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.92	3.47	1.15	4.34	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.22	14.90	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	3.92	1.15	9.81	U	ND	ND	Y	0.00	0.00
0.46	3.54	1.15	8.85	U	ND	ND	Y	0.00	0.00
0.12	0.78	1.15	7.81	U	ND	ND	Y	0.00	0.00
0.46	2.12	1.15	5.30	U	ND	ND	Y	0.00	0.00
0.46	3.16	1.15	7.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.42	1.15	6.04	U	ND	ND	Y	0.00	0.00
0.69	2.94	1.15	4.91	U	ND	ND	Y	0.00	0.00
0.46	4.76	1.15	11.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.92	6.32	2.30	15.81	U	ND	ND	Y	0.00	0.00
0.92	5.55	2.76	16.66	U	ND	ND	Y	0.00	0.00
0.92	4.71	2.76	14.13	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	7.36	36.23	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.36	2.76	16.08	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00

0.92	5.06	3.22	17.70	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.68	22.16	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.77	2.30	11.93	U	ND	ND	Y	0.00	0.00
0.92	5.54	2.30	13.85	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.22	19.39	U	ND	ND	Y	0.00	0.00
1.38	13.36	3.22	31.16	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
2.30	12.08	0.46	2.42	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
1.15	12.28	1.38	14.74	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 38
Sample ID: T-606

Can Factor: 1.38
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**38**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.38	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) / (Avg RFn) × (Cistdi) / (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) × 1000 / (SV) × (CDF)

4) Amount ug/m3 = (amt(ppbv) × MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	39858	20.0	7194756	0.564	2.59	4.47
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7194756	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	105172	20.0	7194756	1.351	6.21	8.14
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	7194756	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7194756	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7194756	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7194756	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7194756	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7194756	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	18433	20.0	7194756	0.827	3.81	7.18
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7194756	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7194756	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	156055	20.0	7194756	2.135	9.82	23.37
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	7194756	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7194756	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7194756	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7194756	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7194756	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7194756	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7194756	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7194756	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	25534	20.0	7194756	0.108	0.50	1.55
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7194756	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7194756	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7194756	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7194756	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7194756	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7194756	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	7194756	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7194756	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7194756	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7194756	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	7194756	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7194756	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7194756	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	7194756	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7194756	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7194756	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7194756	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	54635	20.0	7194756	0.336	1.55	7.56
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	8252690	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	8252690	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	8252690	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	60569	20.0	8252690	0.441	2.03	6.99
47	Benzene	14DF	TRG	78.1	0.794	41333	20.0	8252690	0.126	0.58	1.86
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	8252690	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	8252690	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	8252690	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	8252690	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	8252690	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	8252690	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	8252690	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	8252690	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	8252690	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	8252690	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	8252690	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	8252690	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	83964	20.0	8252690	0.182	0.84	3.16
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	8252690	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	8252690	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	8252690	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	8252690	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	8252690	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	8252690	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	8252690	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	8252690	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	8252690	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	14520265	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	14520265	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	39174	20.0	14520265	0.036	0.17	0.72
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	42965	20.0	14520265	0.049	0.22	0.97
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	14520265	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	14520265	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	14520265	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	20881	20.0	14520265	0.022	0.10	0.43
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	14520265	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	14520265	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	14520265	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	14520265	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	14520265	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	14520265	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	27082	20.0	14520265	0.019	0.09	0.44
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	14520265	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	14520265	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	27787	20.0	14520265	0.025	0.12	0.57
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	14520265	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	14520265	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	14520265	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	168541	20.0	14520265	0.099	0.45	2.50
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	14520265	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	14520265	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	14520265	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	14520265	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	14520265	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	14520265	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	14520265	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	14520265	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	14520265	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	7194756	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	8252690	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	14520265	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6030922	10.0		12.309	123.09	123

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443538A.D
Acq Time : 13 Dec 124 5:16 pm
Sample : T-606
Misc : SCHMIDT
Quant Time: Dec 19 15:40 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	7194756	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.74	114	8252690	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	14520265	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	6030922	12.31	ppbV		123.09
Target Compounds							Qvalue
2) Propylene	4.36	42	39858	0.56	ppbV	#	52
4) Methanol	4.81	31	105172	1.35	ppbV	#	94
11) Ethanol	5.63	46	18433	0.83	ppbV		76
14) Acetone	6.29	58	156055	2.14	ppbV	#	1
23) Carbon disulfide	7.44	76	25534	0.11	ppbV	#	70
41) Chloroform	9.20	83	54635	0.34	ppbV		92
46) Cyclohexane	10.74	56	60569	0.44	ppbV	#	38
47) Benzene	10.45	78	41333	0.13	ppbV	#	71
61) Toluene	13.20	91	83964	0.18	ppbV		95
74) Ethylbenzene	15.56	91	39174	0.04	ppbV		92
75) m,p-Xylenes	15.73	91	42965	0.05	ppbV		93
79) o-Xylene	16.36	91	20881	0.02	ppbV	#	84
86) 1,3,5-Trimethylbenzene	17.88	105	27082	0.02	ppbV	m	81
89) 1,2,4-Trimethylbenzene	18.58	105	27787	0.03	ppbV		94
93) Isopropyltoluene	19.16	119	168541	0.10	ppbV		96

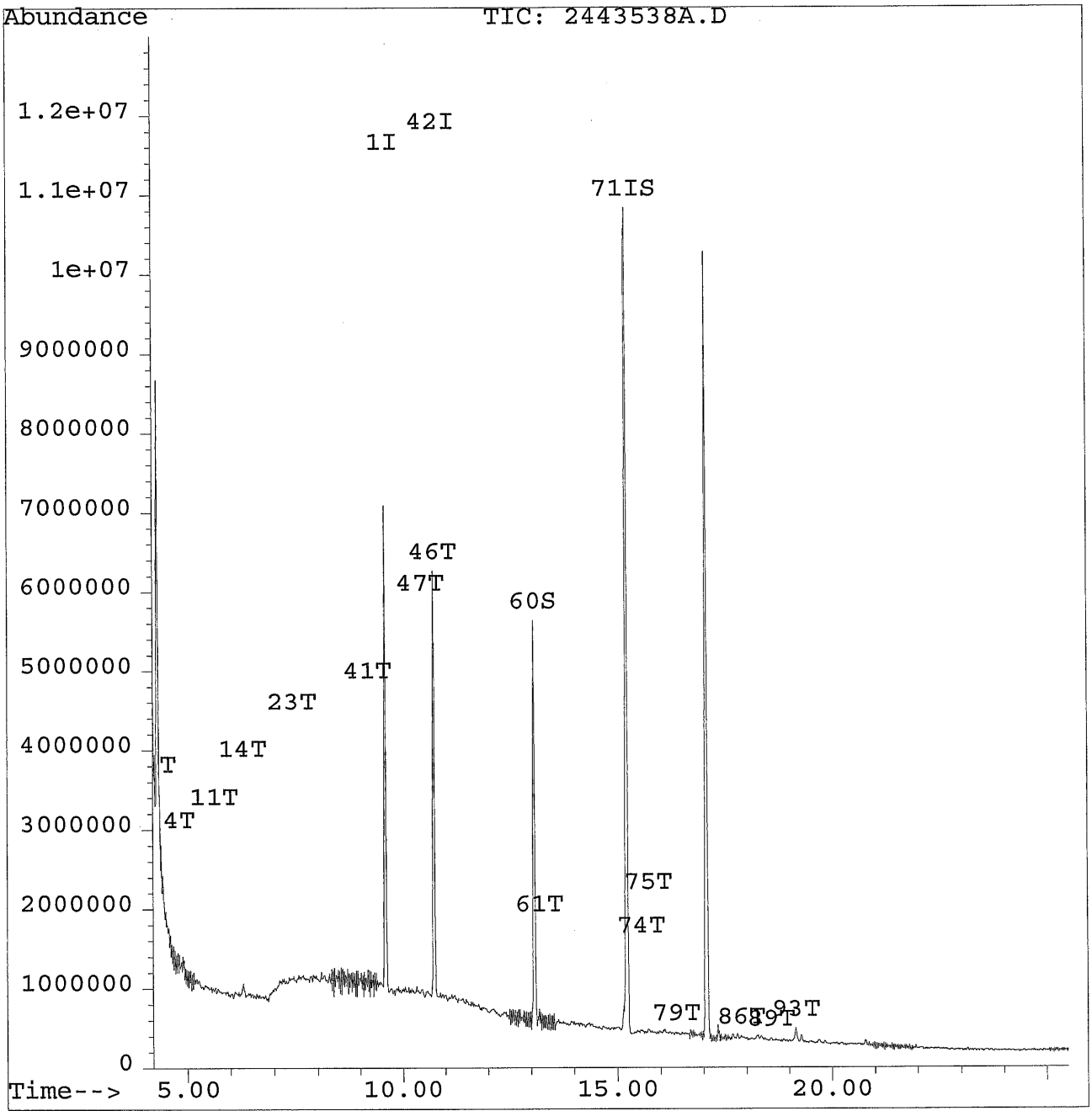
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443538A.D
Acq Time : 13 Dec 124 5:16 pm
Sample : T-606
Misc : SCHMIDT
Quant Time: Dec 19 15:40 19124

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443538A.D
Acq Time : 13 Dec 124 5:16 pm
Sample : T-606
Misc : SCHMIDT

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	17.88 ppbV	29676955	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	91
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 39

Client ID T-607

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 39

File Name: 2443539A.D
Description: T-607
Canister: 771
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:52
Date Analyzed: 12/13/24 **Time:** 17:54
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	1.16	0.75	1.88	2.00	
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	4.80	2.86	3.43	6.29	
74-87-3	Chloromethane	0.66	1.09	1.54	1.35	2.26	3.19	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	14.50	4.12	26.46	27.37	
107-02-8	Acrolein	0.44	1.31	ND	1.00	3.01	ND	
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	25.56	5.20	6.23	60.82	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	ND	2.15	13.44	ND	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	4.01	1.29	3.87	11.85	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.31	1.74	0.65	3.87	5.14	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	129	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 39

File Name: 224435
Descriptio 39
Canister: 771
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:52
Date Analyzed: 12/13/24 **Time:** 17:54
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**39**		
File Name:	2443539A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**9:52**
Sample ID:	T-607	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**17:54**
Anal Date:	13 Dec 124 5:54 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**771**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.31**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.265	4.41	42.00	20855
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.099	4.86	31.00	95101
74-87-3	Chloromethane	5	TRG	0.353	4.77	50.00	33061
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	3.320	5.72	46.00	82233
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	5.854	6.42	58.00	475635
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.919	8.75	72.00	48801
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.096	9.17	61.00	15486
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.399	9.72	72.00	21913
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.103	10.70	78.00	38468
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.095	13.50	91.00	50121
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.031	15.90	106	39367
1330-20-7	m,p-Xylenes	75	TRG	0.066	16.06	91.00	69160
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.034	16.35	91.00	39104
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.064	18.23	105.00	103230
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.049	18.31	105.00	80874
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.076	18.95	105.00	99604
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	241
99-87-6	Isopropyltoluene	93	TRG	0.164	19.53	119.00	332185
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7998060**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**9444643**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17264512**
2037-26-5	Toluene-d8	60	SURR	12.922	13.40	98.00	**7245944**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 39
File Name: 2443539A.D
Run Method: A1563_L.M
Can Factor: 1.31
Air Volume: 300.0 ml
Can/Tube Number: 771
Dilution Factor: 0.3930
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3930
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.27	1.16	2.00	1.16	2.00	2.00	2.00	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.10	4.80	6.29	4.80	6.29	6.29	6.29	**0.500**	**0.600**
Chloromethane	50.5	0.35	1.54	3.19	1.54	3.19	3.19	3.19	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	3.32	14.50	27.37	14.50	27.37	27.37	27.37	**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	5.85	25.56	60.82	25.56	60.82	60.82	60.82	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.92	4.01	11.85	4.01	11.85	11.85	11.85	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.10	0.42	1.51	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.40	1.74	5.14	1.74	5.14	5.14	5.14	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.10	0.45	1.43	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.10	0.42	1.57	ND	ND	0		**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.13	0.58	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.07	0.29	1.25	ND	ND	0		**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.03	0.15	0.65	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.06	0.28	1.38	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.05	0.21	1.05	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.08	0.33	1.63	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.01	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.16	0.71	3.93	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.92	129	129	129	129	129	129	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.44	0.75	1.09	1.88				=		Y	1.16	2.00
0.66	3.24	1.09	5.41	U	ND		ND		Y	0.00	0.00
2.18	2.86	2.62	3.43				=		Y	4.80	6.29
0.66	1.35	1.09	2.26				=		Y	1.54	3.19
0.44	3.06	1.09	7.64	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.09	2.79	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.09	2.42	U	ND		ND		Y	0.00	0.00
0.44	1.70	1.09	4.24	U	ND		ND		Y	0.00	0.00
0.44	1.15	1.09	2.88	U	ND		ND		Y	0.00	0.00
2.18	4.12	14.02	26.46				=		Y	14.50	27.37
0.44	1.00	1.31	3.01	U	ND		ND		Y	0.00	0.00
0.44	2.46	1.09	6.14	U	ND		ND		Y	0.00	0.00
2.18	5.20	2.62	6.23				=		Y	25.56	60.82
0.87	2.15	5.46	13.44	U	ND		ND		Y	0.00	0.00
0.44	1.33	4.37	13.25	U	ND		ND		Y	0.00	0.00
0.44	2.56	1.31	7.67	U	ND		ND		Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND		ND		Y	0.00	0.00
0.87	1.90	1.31	2.85	U	ND		ND		Y	0.00	0.00
0.22	1.68	1.09	8.38	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.37	13.68	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.09	3.80	U	ND		ND		Y	0.00	0.00
0.44	1.36	1.09	3.40	U	ND		ND		Y	0.00	0.00
0.22	0.87	0.87	3.47	U	ND		ND		Y	0.00	0.00
0.44	1.58	0.87	3.15	U	ND		ND		Y	0.00	0.00
1.09	2.46	1.75	3.94	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.09	4.43	U	ND		ND		Y	0.00	0.00
0.44	1.83	1.09	4.57	U	ND		ND		Y	0.00	0.00
0.22	0.77	4.37	15.40	U	ND		ND		Y	0.00	0.00
0.44	1.29	1.31	3.87				=		Y	4.01	11.85
0.44	1.83	2.62	10.97	U	ND		ND		Y	0.00	0.00
0.44	1.54	1.09	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.20	1.09	3.00	U	ND		ND		Y	0.00	0.00
0.44	1.58	1.09	3.94	U	ND		ND		Y	0.00	0.00
0.22	1.16	1.09	5.79	U	ND		ND		Y	0.00	0.00

0.44	1.54	2.18	7.70	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.31	3.87			=	Y	1.74	5.14
0.87	2.65	3.49	10.60	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.22	1.07	1.09	5.34	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.09	4.43	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	0.75	1.09	3.76	U	ND	ND	Y	0.00	0.00
1.53	4.89	2.18	6.98	U	ND	ND	Y	0.00	0.00
0.22	1.38	1.09	6.88	U	ND	ND	Y	0.00	0.00
0.44	1.83	2.18	9.14	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.44	1.58	2.18	7.88	U	ND	ND	Y	0.00	0.00
0.22	1.55	1.09	7.77	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.09	5.87	U	ND	ND	Y	0.00	0.00
0.22	1.46	1.09	7.32	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.87	3.29	1.09	4.12	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	1.01	3.06	14.15	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	3.73	1.09	9.31	U	ND	ND	Y	0.00	0.00
0.44	3.36	1.09	8.40	U	ND	ND	Y	0.00	0.00
0.11	0.74	1.09	7.41	U	ND	ND	Y	0.00	0.00
0.44	2.01	1.09	5.03	U	ND	ND	Y	0.00	0.00
0.44	3.00	1.09	7.50	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	2.29	1.09	5.74	U	ND	ND	Y	0.00	0.00
0.66	2.80	1.09	4.66	U	ND	ND	Y	0.00	0.00
0.44	4.52	1.09	11.30	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.87	6.00	2.18	15.00	U	ND	ND	Y	0.00	0.00
0.87	5.27	2.62	15.82	U	ND	ND	Y	0.00	0.00
0.87	4.47	2.62	13.41	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	6.99	34.39	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	5.09	2.62	15.27	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00

0.87	4.80	3.06	16.80	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.49	21.03	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.53	2.18	11.32	U	ND	ND	Y	0.00	0.00
0.87	5.26	2.18	13.14	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.06	18.40	U	ND	ND	Y	0.00	0.00
1.31	12.68	3.06	29.58	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
2.18	11.46	0.44	2.29	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
1.09	11.66	1.31	13.99	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 39
Sample ID: T-607

Can Factor: 1.31
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**39**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.31
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	20855	20.0	7998060	0.265	1.16	2.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7998060	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	95101	20.0	7998060	1.099	4.80	6.29
5	Chloromethane	PFB	TRG	50.5	0.234	33061	20.0	7998060	0.353	1.54	3.19
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7998060	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7998060	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7998060	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7998060	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7998060	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	82233	20.0	7998060	3.320	14.50	27.37
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7998060	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7998060	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	475635	20.0	7998060	5.854	25.56	60.82
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	7998060	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7998060	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7998060	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7998060	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7998060	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7998060	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7998060	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7998060	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	7998060	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7998060	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7998060	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7998060	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7998060	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7998060	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7998060	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	48801	20.0	7998060	0.919	4.01	11.85
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7998060	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7998060	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7998060	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	15486	20.0	7998060	0.096	0.42	1.51
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7998060	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7998060	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	21913	20.0	7998060	0.399	1.74	5.14
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7998060	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7998060	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7998060	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	7998060	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	9444643	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	9444643	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	9444643	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	9444643	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	38468	20.0	9444643	0.103	0.45	1.43
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	9444643	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	9444643	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	9444643	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	9444643	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	9444643	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	9444643	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	9444643	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	9444643	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	9444643	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	9444643	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	9444643	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	9444643	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	50121	20.0	9444643	0.095	0.42	1.57
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	9444643	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	9444643	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	9444643	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	9444643	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	9444643	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	9444643	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	9444643	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	9444643	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	9444643	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	17264512	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	17264512	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	39367	20.0	17264512	0.031	0.13	0.58
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	69160	20.0	17264512	0.066	0.29	1.25
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	17264512	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	17264512	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	17264512	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	39104	20.0	17264512	0.034	0.15	0.65
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	17264512	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	17264512	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	17264512	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	17264512	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	17264512	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	103230	20.0	17264512	0.064	0.28	1.38
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	80874	20.0	17264512	0.049	0.21	1.05
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	17264512	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	17264512	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	99604	20.0	17264512	0.076	0.33	1.63
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	17264512	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	17264512	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	241	20.0	17264512	0.000	0.00	0.01
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	332185	20.0	17264512	0.164	0.71	3.93
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	17264512	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	17264512	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	17264512	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	17264512	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	17264512	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	17264512	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	17264512	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	17264512	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	17264512	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	7998060	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	9444643	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17264512	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	7245944	10.0		12.922	129.22	129

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443539A.D
Acq Time : 13 Dec 124 5:54 pm
Sample : T-607
Misc : SCHMIDT
Quant Time: Dec 19 15:49 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	7998060	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	9444643	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.23	117	17264512	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	7245944	12.92	ppbV		129.22
Target Compounds							Qvalue
2) Propylene	4.29	42	20855	0.27	ppbV		86
4) Methanol	4.76	31	95101	1.10	ppbV	#	97
5) Chloromethane	4.64	50	33061	0.35	ppbV	#	77
11) Ethanol	5.59	46	82233	3.32	ppbV		91
14) Acetone	6.24	58	475635	5.85	ppbV	#	1
30) 2-Butanone (MEK)	8.53	72	48801	0.92	ppbV		97
34) Ethyl acetate	8.96	61	15486	0.10	ppbV	#	1
37) Tetrahydrofuran	9.47	72	21913	0.40	ppbV	#	68
47) Benzene	10.43	78	38468	0.10	ppbV	m	71
61) Toluene	13.20	91	50121	0.10	ppbV		95
74) Ethylbenzene	15.55	91	39367	0.03	ppbV		95
75) m,p-Xylenes	15.72	91	69160	0.07	ppbV	#	78
79) o-Xylene	16.35	91	39104	0.03	ppbV	#	57
85) 4-Ethyltoluene	17.87	105	103230	0.06	ppbV	m	86
86) 1,3,5-Trimethylbenzene	17.96	105	80874	0.05	ppbV	m	82
89) 1,2,4-Trimethylbenzene	18.57	105	99604	0.08	ppbV		94
92) 1,3-Dichlorobenzene	19.25	146	241	0.00	ppbV	m	90
93) Isopropyltoluene	19.15	119	332185	0.16	ppbV	#	94

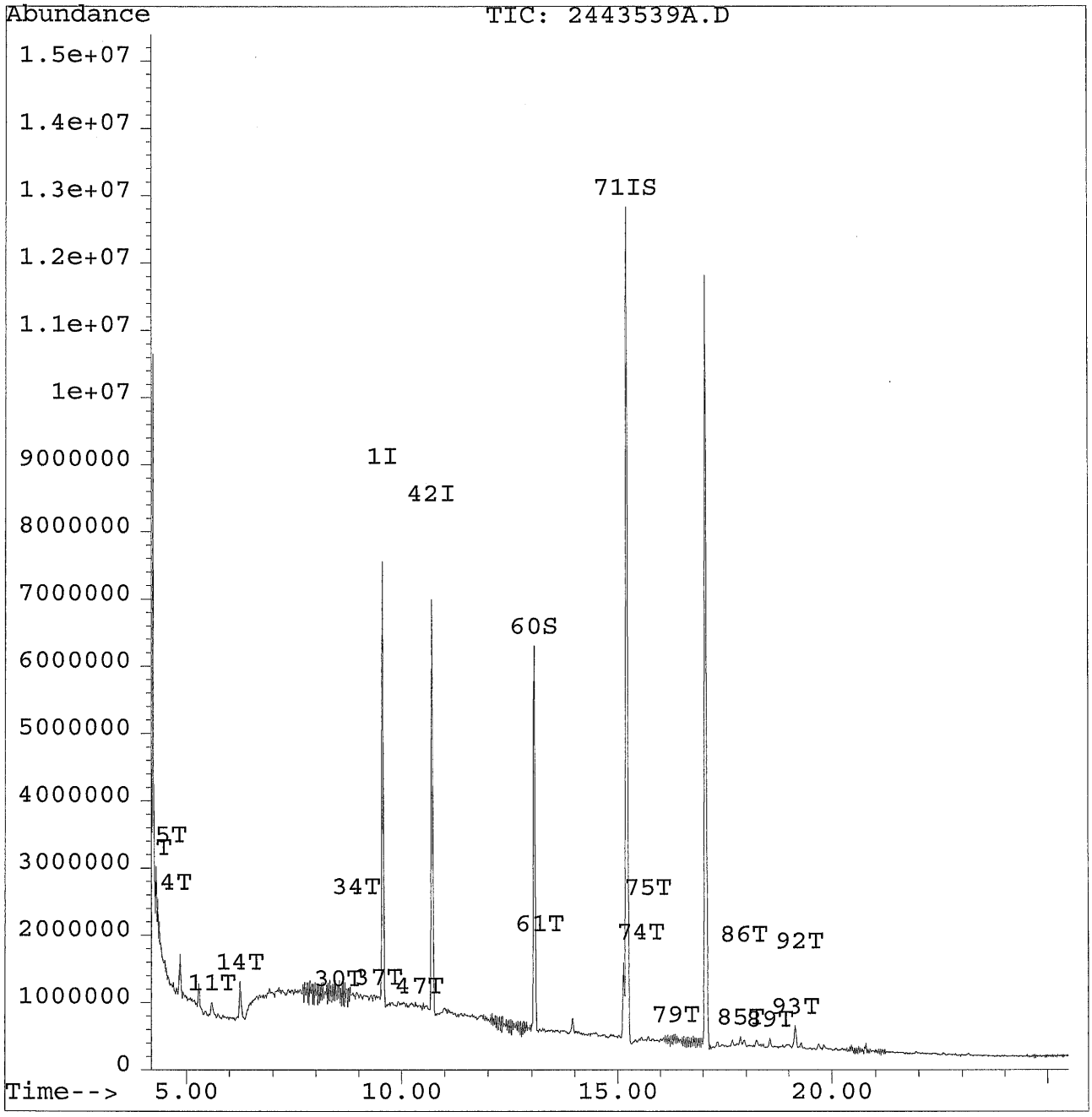
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443539A.D
Acq Time : 13 Dec 124 5:54 pm
Sample : T-607
Misc : SCHMIDT
Quant Time: Dec 19 15:49 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443539A.D
Acq Time : 13 Dec 124 5:54 pm
Sample : T-607
Misc : SCHMIDT

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	16.68 ppbV	35584766	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number **224435**

Lab Id Number **40**

Client ID T-608

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 40**

File Name: 2443540A.D **Date Sampled:** 11/21/24 **Time:** 09:47
Description: T-608 **Date Analyzed:** 12/13/24 **Time:** 18:34
Canister: 531 **Can Dilution Factor:** 1.35
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	1.34	0.78	1.94	2.32	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.34	5.57	ND	
67-56-1	Methanol	2.25	2.70	6.51	2.95	3.54	8.53	
74-87-3	Chloromethane	0.68	1.13	ND	1.40	2.33	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.15	7.87	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.88	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.50	2.49	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.75	4.37	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.19	2.97	ND	
64-17-5	Ethanol	2.25	14.45	ND	4.25	27.27	ND	
107-02-8	Acrolein	0.45	1.35	ND	1.03	3.10	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.53	6.33	ND	
67-64-1	Acetone	2.25	2.70	5.40	5.35	6.42	12.84	
67-63-0	2-propanol (isopropylalcohol)	0.90	5.63	ND	2.22	13.85	ND	
75-65-0	t-Butyl alcohol	0.45	4.50	ND	1.37	13.66	ND	
4227-95-6	Methyl iodide	0.45	1.35	ND	2.63	7.90	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
107-13-1	Acrylonitrile	0.90	1.35	ND	1.96	2.94	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.73	8.63	ND	
107-05-1	Allyl chloride	0.23	4.50	ND	0.70	14.10	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.78	3.91	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.40	3.51	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.90	ND	0.89	3.57	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.90	ND	1.62	3.25	ND	
107-12-0	Propionitrile	1.13	1.80	ND	2.54	4.06	ND	
75-34-3	1,1-Dichloroethane	0.22	1.13	ND	0.91	4.56	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.88	4.71	ND	
108-05-4	Vinyl acetate	0.23	4.50	ND	0.79	15.87	ND	
78-93-3	2-Butanone (MEK)	0.45	1.35	ND	1.33	3.99	ND	
108-20-3	Diisopropyl ether	0.45	2.70	ND	1.88	11.30	ND	
110-54-3	Hexane	0.45	1.13	ND	1.59	3.97	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.24	3.09	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.62	4.06	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.19	5.96	ND	
96-33-3	Methyl acrylate	0.45	2.25	ND	1.59	7.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.35	ND	0.67	3.99	ND	
78-83-1	Isobutyl alcohol	0.90	3.60	ND	2.73	10.93	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.10	5.50	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.91	4.56	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.88	ND	
71-43-2	Benzene	1.58	2.25	ND	5.04	7.20	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.42	7.09	ND	
994-05-8	t-Amyl methyl ether	0.45	2.25	ND	1.88	9.42	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.05	5.26	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.85	4.62	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
123-91-1	1,4 Dioxane	0.45	2.25	ND	1.62	8.12	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.60	8.01	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.05	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.51	7.55	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.84	4.61	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.60	ND	1.85	14.77	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
108-88-3	Toluene	0.90	1.13	ND	3.39	4.24	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.10	5.26	ND	
591-78-6	2-Hexanone	0.45	3.60	ND	1.85	14.77	ND	
142-28-9	1,3-Dichloropropane	0.23	3.15	ND	1.04	14.58	ND	
111-65-9	Octane	0.45	1.13	ND	2.10	5.26	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.84	9.60	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.46	8.66	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.76	7.64	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.08	5.19	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.09	7.73	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.96	4.89	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.96	4.89	ND	
111-84-2	Nonane	0.45	1.13	ND	2.36	5.91	ND	
100-42-5	Styrene	0.68	1.13	ND	2.88	4.80	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.66	11.64	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.96	4.89	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.90	2.25	ND	6.19	15.46	ND	
96-18-4	1,2,3-Trichloropropane	0.90	2.70	ND	5.43	16.30	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.90	2.70	ND	4.61	13.82	ND	
103-65-1	n-Propylbenzene	0.90	3.15	ND	4.43	15.51	ND	
98-82-8	Isopropylbenzene	0.90	3.15	ND	4.43	15.51	ND	
622-96-8	4-Ethyltoluene	0.90	7.20	ND	4.43	35.44	ND	
108-67-8	1,3,5-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
124-18-5	Decane	0.90	2.70	ND	5.25	15.74	ND	
98-06-6	tert-butyl benzene	0.90	2.70	ND	4.95	14.84	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
538-93-2	i-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
135-98-8	sec-butylbenzene	0.90	3.15	ND	4.95	17.31	ND	
541-73-1	1,3-Dichlorobenzene	0.90	3.60	ND	5.42	21.67	ND	
99-87-6	Isopropyltoluene	0.90	2.70	ND	4.95	14.84	ND	
100-44-7	Benzyl chloride	0.90	2.25	ND	4.67	11.67	ND	
106-46-7	1,4-Dichlorobenzene	0.90	2.25	ND	5.42	13.55	ND	
104-51-8	n-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
95-50-1	1,2-Dichlorobenzene	0.90	3.15	ND	5.42	18.96	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.35	3.15	ND	13.06	30.48	ND	
120-82-1	1,2,4-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
91-20-3	Naphthalene	2.25	0.45	ND	11.81	2.36	ND	
87-61-6	1,2,3-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
87-68-3	Hexachlorobutadiene	1.13	1.35	ND	12.02	14.42	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 40

File Name: 224435
Descriptio 40
Canister: 531
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 09:47
Date Analyzed: 12/13/24 **Time:** 18:34
Can Dilution Factor: 1.35
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.15	6.75	ND	12.90	27.64	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**40**		
File Name:	2443540A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**9:47**
Sample ID:	T-608	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**18:34**
Anal Date:	13 Dec 124 6:34 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**531**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.35**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.299	4.41	42.00	25935
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.446	4.86	31.00	138280
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoretha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.199	6.42	58.00	107636
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoretha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.124	10.70	78.00	50948
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.064	13.50	91.00	37160
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.018	15.90	106	23799
1330-20-7	m,p-Xylenes	75	TRG	0.026	16.06	91.00	27439
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.024	16.61	104.00	20671
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.021	16.34	91.00	24795
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.054	18.23	105.00	87775
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.029	18.31	105.00	47993
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.048	18.95	105.00	64318
538-93-2	i-Butylbenzene	90	TRG	0.009	19.24	91.00	17617
135-98-8	sec-butylbenzene	91	TRG	0.011	19.32	105.00	25233
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.40	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**8833488**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**10364550**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17507564**
2037-26-5	Toluene-d8	60	SURR	12.048	13.40	98.00	**7413898**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 40
File Name: 2443540A.D
Run Method: A1563_L.M
Can Factor: 1.35
Air Volume: 300.0 ml
Can/Tube Number: 531
Dilution Factor: 0.4050
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4050
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.30	1.34	2.32	1.34	2.32	2.32	2.32	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.45	6.51	8.53	6.51	8.53	8.53	8.53	**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.20	5.40	12.84	5.40	12.84	12.84	12.84	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.12	0.56	1.78	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.06	0.29	1.09	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.02	0.08	0.36	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.03	0.12	0.50	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.02	0.11	0.46	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.02	0.10	0.42	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.05	0.24	1.20	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.03	0.13	0.63	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.05	0.22	1.07	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.01	0.04	0.23	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.01	0.05	0.28	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.05	120	120	120	120	120	120	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.94				=		Y	1.34	2.32
0.68	3.34	1.13	5.57	U	ND		ND		Y	0.00	0.00
2.25	2.95	2.70	3.54				=		Y	6.51	8.53
0.68	1.40	1.13	2.33	U	ND		ND		Y	0.00	0.00
0.45	3.15	1.13	7.87	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.88	U	ND		ND		Y	0.00	0.00
0.23	0.50	1.13	2.49	U	ND		ND		Y	0.00	0.00
0.45	1.75	1.13	4.37	U	ND		ND		Y	0.00	0.00
0.45	1.19	1.13	2.97	U	ND		ND		Y	0.00	0.00
2.25	4.25	14.45	27.27	U	ND		ND		Y	0.00	0.00
0.45	1.03	1.35	3.10	U	ND		ND		Y	0.00	0.00
0.45	2.53	1.13	6.33	U	ND		ND		Y	0.00	0.00
2.25	5.35	2.70	6.42				=		Y	5.40	12.84
0.90	2.22	5.63	13.85	U	ND		ND		Y	0.00	0.00
0.45	1.37	4.50	13.66	U	ND		ND		Y	0.00	0.00
0.45	2.63	1.35	7.90	U	ND		ND		Y	0.00	0.00
0.23	0.89	1.13	4.46	U	ND		ND		Y	0.00	0.00
0.90	1.96	1.35	2.94	U	ND		ND		Y	0.00	0.00
0.23	1.73	1.13	8.63	U	ND		ND		Y	0.00	0.00
0.23	0.70	4.50	14.10	U	ND		ND		Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND		ND		Y	0.00	0.00
0.45	1.40	1.13	3.51	U	ND		ND		Y	0.00	0.00
0.23	0.89	0.90	3.57	U	ND		ND		Y	0.00	0.00
0.45	1.62	0.90	3.25	U	ND		ND		Y	0.00	0.00
1.13	2.54	1.80	4.06	U	ND		ND		Y	0.00	0.00
0.22	0.91	1.13	4.56	U	ND		ND		Y	0.00	0.00
0.45	1.88	1.13	4.71	U	ND		ND		Y	0.00	0.00
0.23	0.79	4.50	15.87	U	ND		ND		Y	0.00	0.00
0.45	1.33	1.35	3.99	U	ND		ND		Y	0.00	0.00
0.45	1.88	2.70	11.30	U	ND		ND		Y	0.00	0.00
0.45	1.59	1.13	3.97	U	ND		ND		Y	0.00	0.00
0.45	1.24	1.13	3.09	U	ND		ND		Y	0.00	0.00
0.45	1.62	1.13	4.06	U	ND		ND		Y	0.00	0.00
0.23	1.19	1.13	5.96	U	ND		ND		Y	0.00	0.00

0.45	1.59	2.25	7.93	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.35	3.99	U	ND	ND	Y	0.00	0.00
0.90	2.73	3.60	10.93	U	ND	ND	Y	0.00	0.00
0.23	0.89	1.13	4.46	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.13	5.21	U	ND	ND	Y	0.00	0.00
0.23	1.10	1.13	5.50	U	ND	ND	Y	0.00	0.00
0.23	1.23	1.13	6.15	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.13	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.88	U	ND	ND	Y	0.00	0.00
1.58	5.04	2.25	7.20	U	ND	ND	Y	0.00	0.00
0.23	1.42	1.13	7.09	U	ND	ND	Y	0.00	0.00
0.45	1.88	2.25	9.42	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	1.85	1.13	4.62	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.13	5.21	U	ND	ND	Y	0.00	0.00
0.45	1.62	2.25	8.12	U	ND	ND	Y	0.00	0.00
0.23	1.60	1.13	8.01	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.05	U	ND	ND	Y	0.00	0.00
0.23	1.51	1.13	7.55	U	ND	ND	Y	0.00	0.00
0.45	1.84	1.13	4.61	U	ND	ND	Y	0.00	0.00
0.45	1.85	3.60	14.77	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.90	3.39	1.13	4.24	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.23	1.23	1.13	6.15	U	ND	ND	Y	0.00	0.00
0.45	2.10	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	1.85	3.60	14.77	U	ND	ND	Y	0.00	0.00
0.23	1.04	3.15	14.58	U	ND	ND	Y	0.00	0.00
0.45	2.10	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	3.84	1.13	9.60	U	ND	ND	Y	0.00	0.00
0.45	3.46	1.13	8.66	U	ND	ND	Y	0.00	0.00
0.11	0.76	1.13	7.64	U	ND	ND	Y	0.00	0.00
0.45	2.08	1.13	5.19	U	ND	ND	Y	0.00	0.00
0.45	3.09	1.13	7.73	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.45	2.36	1.13	5.91	U	ND	ND	Y	0.00	0.00
0.68	2.88	1.13	4.80	U	ND	ND	Y	0.00	0.00
0.45	4.66	1.13	11.64	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.90	6.19	2.25	15.46	U	ND	ND	Y	0.00	0.00
0.90	5.43	2.70	16.30	U	ND	ND	Y	0.00	0.00
0.90	4.61	2.70	13.82	U	ND	ND	Y	0.00	0.00
0.90	4.43	3.15	15.51	U	ND	ND	Y	0.00	0.00
0.90	4.43	3.15	15.51	U	ND	ND	Y	0.00	0.00
0.90	4.43	7.20	35.44	U	ND	ND	Y	0.00	0.00
0.90	4.43	4.05	19.94	U	ND	ND	Y	0.00	0.00
0.90	5.25	2.70	15.74	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	4.43	4.05	19.94	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00

0.90	4.95	3.15	17.31	U	ND	ND	Y	0.00	0.00
0.90	5.42	3.60	21.67	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	4.67	2.25	11.67	U	ND	ND	Y	0.00	0.00
0.90	5.42	2.25	13.55	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	5.42	3.15	18.96	U	ND	ND	Y	0.00	0.00
1.35	13.06	3.15	30.48	U	ND	ND	Y	0.00	0.00
1.35	10.03	2.25	16.72	U	ND	ND	Y	0.00	0.00
2.25	11.81	0.45	2.36	U	ND	ND	Y	0.00	0.00
1.35	10.03	2.25	16.72	U	ND	ND	Y	0.00	0.00
1.13	12.02	1.35	14.42	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 40
Sample ID: T-608

Can Factor: 1.35
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**40**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.35
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i — Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	25935	20.0	8833488	0.299	1.34	2.32
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	8833488	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	138280	20.0	8833488	1.446	6.51	8.53
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	8833488	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	8833488	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	8833488	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	8833488	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	8833488	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	8833488	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	8833488	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	8833488	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	8833488	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	107636	20.0	8833488	1.199	5.40	12.84
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	8833488	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	8833488	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	8833488	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	8833488	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	8833488	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	8833488	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	8833488	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	8833488	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	8833488	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	8833488	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	8833488	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	8833488	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	8833488	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	8833488	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	8833488	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	8833488	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	8833488	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	8833488	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	8833488	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	8833488	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	8833488	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	8833488	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	8833488	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	8833488	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	8833488	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	8833488	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	8833488	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	10364550	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	10364550	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	10364550	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	10364550	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	50948	20.0	10364550	0.124	0.56	1.78
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	10364550	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	10364550	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	10364550	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	10364550	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	10364550	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	10364550	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	10364550	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	10364550	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	10364550	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	10364550	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	10364550	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	10364550	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	37160	20.0	10364550	0.064	0.29	1.09
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	10364550	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	10364550	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	10364550	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	10364550	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	10364550	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	10364550	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	10364550	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	10364550	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	10364550	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	17507564	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	17507564	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	23799	20.0	17507564	0.018	0.08	0.36
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	27439	20.0	17507564	0.026	0.12	0.50
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	17507564	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	20671	20.0	17507564	0.024	0.11	0.46
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	17507564	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	24795	20.0	17507564	0.021	0.10	0.42
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	17507564	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	17507564	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	17507564	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	17507564	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	17507564	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	87775	20.0	17507564	0.054	0.24	1.20
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	47993	20.0	17507564	0.029	0.13	0.63
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	17507564	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	17507564	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	64318	20.0	17507564	0.048	0.22	1.07
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	17617	20.0	17507564	0.009	0.04	0.23
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	25233	20.0	17507564	0.011	0.05	0.28
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	17507564	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	17507564	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	17507564	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	17507564	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	17507564	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	17507564	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	17507564	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	17507564	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	17507564	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	17507564	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	17507564	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	8833488	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	10364550	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17507564	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	7413898	10.0		12.048	120.48	120

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443540A.D
Acq Time : 13 Dec 124 6:34 pm
Sample : T-608
Misc : SCHMIDT
Quant Time: Dec 19 15:58 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.56	168	8833488	20.00	ppbV		-0.26
42) 1,4-Difluorobenzene	10.72	114	10364550	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.21	117	17507564	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.06	98	7413898	12.05	ppbV		120.48
Target Compounds							Qvalue
2) Propylene	4.29	42	25935	0.30	ppbV		90
4) Methanol	4.81	31	138280	1.45	ppbV	#	90
14) Acetone	6.26	58	107636	1.20	ppbV	#	1
47) Benzene	10.41	78	50948	0.12	ppbV	#	67
61) Toluene	13.20	91	37160	0.06	ppbV		93
74) Ethylbenzene	15.55	91	23799	0.02	ppbV		94
75) m,p-Xylenes	15.72	91	27439	0.03	ppbV	#	74
77) Styrene	16.27	104	20671	0.02	ppbV	#	80
79) o-Xylene	16.34	91	24795	0.02	ppbV		95
85) 4-Ethyltoluene	17.88	105	87775	0.05	ppbV	#	87
86) 1,3,5-Trimethylbenzene	17.96	105	47993	0.03	ppbV	m	80
89) 1,2,4-Trimethylbenzene	18.58	105	64318	0.05	ppbV	#	87
90) i-Butylbenzene	18.87	91	17617	0.01	ppbV	#	75
91) sec-butylbenzene	18.95	105	25233	0.01	ppbV	#	90

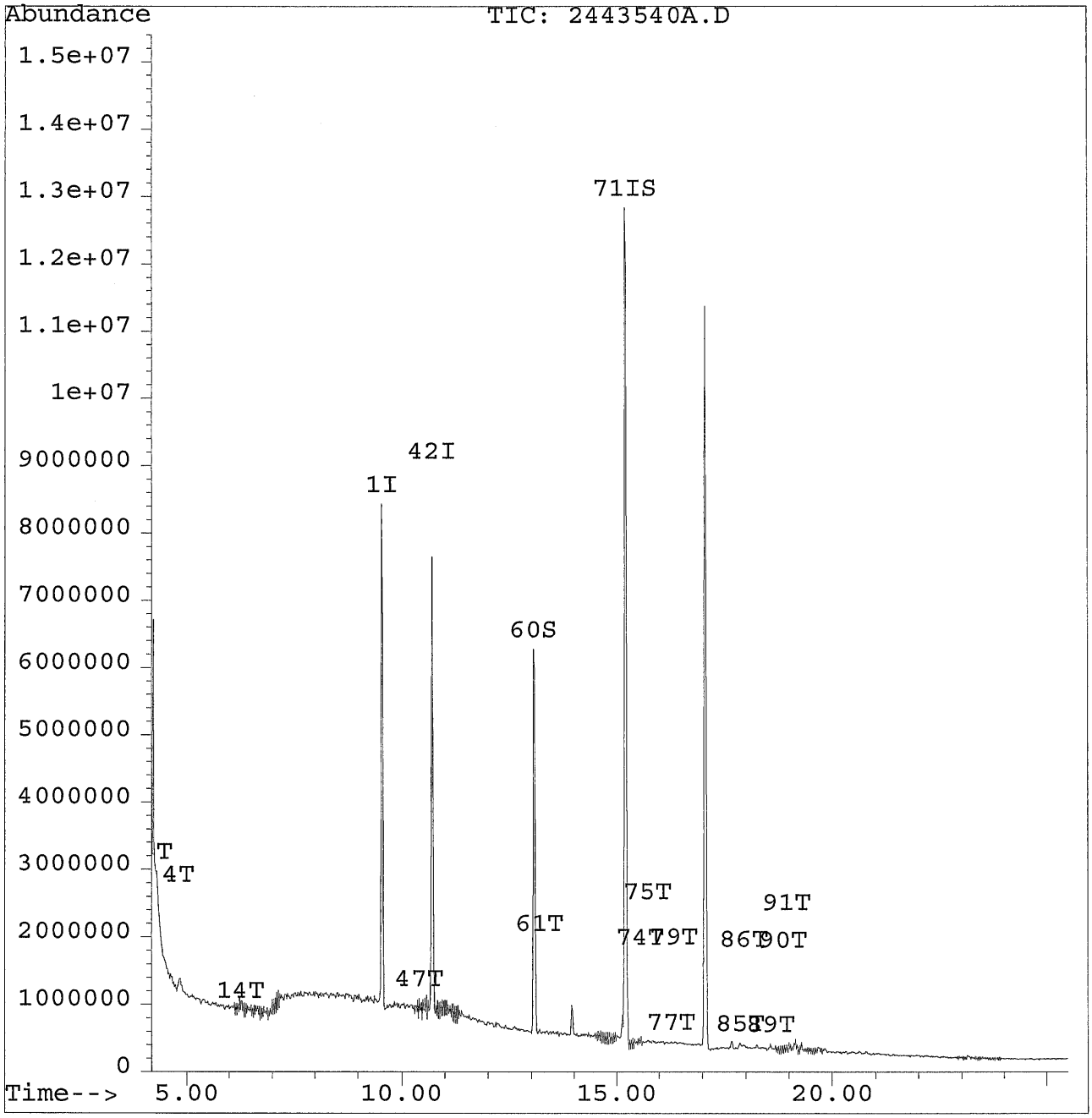
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443540A.D
Acq Time : 13 Dec 124 6:34 pm
Sample : T-608
Misc : SCHMIDT
Quant Time: Dec 19 15:58 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



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Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443540A.D
Acq Time : 13 Dec 124 6:34 pm Operator: SS
Sample : T-608 Inst : 5970 - M
Misc : SCHMIDT Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	16.96 ppbV	34092887	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number **224435**

Lab Id Number **41**

Client ID T-609

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 41

File Name: 2443541A.D
Description: T-609
Canister: 668
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/13/24 **Time:** 19:16
Can Dilution Factor: 1.31
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.44	1.09	1.31	0.75	1.88	2.26	
75-71-8	Dichlorodifluoromethane	0.66	1.09	ND	3.24	5.41	ND	
67-56-1	Methanol	2.18	2.62	ND	2.86	3.43	ND	
74-87-3	Chloromethane	0.66	1.09	ND	1.35	2.26	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.44	1.09	ND	3.06	7.64	ND	
75-01-4	Vinyl chloride	0.22	1.09	ND	0.56	2.79	ND	
106-99-0	1,3-Butadiene	0.22	1.09	ND	0.49	2.42	ND	
74-83-9	Bromomethane	0.44	1.09	ND	1.70	4.24	ND	
75-00-3	Chloroethane	0.44	1.09	ND	1.15	2.88	ND	
64-17-5	Ethanol	2.18	14.02	ND	4.12	26.46	ND	
107-02-8	Acrolein	0.44	1.31	ND	1.00	3.01	ND	
75-69-4	Trichlorofluoromethane	0.44	1.09	ND	2.46	6.14	ND	
67-64-1	Acetone	2.18	2.62	7.23	5.20	6.23	17.21	
67-63-0	2-propanol (isopropylalcohol)	0.87	5.46	ND	2.15	13.44	ND	
75-65-0	t-Butyl alcohol	0.44	4.37	ND	1.33	13.25	ND	
4227-95-6	Methyl iodide	0.44	1.31	ND	2.56	7.67	ND	
75-35-4	1,1-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
107-13-1	Acrylonitrile	0.87	1.31	ND	1.90	2.85	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.22	1.09	ND	1.68	8.38	ND	
107-05-1	Allyl chloride	0.22	4.37	ND	0.68	13.68	ND	
75-09-2	Methylene chloride	0.22	1.09	ND	0.76	3.80	ND	
75-15-0	Carbon disulfide	0.44	1.09	ND	1.36	3.40	ND	
156-60-5	trans-1,2-Dichloroethene	0.22	0.87	ND	0.87	3.47	ND	
1634-04-4	Methyl tert butyl ether	0.44	0.87	ND	1.58	3.15	ND	
107-12-0	Propionitrile	1.09	1.75	ND	2.46	3.94	ND	
75-34-3	1,1-Dichloroethane	0.22	1.09	ND	0.88	4.43	ND	
637-92-3	Ethyl tert butyl ether	0.44	1.09	ND	1.83	4.57	ND	
108-05-4	Vinyl acetate	0.22	4.37	ND	0.77	15.40	ND	
78-93-3	2-Butanone (MEK)	0.44	1.31	ND	1.29	3.87	ND	
108-20-3	Diisopropyl ether	0.44	2.62	ND	1.83	10.97	ND	
110-54-3	Hexane	0.44	1.09	ND	1.54	3.85	ND	
126-98-7	Methacrylonitrile	0.44	1.09	ND	1.20	3.00	ND	
141-78-6	Ethyl acetate	0.44	1.09	ND	1.58	3.94	ND	
74-97-5	Bromochloromethane	0.22	1.09	ND	1.16	5.79	ND	
96-33-3	Methyl acrylate	0.44	2.18	ND	1.54	7.70	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.22	1.31	ND	0.65	3.87	ND	
78-83-1	Isobutyl alcohol	0.87	3.49	ND	2.65	10.60	ND	
156-59-2	cis-1,2-Dichloroethene	0.22	1.09	ND	0.87	4.33	ND	
594-20-7	2,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
67-66-3	Chloroform	0.22	1.09	ND	1.07	5.34	ND	
71-55-6	1,1,1-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
107-06-2	1,2-Dichloroethane	0.22	1.09	ND	0.89	4.43	ND	
563-58-6	1,1-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
110-82-7	Cyclohexane	0.22	1.09	ND	0.75	3.76	ND	
71-43-2	Benzene	1.53	2.18	ND	4.89	6.98	ND	
56-23-5	Carbon tetrachloride	0.22	1.09	ND	1.38	6.88	ND	
994-05-8	t-Amyl methyl ether	0.44	2.18	ND	1.83	9.14	ND	
540-84-1	2,2,4-Trimethylpentane	0.22	1.09	ND	1.02	5.11	ND	
142-82-5	n-Heptane	0.44	1.09	ND	1.79	4.48	ND	
78-87-5	1,2-Dichloropropane	0.22	1.09	ND	1.01	5.05	ND	
123-91-1	1,4 Dioxane	0.44	2.18	ND	1.58	7.88	ND	
74-95-3	Dibromomethane	0.22	1.09	ND	1.55	7.77	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.09	ND	0.59	5.87	ND	
75-27-4	Bromodichloromethane	0.22	1.09	ND	1.46	7.32	ND	
80-62-6	Methyl methacrylate	0.44	1.09	ND	1.79	4.48	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.44	3.49	ND	1.79	14.34	ND	
10061-01-5	cis-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
108-88-3	Toluene	0.87	1.09	ND	3.29	4.12	ND	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.09	ND	0.99	4.96	ND	
79-00-5	1,1,2-Trichloroethane	0.22	1.09	ND	1.19	5.96	ND	
97-63-2	Ethyl methacrylate	0.44	1.09	ND	2.04	5.11	ND	
591-78-6	2-Hexanone	0.44	3.49	ND	1.79	14.34	ND	
142-28-9	1,3-Dichloropropane	0.22	3.06	ND	1.01	14.15	ND	
111-65-9	Octane	0.44	1.09	ND	2.04	5.11	ND	
124-48-1	Dibromochloromethane	0.44	1.09	ND	3.73	9.31	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.44	1.09	ND	3.36	8.40	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.09	ND	0.74	7.41	ND	
108-90-7	Chlorobenzene	0.44	1.09	ND	2.01	5.03	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.44	1.09	ND	3.00	7.50	ND	
100-41-4	Ethylbenzene	0.44	1.09	ND	1.90	4.75	ND	
1330-20-7	m,p-Xylenes	0.44	1.09	ND	1.90	4.75	ND	
111-84-2	Nonane	0.44	1.09	ND	2.29	5.74	ND	
100-42-5	Styrene	0.66	1.09	ND	2.80	4.66	ND	
75-25-2	Bromoform	0.44	1.09	ND	4.52	11.30	ND	
95-47-6	o-Xylene	0.44	1.09	ND	1.90	4.75	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.87	2.18	ND	6.00	15.00	ND	
96-18-4	1,2,3-Trichloropropane	0.87	2.62	ND	5.27	15.82	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.87	2.62	ND	4.47	13.41	ND	
103-65-1	n-Propylbenzene	0.87	3.06	ND	4.30	15.05	ND	
98-82-8	Isopropylbenzene	0.87	3.06	ND	4.30	15.05	ND	
622-96-8	4-Ethyltoluene	0.87	6.99	ND	4.30	34.39	ND	
108-67-8	1,3,5-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
124-18-5	Decane	0.87	2.62	ND	5.09	15.27	ND	
98-06-6	tert-butyl benzene	0.87	2.62	ND	4.80	14.40	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.87	3.93	ND	4.30	19.35	ND	
538-93-2	i-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
135-98-8	sec-butylbenzene	0.87	3.06	ND	4.80	16.80	ND	
541-73-1	1,3-Dichlorobenzene	0.87	3.49	ND	5.26	21.03	ND	
99-87-6	Isopropyltoluene	0.87	2.62	ND	4.80	14.40	ND	
100-44-7	Benzyl chloride	0.87	2.18	ND	4.53	11.32	ND	
106-46-7	1,4-Dichlorobenzene	0.87	2.18	ND	5.26	13.14	ND	
104-51-8	n-Butylbenzene	0.87	2.62	ND	4.80	14.40	ND	
95-50-1	1,2-Dichlorobenzene	0.87	3.06	ND	5.26	18.40	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.31	3.06	ND	12.68	29.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
91-20-3	Naphthalene	2.18	0.44	ND	11.46	2.29	ND	
87-61-6	1,2,3-Trichlorobenzene	1.31	2.18	ND	9.73	16.22	ND	
87-68-3	Hexachlorobutadiene	1.09	1.31	ND	11.66	13.99	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	123	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 41

File Name: 224435
Descriptio 41
Canister: 668
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/13/24 **Time:** 19:16
Can Dilution Factor: 1.31
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.06	6.55	ND	12.52	26.83	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**41**		
File Name:	2443541A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**11:38**
Sample ID:	T-609	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**19:16**
Anal Date:	13 Dec 124 7:16 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**668**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.31**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.301	4.41	42.00	22221
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.382	4.86	31.00	31100
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.656	6.42	58.00	126491
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.162	10.70	78.00	55358
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	0.00	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.018	18.23	105.00	26552
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.009	18.31	105.00	13551
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.015	18.95	105.00	18343
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7517195**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8609312**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**15625011**
2037-26-5	Toluene-d8	60	SURR	12.330	13.40	98.00	**6302383**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 41
File Name: 2443541A.D
Run Method: A1563_L.M
Can Factor: 1.31
Air Volume: 300.0 ml
Can/Tube Number: 668
Dilution Factor: 0.3930
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.3930
Sig Figs:	2
MDLSF:	2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	2.0

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.30	1.31	2.26	1.31	2.26	2.26	2.26	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.38	1.67	2.19	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.66	7.23	17.21	7.23	17.21	17.21	17.21	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.16	0.71	2.26	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.02	0.08	0.39	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.01	0.04	0.19	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.02	0.07	0.33	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.33	123	123	123	123	123	123	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.44	0.75	1.09	1.88				=		Y	1.31	2.26
0.66	3.24	1.09	5.41	U	ND		ND		Y	0.00	0.00
2.18	2.86	2.62	3.43	U	ND		ND		Y	0.00	0.00
0.66	1.35	1.09	2.26	U	ND		ND		Y	0.00	0.00
0.44	3.06	1.09	7.64	U	ND		ND		Y	0.00	0.00
0.22	0.56	1.09	2.79	U	ND		ND		Y	0.00	0.00
0.22	0.49	1.09	2.42	U	ND		ND		Y	0.00	0.00
0.44	1.70	1.09	4.24	U	ND		ND		Y	0.00	0.00
0.44	1.15	1.09	2.88	U	ND		ND		Y	0.00	0.00
2.18	4.12	14.02	26.46	U	ND		ND		Y	0.00	0.00
0.44	1.00	1.31	3.01	U	ND		ND		Y	0.00	0.00
0.44	2.46	1.09	6.14	U	ND		ND		Y	0.00	0.00
2.18	5.20	2.62	6.23				=		Y	7.23	17.21
0.87	2.15	5.46	13.44	U	ND		ND		Y	0.00	0.00
0.44	1.33	4.37	13.25	U	ND		ND		Y	0.00	0.00
0.44	2.56	1.31	7.67	U	ND		ND		Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND		ND		Y	0.00	0.00
0.87	1.90	1.31	2.85	U	ND		ND		Y	0.00	0.00
0.22	1.68	1.09	8.38	U	ND		ND		Y	0.00	0.00
0.22	0.68	4.37	13.68	U	ND		ND		Y	0.00	0.00
0.22	0.76	1.09	3.80	U	ND		ND		Y	0.00	0.00
0.44	1.36	1.09	3.40	U	ND		ND		Y	0.00	0.00
0.22	0.87	0.87	3.47	U	ND		ND		Y	0.00	0.00
0.44	1.58	0.87	3.15	U	ND		ND		Y	0.00	0.00
1.09	2.46	1.75	3.94	U	ND		ND		Y	0.00	0.00
0.22	0.88	1.09	4.43	U	ND		ND		Y	0.00	0.00
0.44	1.83	1.09	4.57	U	ND		ND		Y	0.00	0.00
0.22	0.77	4.37	15.40	U	ND		ND		Y	0.00	0.00
0.44	1.29	1.31	3.87	U	ND		ND		Y	0.00	0.00
0.44	1.83	2.62	10.97	U	ND		ND		Y	0.00	0.00
0.44	1.54	1.09	3.85	U	ND		ND		Y	0.00	0.00
0.44	1.20	1.09	3.00	U	ND		ND		Y	0.00	0.00
0.44	1.58	1.09	3.94	U	ND		ND		Y	0.00	0.00
0.22	1.16	1.09	5.79	U	ND		ND		Y	0.00	0.00

0.44	1.54	2.18	7.70	U	ND	ND	Y	0.00	0.00
0.22	0.65	1.31	3.87	U	ND	ND	Y	0.00	0.00
0.87	2.65	3.49	10.60	U	ND	ND	Y	0.00	0.00
0.22	0.87	1.09	4.33	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.22	1.07	1.09	5.34	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.22	0.89	1.09	4.43	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	0.75	1.09	3.76	U	ND	ND	Y	0.00	0.00
1.53	4.89	2.18	6.98	U	ND	ND	Y	0.00	0.00
0.22	1.38	1.09	6.88	U	ND	ND	Y	0.00	0.00
0.44	1.83	2.18	9.14	U	ND	ND	Y	0.00	0.00
0.22	1.02	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.22	1.01	1.09	5.05	U	ND	ND	Y	0.00	0.00
0.44	1.58	2.18	7.88	U	ND	ND	Y	0.00	0.00
0.22	1.55	1.09	7.77	U	ND	ND	Y	0.00	0.00
0.11	0.59	1.09	5.87	U	ND	ND	Y	0.00	0.00
0.22	1.46	1.09	7.32	U	ND	ND	Y	0.00	0.00
0.44	1.79	1.09	4.48	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.87	3.29	1.09	4.12	U	ND	ND	Y	0.00	0.00
0.22	0.99	1.09	4.96	U	ND	ND	Y	0.00	0.00
0.22	1.19	1.09	5.96	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	1.79	3.49	14.34	U	ND	ND	Y	0.00	0.00
0.22	1.01	3.06	14.15	U	ND	ND	Y	0.00	0.00
0.44	2.04	1.09	5.11	U	ND	ND	Y	0.00	0.00
0.44	3.73	1.09	9.31	U	ND	ND	Y	0.00	0.00
0.44	3.36	1.09	8.40	U	ND	ND	Y	0.00	0.00
0.11	0.74	1.09	7.41	U	ND	ND	Y	0.00	0.00
0.44	2.01	1.09	5.03	U	ND	ND	Y	0.00	0.00
0.44	3.00	1.09	7.50	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.44	2.29	1.09	5.74	U	ND	ND	Y	0.00	0.00
0.66	2.80	1.09	4.66	U	ND	ND	Y	0.00	0.00
0.44	4.52	1.09	11.30	U	ND	ND	Y	0.00	0.00
0.44	1.90	1.09	4.75	U	ND	ND	Y	0.00	0.00
0.87	6.00	2.18	15.00	U	ND	ND	Y	0.00	0.00
0.87	5.27	2.62	15.82	U	ND	ND	Y	0.00	0.00
0.87	4.47	2.62	13.41	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.06	15.05	U	ND	ND	Y	0.00	0.00
0.87	4.30	6.99	34.39	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	5.09	2.62	15.27	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.30	3.93	19.35	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00

0.87	4.80	3.06	16.80	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.49	21.03	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	4.53	2.18	11.32	U	ND	ND	Y	0.00	0.00
0.87	5.26	2.18	13.14	U	ND	ND	Y	0.00	0.00
0.87	4.80	2.62	14.40	U	ND	ND	Y	0.00	0.00
0.87	5.26	3.06	18.40	U	ND	ND	Y	0.00	0.00
1.31	12.68	3.06	29.58	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
2.18	11.46	0.44	2.29	U	ND	ND	Y	0.00	0.00
1.31	9.73	2.18	16.22	U	ND	ND	Y	0.00	0.00
1.09	11.66	1.31	13.99	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 41
Sample ID: T-609

Can Factor: 1.31
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	
ND	**0.7**	**1.5**	3.1	6.55	3.06	12.52	6.55	26.83	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**41**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.31	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) / (Avg RFn) (Cistdi) / (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 / (SV) (CDF)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	22221	20.0	7517195	0.301	1.31	2.26
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7517195	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	31100	20.0	7517195	0.382	1.67	2.19
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	7517195	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7517195	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7517195	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7517195	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7517195	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7517195	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	7517195	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7517195	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7517195	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	126491	20.0	7517195	1.656	7.23	17.21
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	7517195	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7517195	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7517195	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7517195	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7517195	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7517195	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7517195	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7517195	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	7517195	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7517195	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7517195	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7517195	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7517195	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7517195	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7517195	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	7517195	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7517195	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7517195	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7517195	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	7517195	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7517195	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7517195	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	7517195	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7517195	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7517195	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7517195	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	7517195	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	8609312	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	8609312	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	8609312	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	8609312	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	55358	20.0	8609312	0.162	0.71	2.26
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	8609312	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	8609312	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	8609312	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	8609312	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	8609312	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	8609312	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	8609312	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	8609312	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	8609312	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	8609312	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	8609312	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	8609312	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	0	20.0	8609312	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	8609312	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	8609312	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	8609312	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	8609312	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	8609312	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	8609312	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	8609312	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	8609312	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	8609312	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	15625011	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	15625011	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	15625011	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	15625011	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	15625011	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	15625011	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	15625011	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	15625011	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	15625011	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	15625011	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	15625011	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	15625011	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	15625011	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	26552	20.0	15625011	0.018	0.08	0.39
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	13551	20.0	15625011	0.009	0.04	0.19
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	15625011	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	15625011	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	18343	20.0	15625011	0.015	0.07	0.33
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	15625011	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	15625011	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	15625011	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	15625011	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	15625011	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	15625011	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	15625011	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	15625011	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	15625011	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	15625011	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	15625011	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	15625011	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	15625011	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	7517195	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	8609312	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	15625011	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6302383	10.0		12.330	123.30	123

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443541A.D
Acq Time : 13 Dec 124 7:16 pm
Sample : T-609
Misc : SCHMIDT
Quant Time: Dec 19 16:11 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	7517195	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	8609312	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.21	117	15625011	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	6302383	12.33	ppbV		123.30
Target Compounds							Qvalue
2) Propylene	4.28	42	22221	0.30	ppbV		86
4) Methanol	4.77	31	31100	0.38	ppbV	#	96
14) Acetone	6.26	58	126491	1.66	ppbV	#	1
47) Benzene	10.43	78	55358	0.16	ppbV	m	70
85) 4-Ethyltoluene	17.87	105	26552	0.02	ppbV	#	83
86) 1,3,5-Trimethylbenzene	17.96	105	13551	0.01	ppbV	m	81
89) 1,2,4-Trimethylbenzene	18.57	105	18343	0.02	ppbV	#	92

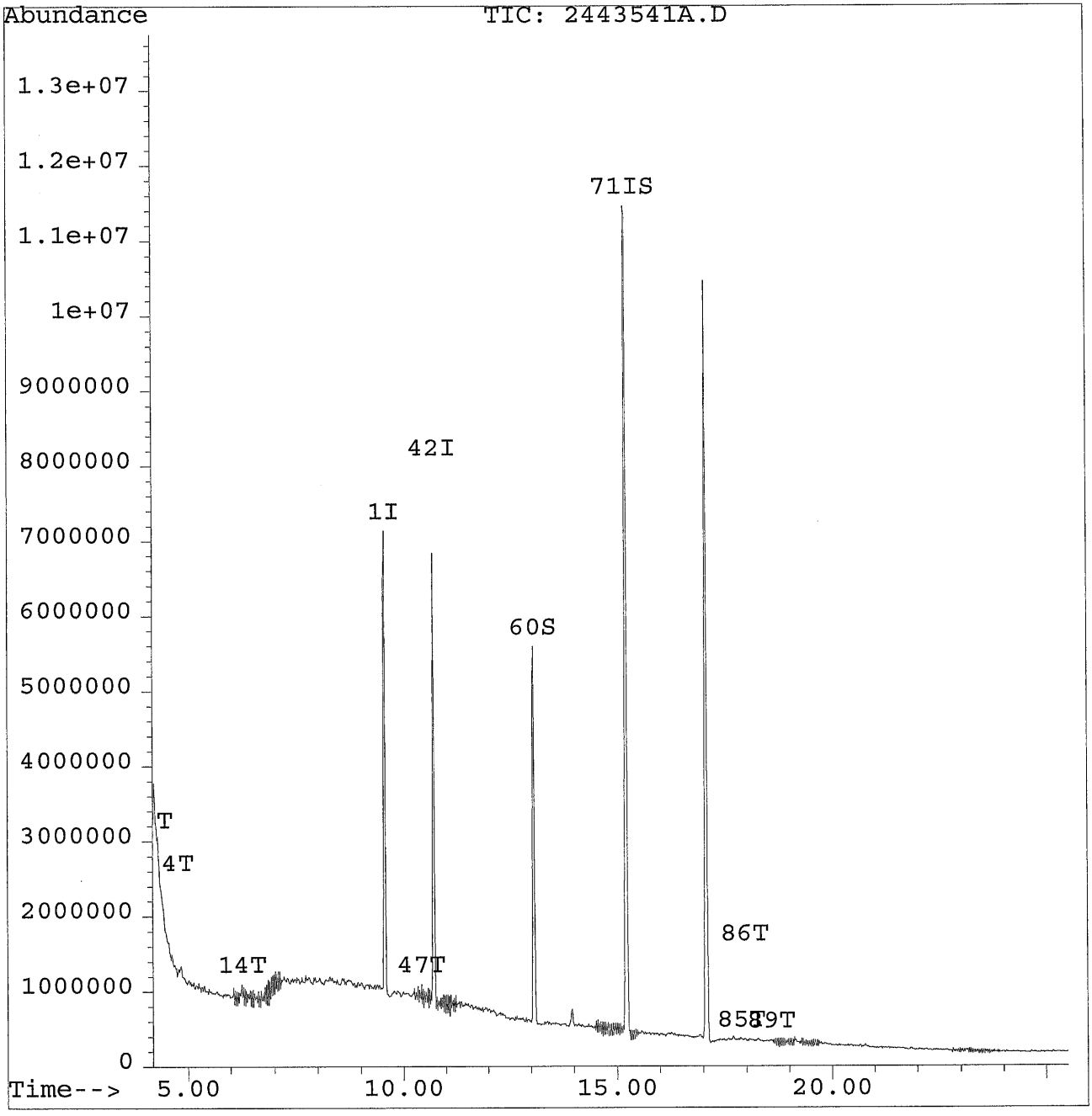
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443541A.D
Acq Time : 13 Dec 124 7:16 pm
Sample : T-609
Misc : SCHMIDT
Quant Time: Dec 19 16:11 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443541A.D
Acq Time : 13 Dec 124 7:16 pm
Sample : T-609
Misc : SCHMIDT

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	16.98 ppbV	30539651	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 42

Client ID T-610

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 42**

File Name: 2443542A.D **Date Sampled:** 11/21/24 **Time:** 11:11
Description: T-610 **Date Analyzed:** 12/13/24 **Time:** 19:55
Canister: 730 **Can Dilution Factor:** 1.37
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.14	2.66	0.79	1.97	4.59	
75-71-8	Dichlorodifluoromethane	0.69	1.14	ND	3.39	5.65	ND	
67-56-1	Methanol	2.28	2.74	7.31	2.99	3.59	9.58	
74-87-3	Chloromethane	0.69	1.14	1.30	1.42	2.36	2.70	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.14	ND	3.20	7.99	ND	
75-01-4	Vinyl chloride	0.23	1.14	ND	0.59	2.92	ND	
106-99-0	1,3-Butadiene	0.23	1.14	ND	0.51	2.53	ND	
74-83-9	Bromomethane	0.46	1.14	ND	1.77	4.44	ND	
75-00-3	Chloroethane	0.46	1.14	ND	1.21	3.02	ND	
64-17-5	Ethanol	2.28	14.66	ND	4.31	27.68	ND	
107-02-8	Acrolein	0.46	1.37	ND	1.05	3.15	ND	
75-69-4	Trichlorofluoromethane	0.46	1.14	ND	2.57	6.42	ND	
67-64-1	Acetone	2.28	2.74	7.91	5.43	6.52	18.81	
67-63-0	2-propanol (isopropylalcohol)	0.91	5.71	ND	2.25	14.05	ND	
75-65-0	t-Butyl alcohol	0.46	4.57	ND	1.39	13.86	ND	
4227-95-6	Methyl iodide	0.46	1.37	ND	2.67	8.02	ND	
75-35-4	1,1-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	
107-13-1	Acrylonitrile	0.91	1.37	ND	1.99	2.98	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.14	ND	1.75	8.76	ND	
107-05-1	Allyl chloride	0.23	4.57	ND	0.72	14.31	ND	
75-09-2	Methylene chloride	0.23	1.14	ND	0.79	3.97	ND	
75-15-0	Carbon disulfide	0.46	1.14	ND	1.42	3.56	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.91	ND	0.91	3.62	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.91	ND	1.65	3.30	ND	
107-12-0	Propionitrile	1.14	1.83	ND	2.58	4.12	ND	
75-34-3	1,1-Dichloroethane	0.23	1.14	ND	0.92	4.63	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.14	ND	1.91	4.78	ND	
108-05-4	Vinyl acetate	0.23	4.57	ND	0.81	16.10	ND	
78-93-3	2-Butanone (MEK)	0.46	1.37	2.58	1.35	4.05	7.62	
108-20-3	Diisopropyl ether	0.46	2.74	ND	1.91	11.47	ND	
110-54-3	Hexane	0.46	1.14	ND	1.61	4.03	ND	
126-98-7	Methacrylonitrile	0.46	1.14	ND	1.25	3.14	ND	
141-78-6	Ethyl acetate	0.46	1.14	ND	1.65	4.12	ND	
74-97-5	Bromochloromethane	0.23	1.14	ND	1.21	6.05	ND	
96-33-3	Methyl acrylate	0.46	2.28	ND	1.61	8.05	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.37	ND	0.68	4.05	ND	
78-83-1	Isobutyl alcohol	0.91	3.65	ND	2.77	11.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.14	ND	0.91	4.53	ND	
594-20-7	2,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
67-66-3	Chloroform	0.23	1.14	ND	1.12	5.58	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
107-06-2	1,2-Dichloroethane	0.23	1.14	ND	0.93	4.63	ND	
563-58-6	1,1-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
110-82-7	Cyclohexane	0.23	1.14	ND	0.79	3.94	ND	
71-43-2	Benzene	1.60	2.28	ND	5.11	7.30	ND	
56-23-5	Carbon tetrachloride	0.23	1.14	ND	1.44	7.19	ND	
994-05-8	t-Amyl methyl ether	0.46	2.28	ND	1.91	9.56	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.14	ND	1.07	5.34	ND	
142-82-5	n-Heptane	0.46	1.14	ND	1.87	4.69	ND	
78-87-5	1,2-Dichloropropane	0.23	1.14	ND	1.06	5.28	ND	
123-91-1	1,4 Dioxane	0.46	2.28	ND	1.65	8.24	ND	
74-95-3	Dibromomethane	0.23	1.14	ND	1.63	8.13	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.14	ND	0.61	6.14	ND	
75-27-4	Bromodichloromethane	0.23	1.14	ND	1.53	7.66	ND	
80-62-6	Methyl methacrylate	0.46	1.14	ND	1.87	4.68	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.65	ND	1.87	14.99	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
108-88-3	Toluene	0.91	1.14	1.22	3.45	4.31	4.59	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.14	ND	1.04	5.19	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.14	ND	1.25	6.24	ND	
97-63-2	Ethyl methacrylate	0.46	1.14	ND	2.14	5.34	ND	
591-78-6	2-Hexanone	0.46	3.65	ND	1.87	14.99	ND	
142-28-9	1,3-Dichloropropane	0.23	3.20	ND	1.06	14.79	ND	
111-65-9	Octane	0.46	1.14	ND	2.14	5.34	ND	
124-48-1	Dibromochloromethane	0.46	1.14	ND	3.90	9.74	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.14	ND	3.51	8.79	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.14	ND	0.78	7.75	ND	
108-90-7	Chlorobenzene	0.46	1.14	ND	2.11	5.26	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.14	ND	3.14	7.85	ND	
100-41-4	Ethylbenzene	0.46	1.14	ND	1.99	4.97	ND	
1330-20-7	m,p-Xylenes	0.46	1.14	0.67	1.99	4.97	2.93	J
111-84-2	Nonane	0.46	1.14	ND	2.40	6.00	ND	
100-42-5	Styrene	0.69	1.14	ND	2.92	4.87	ND	
75-25-2	Bromoform	0.46	1.14	ND	4.73	11.82	ND	
95-47-6	o-Xylene	0.46	1.14	ND	1.99	4.97	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.91	2.28	ND	6.28	15.69	ND	
96-18-4	1,2,3-Trichloropropane	0.91	2.74	ND	5.51	16.54	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.91	2.74	ND	4.68	14.03	ND	
103-65-1	n-Propylbenzene	0.91	3.20	ND	4.50	15.74	ND	
98-82-8	Isopropylbenzene	0.91	3.20	ND	4.50	15.74	ND	
622-96-8	4-Ethyltoluene	0.91	7.31	ND	4.50	35.97	ND	
108-67-8	1,3,5-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
124-18-5	Decane	0.91	2.74	ND	5.32	15.97	ND	
98-06-6	tert-butyl benzene	0.91	2.74	ND	5.02	15.06	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.91	4.11	ND	4.50	20.23	ND	
538-93-2	i-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
135-98-8	sec-butylbenzene	0.91	3.20	ND	5.02	17.57	ND	
541-73-1	1,3-Dichlorobenzene	0.91	3.65	ND	5.50	21.99	ND	
99-87-6	Isopropyltoluene	0.91	2.74	ND	5.02	15.06	ND	
100-44-7	Benzyl chloride	0.91	2.28	ND	4.74	11.84	ND	
106-46-7	1,4-Dichlorobenzene	0.91	2.28	ND	5.50	13.75	ND	
104-51-8	n-Butylbenzene	0.91	2.74	ND	5.02	15.06	ND	
95-50-1	1,2-Dichlorobenzene	0.91	3.20	ND	5.50	19.25	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.37	3.20	ND	13.26	30.94	ND	
120-82-1	1,2,4-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
91-20-3	Naphthalene	2.28	0.46	ND	11.99	2.40	ND	
87-61-6	1,2,3-Trichlorobenzene	1.37	2.28	ND	10.18	16.96	ND	
87-68-3	Hexachlorobutadiene	1.14	1.37	ND	12.19	14.63	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 42

File Name: 224435
Descriptio 42
Canister: 730
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/13/24 **Time:** 19:55
Can Dilution Factor: 1.37
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.20	6.85	ND	13.09	28.05	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**42**		
File Name:	2443542A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**11:11**
Sample ID:	T-610	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**19:55**
Anal Date:	13 Dec 124 7:55 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**730**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.37**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.583	4.41	42.00	43399
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	1.600	4.86	31.00	131217
74-87-3	Chloromethane	5	TRG	0.286	4.77	50.00	25332
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.731	6.42	58.00	133256
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.101	6.45	45.00	15129
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.565	8.75	72.00	28400
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.179	10.70	78.00	61464
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.267	13.50	91.00	128695
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.053	15.90	106	61777
1330-20-7	m,p-Xylenes	75	TRG	0.148	16.06	91.00	141202
111-84-2	Nonane	76	TRG	0.043	16.43	57.00	24053
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.049	16.35	91.00	51539
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.018	18.31	105.00	27615
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.041	18.95	105.00	49398
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7577262**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8650508**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**15736182**
2037-26-5	Toluene-d8	60	SURR	12.133	13.40	98.00	**6231333**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 42
File Name: 2443542A.D
Run Method: A1563_L.M
Can Factor: 1.37
Air Volume: 300.0 ml
Can/Tube Number: 730
Dilution Factor: 0.4110
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4110
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.58	2.66	4.59	2.66	4.59	4.59	4.59	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	1.60	7.31	9.58	7.31	9.58	9.58	9.58	**0.500**	**0.600**
Chloromethane	50.5	0.29	1.30	2.70	1.30	2.70	2.70	2.70	**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.73	7.91	18.81	7.91	18.81	18.81	18.81	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.10	0.46	1.14	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.56	2.58	7.62	2.58	7.62	7.62	7.62	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Benzene	78.1	0.18	0.82	2.61	ND	ND	0		**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Toluene	92.1	0.27	1.22	4.59	1.22	4.59	4.59	4.59	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0		**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethylbenzene	106.2	0.05	0.24	1.05	ND	ND	0		**0.100**	**0.250**
m,p-Xylenes	106.2	0.15	0.67	2.93	0.67	2.93	2.93	2.93	**0.100**	**0.250**
Nonane	128.3	0.04	0.20	1.03	ND	ND	0		**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
o-Xylene	106.2	0.05	0.23	0.98	ND	ND	0		**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.02	0.08	0.41	ND	ND	0		**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.04	0.19	0.93	ND	ND	0		**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.13	121	121	121	121	121	121	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.14	1.97				=		Y	2.66	4.59
0.69	3.39	1.14	5.65	U	ND		ND		Y	0.00	0.00
2.28	2.99	2.74	3.59				=		Y	7.31	9.58
0.69	1.42	1.14	2.36				=		Y	1.30	2.70
0.46	3.20	1.14	7.99	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.14	2.92	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.14	2.53	U	ND		ND		Y	0.00	0.00
0.46	1.77	1.14	4.44	U	ND		ND		Y	0.00	0.00
0.46	1.21	1.14	3.02	U	ND		ND		Y	0.00	0.00
2.28	4.31	14.66	27.68	U	ND		ND		Y	0.00	0.00
0.46	1.05	1.37	3.15	U	ND		ND		Y	0.00	0.00
0.46	2.57	1.14	6.42	U	ND		ND		Y	0.00	0.00
2.28	5.43	2.74	6.52				=		Y	7.91	18.81
0.91	2.25	5.71	14.05	U	ND		ND		Y	0.00	0.00
0.46	1.39	4.57	13.86	U	ND		ND		Y	0.00	0.00
0.46	2.67	1.37	8.02	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.14	4.53	U	ND		ND		Y	0.00	0.00
0.91	1.99	1.37	2.98	U	ND		ND		Y	0.00	0.00
0.23	1.75	1.14	8.76	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.57	14.31	U	ND		ND		Y	0.00	0.00
0.23	0.79	1.14	3.97	U	ND		ND		Y	0.00	0.00
0.46	1.42	1.14	3.56	U	ND		ND		Y	0.00	0.00
0.23	0.91	0.91	3.62	U	ND		ND		Y	0.00	0.00
0.46	1.65	0.91	3.30	U	ND		ND		Y	0.00	0.00
1.14	2.58	1.83	4.12	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.14	4.63	U	ND		ND		Y	0.00	0.00
0.46	1.91	1.14	4.78	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.57	16.10	U	ND		ND		Y	0.00	0.00
0.46	1.35	1.37	4.05				=		Y	2.58	7.62
0.46	1.91	2.74	11.47	U	ND		ND		Y	0.00	0.00
0.46	1.61	1.14	4.03	U	ND		ND		Y	0.00	0.00
0.46	1.25	1.14	3.14	U	ND		ND		Y	0.00	0.00
0.46	1.65	1.14	4.12	U	ND		ND		Y	0.00	0.00
0.23	1.21	1.14	6.05	U	ND		ND		Y	0.00	0.00

0.46	1.61	2.28	8.05	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.37	4.05	U	ND	ND	Y	0.00	0.00
0.91	2.77	3.65	11.09	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.14	4.53	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.14	5.28	U	ND	ND	Y	0.00	0.00
0.23	1.12	1.14	5.58	U	ND	ND	Y	0.00	0.00
0.23	1.25	1.14	6.24	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.14	4.63	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.14	5.19	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.14	3.94	U	ND	ND	Y	0.00	0.00
1.60	5.11	2.28	7.30	U	ND	ND	Y	0.00	0.00
0.23	1.44	1.14	7.19	U	ND	ND	Y	0.00	0.00
0.46	1.91	2.28	9.56	U	ND	ND	Y	0.00	0.00
0.23	1.07	1.14	5.34	U	ND	ND	Y	0.00	0.00
0.46	1.87	1.14	4.69	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.14	5.28	U	ND	ND	Y	0.00	0.00
0.46	1.65	2.28	8.24	U	ND	ND	Y	0.00	0.00
0.23	1.63	1.14	8.13	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.14	6.14	U	ND	ND	Y	0.00	0.00
0.23	1.53	1.14	7.66	U	ND	ND	Y	0.00	0.00
0.46	1.87	1.14	4.68	U	ND	ND	Y	0.00	0.00
0.46	1.87	3.65	14.99	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.14	5.19	U	ND	ND	Y	0.00	0.00
0.91	3.45	1.14	4.31			=	Y	1.22	4.59
0.23	1.04	1.14	5.19	U	ND	ND	Y	0.00	0.00
0.23	1.25	1.14	6.24	U	ND	ND	Y	0.00	0.00
0.46	2.14	1.14	5.34	U	ND	ND	Y	0.00	0.00
0.46	1.87	3.65	14.99	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.20	14.79	U	ND	ND	Y	0.00	0.00
0.46	2.14	1.14	5.34	U	ND	ND	Y	0.00	0.00
0.46	3.90	1.14	9.74	U	ND	ND	Y	0.00	0.00
0.46	3.51	1.14	8.79	U	ND	ND	Y	0.00	0.00
0.11	0.78	1.14	7.75	U	ND	ND	Y	0.00	0.00
0.46	2.11	1.14	5.26	U	ND	ND	Y	0.00	0.00
0.46	3.14	1.14	7.85	U	ND	ND	Y	0.00	0.00
0.46	1.99	1.14	4.97	U	ND	ND	Y	0.00	0.00
0.46	1.99	1.14	4.97	J	J	=	Y	0.67	2.93
0.46	2.40	1.14	6.00	U	ND	ND	Y	0.00	0.00
0.69	2.92	1.14	4.87	U	ND	ND	Y	0.00	0.00
0.46	4.73	1.14	11.82	U	ND	ND	Y	0.00	0.00
0.46	1.99	1.14	4.97	U	ND	ND	Y	0.00	0.00
0.91	6.28	2.28	15.69	U	ND	ND	Y	0.00	0.00
0.91	5.51	2.74	16.54	U	ND	ND	Y	0.00	0.00
0.91	4.68	2.74	14.03	U	ND	ND	Y	0.00	0.00
0.91	4.50	3.20	15.74	U	ND	ND	Y	0.00	0.00
0.91	4.50	3.20	15.74	U	ND	ND	Y	0.00	0.00
0.91	4.50	7.31	35.97	U	ND	ND	Y	0.00	0.00
0.91	4.50	4.11	20.23	U	ND	ND	Y	0.00	0.00
0.91	5.32	2.74	15.97	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00
0.91	4.50	4.11	20.23	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00

0.91	5.02	3.20	17.57	U	ND	ND	Y	0.00	0.00
0.91	5.50	3.65	21.99	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00
0.91	4.74	2.28	11.84	U	ND	ND	Y	0.00	0.00
0.91	5.50	2.28	13.75	U	ND	ND	Y	0.00	0.00
0.91	5.02	2.74	15.06	U	ND	ND	Y	0.00	0.00
0.91	5.50	3.20	19.25	U	ND	ND	Y	0.00	0.00
1.37	13.26	3.20	30.94	U	ND	ND	Y	0.00	0.00
1.37	10.18	2.28	16.96	U	ND	ND	Y	0.00	0.00
2.28	11.99	0.46	2.40	U	ND	ND	Y	0.00	0.00
1.37	10.18	2.28	16.96	U	ND	ND	Y	0.00	0.00
1.14	12.19	1.37	14.63	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 42
Sample ID: T-610

Can Factor: 1.37
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	
ND	**0.7**	**1.5**	3.2	6.85	3.20	13.09	6.85	28.05	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**42**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.37	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi) i] Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	43399	20.0	7577262	0.583	2.66	4.59
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7577262	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	131217	20.0	7577262	1.600	7.31	9.58
5	Chloromethane	PFB	TRG	50.5	0.234	25332	20.0	7577262	0.286	1.30	2.70
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7577262	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7577262	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7577262	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7577262	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7577262	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	7577262	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7577262	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7577262	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	133256	20.0	7577262	1.731	7.91	18.81
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	15129	20.0	7577262	0.101	0.46	1.14
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7577262	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7577262	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7577262	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7577262	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7577262	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7577262	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7577262	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	7577262	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7577262	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7577262	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7577262	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7577262	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7577262	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7577262	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	28400	20.0	7577262	0.565	2.58	7.62
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7577262	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7577262	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7577262	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	7577262	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7577262	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7577262	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	7577262	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7577262	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7577262	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7577262	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	7577262	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	8650508	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	8650508	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	8650508	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	8650508	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	61464	20.0	8650508	0.179	0.82	2.61
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	8650508	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	8650508	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	8650508	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	8650508	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	8650508	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	8650508	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	8650508	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	8650508	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	8650508	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	8650508	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	8650508	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	8650508	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	128695	20.0	8650508	0.267	1.22	4.59
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	8650508	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	8650508	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	8650508	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	8650508	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	8650508	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	8650508	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	8650508	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	8650508	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	8650508	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	15736182	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	15736182	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	61777	20.0	15736182	0.053	0.24	1.05
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	141202	20.0	15736182	0.148	0.67	2.93
76	Nonane	d5CB	TRG	128.3	0.711	24053	20.0	15736182	0.043	0.20	1.03
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	15736182	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	15736182	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	51539	20.0	15736182	0.049	0.23	0.98
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	15736182	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	15736182	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	15736182	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	15736182	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	15736182	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	15736182	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	27615	20.0	15736182	0.018	0.08	0.41
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	15736182	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	15736182	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	49398	20.0	15736182	0.041	0.19	0.93
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	15736182	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	15736182	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	15736182	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	15736182	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	15736182	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	15736182	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	15736182	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	15736182	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	15736182	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	15736182	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	15736182	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	15736182	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	15736182	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	7577262	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	8650508	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	15736182	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6231333	10.0		12.133	121.33	121

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443542A.D
Acq Time : 13 Dec 124 7:55 pm Operator: SS
Sample : T-610 Inst : 5970 - M
Misc : SCHMIDT Multiplr: 1.00
Quant Time: Dec 20 10:32 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	7577262	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	8650508	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.23	117	15736182	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	6231333	12.13	ppbV		121.33
Target Compounds							Qvalue
2) Propylene	4.31	42	43399	0.58	ppbV		88
4) Methanol	4.84	31	131217	1.60	ppbV	#	93
5) Chloromethane	4.65	50	25332	0.29	ppbV	#	75
14) Acetone	6.26	58	133256	1.73	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.34	45	15129	0.10	ppbV	#	90
30) 2-Butanone (MEK)	8.53	72	28400	0.56	ppbV		98
47) Benzene	10.43	78	61464	0.18	ppbV	m	65
61) Toluene	13.20	91	128695	0.27	ppbV		98
74) Ethylbenzene	15.55	91	61777	0.05	ppbV	#	84
75) m,p-Xylenes	15.72	91	141202	0.15	ppbV	#	77
76) Nonane	16.08	57	24053	0.04	ppbV	#	66
79) o-Xylene	16.35	91	51539	0.05	ppbV	#	85
86) 1,3,5-Trimethylbenzene	17.96	105	27615	0.02	ppbV	m	76
89) 1,2,4-Trimethylbenzene	18.57	105	49398	0.04	ppbV	#	91

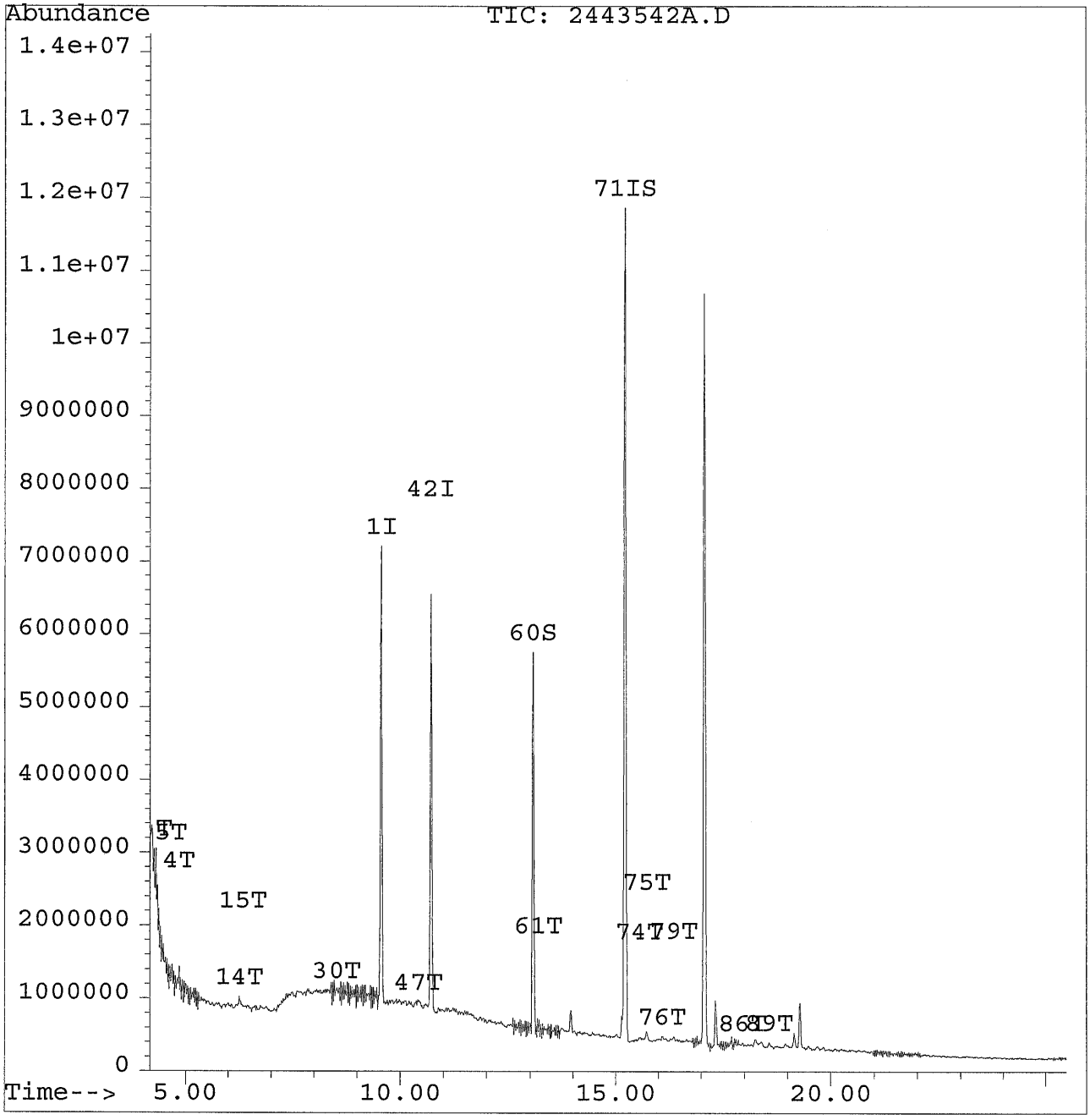
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443542A.D
Acq Time : 13 Dec 124 7:55 pm
Sample : T-610
Misc : SCHMIDT
Quant Time: Dec 20 10:32 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443542A.D
Acq Time : 13 Dec 124 7:55 pm Operator: SS
Sample : T-610 Inst : 5970 - M
Misc : SCHMIDT Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	17.30 ppbV	31028097	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
3	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	91
4	2-Furancarbonyl chloride	4649	000527-69-5	8

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
17.33	1.02 ppbV	1825916	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[3.1.0]hex-2-ene, 2-methyl-5	5773	002867-05-2	80
2	.alpha.-Phellandrene	5822	000099-83-2	78
3	Bicyclo[3.1.1]hept-2-ene, 3,6,6-tri	5817	004889-83-2	72
4	Bicyclo[3.1.0]hexan-2-ol, 2-methyl-	9414	017699-16-0	64
5	.alpha.-Pinene	5805	000080-56-8	64

Sample Data Packages

SDG Number **224435**

Lab Id Number **43**

Client ID T-611

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 43**

File Name: 2443543A.D **Date Sampled:** 11/21/24 **Time:** 11:28
Description: T-611 **Date Analyzed:** 12/13/24 **Time:** 20:34
Canister: 701 **Can Dilution Factor:** 1.35
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.45	1.13	1.44	0.78	1.94	2.48	
75-71-8	Dichlorodifluoromethane	0.68	1.13	ND	3.34	5.57	ND	
67-56-1	Methanol	2.25	2.70	3.27	2.95	3.54	4.28	
74-87-3	Chloromethane	0.68	1.13	ND	1.40	2.33	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.45	1.13	ND	3.15	7.87	ND	
75-01-4	Vinyl chloride	0.23	1.13	ND	0.58	2.88	ND	
106-99-0	1,3-Butadiene	0.23	1.13	ND	0.50	2.49	ND	
74-83-9	Bromomethane	0.45	1.13	ND	1.75	4.37	ND	
75-00-3	Chloroethane	0.45	1.13	ND	1.19	2.97	ND	
64-17-5	Ethanol	2.25	14.45	ND	4.25	27.27	ND	
107-02-8	Acrolein	0.45	1.35	ND	1.03	3.10	ND	
75-69-4	Trichlorofluoromethane	0.45	1.13	ND	2.53	6.33	ND	
67-64-1	Acetone	2.25	2.70	6.62	5.35	6.42	15.75	
67-63-0	2-propanol (isopropylalcohol)	0.90	5.63	2.61	2.22	13.85	6.43	J
75-65-0	t-Butyl alcohol	0.45	4.50	ND	1.37	13.66	ND	
4227-95-6	Methyl iodide	0.45	1.35	ND	2.63	7.90	ND	
75-35-4	1,1-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
107-13-1	Acrylonitrile	0.90	1.35	ND	1.96	2.94	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.13	ND	1.73	8.63	ND	
107-05-1	Allyl chloride	0.23	4.50	ND	0.70	14.10	ND	
75-09-2	Methylene chloride	0.23	1.13	ND	0.78	3.91	ND	
75-15-0	Carbon disulfide	0.45	1.13	ND	1.40	3.51	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.90	ND	0.89	3.57	ND	
1634-04-4	Methyl tert butyl ether	0.45	0.90	ND	1.62	3.25	ND	
107-12-0	Propionitrile	1.13	1.80	ND	2.54	4.06	ND	
75-34-3	1,1-Dichloroethane	0.22	1.13	ND	0.91	4.56	ND	
637-92-3	Ethyl tert butyl ether	0.45	1.13	ND	1.88	4.71	ND	
108-05-4	Vinyl acetate	0.23	4.50	ND	0.79	15.87	ND	
78-93-3	2-Butanone (MEK)	0.45	1.35	3.59	1.33	3.99	10.60	
108-20-3	Diisopropyl ether	0.45	2.70	ND	1.88	11.30	ND	
110-54-3	Hexane	0.45	1.13	ND	1.59	3.97	ND	
126-98-7	Methacrylonitrile	0.45	1.13	ND	1.24	3.09	ND	
141-78-6	Ethyl acetate	0.45	1.13	ND	1.62	4.06	ND	
74-97-5	Bromochloromethane	0.23	1.13	ND	1.19	5.96	ND	
96-33-3	Methyl acrylate	0.45	2.25	ND	1.59	7.93	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.35	ND	0.67	3.99	ND	
78-83-1	Isobutyl alcohol	0.90	3.60	ND	2.73	10.93	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.13	ND	0.89	4.46	ND	
594-20-7	2,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
67-66-3	Chloroform	0.23	1.13	ND	1.10	5.50	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
107-06-2	1,2-Dichloroethane	0.23	1.13	ND	0.91	4.56	ND	
563-58-6	1,1-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
110-82-7	Cyclohexane	0.23	1.13	ND	0.78	3.88	ND	
71-43-2	Benzene	1.58	2.25	ND	5.04	7.20	ND	
56-23-5	Carbon tetrachloride	0.23	1.13	ND	1.42	7.09	ND	
994-05-8	t-Amyl methyl ether	0.45	2.25	ND	1.88	9.42	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.13	ND	1.05	5.26	ND	
142-82-5	n-Heptane	0.45	1.13	ND	1.85	4.62	ND	
78-87-5	1,2-Dichloropropane	0.23	1.13	ND	1.04	5.21	ND	
123-91-1	1,4 Dioxane	0.45	2.25	ND	1.62	8.12	ND	
74-95-3	Dibromomethane	0.23	1.13	ND	1.60	8.01	ND	
79-01-6	Trichloroethene (TCE)	0.11	1.13	ND	0.61	6.05	ND	
75-27-4	Bromodichloromethane	0.23	1.13	ND	1.51	7.55	ND	
80-62-6	Methyl methacrylate	0.45	1.13	ND	1.84	4.61	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.45	3.60	ND	1.85	14.77	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
108-88-3	Toluene	0.90	1.13	ND	3.39	4.24	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.13	ND	1.02	5.11	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.13	ND	1.23	6.15	ND	
97-63-2	Ethyl methacrylate	0.45	1.13	ND	2.10	5.26	ND	
591-78-6	2-Hexanone	0.45	3.60	ND	1.85	14.77	ND	
142-28-9	1,3-Dichloropropane	0.23	3.15	ND	1.04	14.58	ND	
111-65-9	Octane	0.45	1.13	ND	2.10	5.26	ND	
124-48-1	Dibromochloromethane	0.45	1.13	ND	3.84	9.60	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.45	1.13	ND	3.46	8.66	ND	
127-18-4	Tetrachloroethene (PCE)	0.11	1.13	ND	0.76	7.64	ND	
108-90-7	Chlorobenzene	0.45	1.13	ND	2.08	5.19	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.45	1.13	ND	3.09	7.73	ND	
100-41-4	Ethylbenzene	0.45	1.13	ND	1.96	4.89	ND	
1330-20-7	m,p-Xylenes	0.45	1.13	ND	1.96	4.89	ND	
111-84-2	Nonane	0.45	1.13	ND	2.36	5.91	ND	
100-42-5	Styrene	0.68	1.13	ND	2.88	4.80	ND	
75-25-2	Bromoform	0.45	1.13	ND	4.66	11.64	ND	
95-47-6	o-Xylene	0.45	1.13	ND	1.96	4.89	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.90	2.25	ND	6.19	15.46	ND	
96-18-4	1,2,3-Trichloropropane	0.90	2.70	ND	5.43	16.30	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.90	2.70	ND	4.61	13.82	ND	
103-65-1	n-Propylbenzene	0.90	3.15	ND	4.43	15.51	ND	
98-82-8	Isopropylbenzene	0.90	3.15	ND	4.43	15.51	ND	
622-96-8	4-Ethyltoluene	0.90	7.20	ND	4.43	35.44	ND	
108-67-8	1,3,5-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
124-18-5	Decane	0.90	2.70	ND	5.25	15.74	ND	
98-06-6	tert-butyl benzene	0.90	2.70	ND	4.95	14.84	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.90	4.05	ND	4.43	19.94	ND	
538-93-2	i-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
135-98-8	sec-butylbenzene	0.90	3.15	ND	4.95	17.31	ND	
541-73-1	1,3-Dichlorobenzene	0.90	3.60	ND	5.42	21.67	ND	
99-87-6	Isopropyltoluene	0.90	2.70	ND	4.95	14.84	ND	
100-44-7	Benzyl chloride	0.90	2.25	ND	4.67	11.67	ND	
106-46-7	1,4-Dichlorobenzene	0.90	2.25	ND	5.42	13.55	ND	
104-51-8	n-Butylbenzene	0.90	2.70	ND	4.95	14.84	ND	
95-50-1	1,2-Dichlorobenzene	0.90	3.15	ND	5.42	18.96	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.35	3.15	ND	13.06	30.48	ND	
120-82-1	1,2,4-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
91-20-3	Naphthalene	2.25	0.45	ND	11.81	2.36	ND	
87-61-6	1,2,3-Trichlorobenzene	1.35	2.25	ND	10.03	16.72	ND	
87-68-3	Hexachlorobutadiene	1.13	1.35	ND	12.02	14.42	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	120	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 43

File Name: 224435
Descriptio 43
Canister: 701
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/13/24 **Time:** 20:34
Can Dilution Factor: 1.35
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.15	6.75	ND	12.90	27.64	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**43**		
File Name:	2443543A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**11:28**
Sample ID:	T-611	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**20:34**
Anal Date:	13 Dec 124 8:34 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**701**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.35**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.320	4.41	42.00	31456
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.726	4.86	31.00	78597
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.471	6.42	58.00	149557
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.580	6.45	45.00	114240
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.082	7.61	76.00	27060
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.798	8.75	72.00	52966
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.127	10.70	78.00	56278
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.155	13.50	91.00	96330
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.028	15.90	106	39975
1330-20-7	m,p-Xylenes	75	TRG	0.063	16.06	91.00	72588
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.030	16.36	91.00	37950
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.014	18.04	91.00	30541
98-82-8	Isopropylbenzene	84	TRG	0.019	18.23	105.00	77795
622-96-8	4-Ethyltoluene	85	TRG	0.045	18.23	105.00	77795
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.022	18.31	105.00	40336
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.032	18.95	105.00	45402
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**10005180**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11120594**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18806892**
2037-26-5	Toluene-d8	60	SURR	12.013	13.40	98.00	**7931136**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 43
File Name: 2443543A.D
Run Method: A1563_L.M
Can Factor: 1.35
Air Volume: 300.0 ml
Can/Tube Number: 701
Dilution Factor: 0.4050
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4050
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	UG/M3 ResultV PPBV	UG/M3 Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.32	1.44	2.48	1.44	2.48	2.48	2.48	**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.73	3.27	4.28	3.27	4.28	4.28	4.28	**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.47	6.62	15.75	6.62	15.75	15.75	15.75	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.58	2.61	6.43	2.61	6.43	6.43	6.43	**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.08	0.37	1.16	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.80	3.59	10.60	3.59	10.60	10.60	10.60	**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.13	0.57	1.83	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.16	0.70	2.63	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.03	0.13	0.56	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.06	0.29	1.24	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.03	0.14	0.60	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.01	0.06	0.30	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.02	0.08	0.41	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.04	0.20	0.99	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.02	0.10	0.49	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.03	0.14	0.70	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.01	120	120	120	120	120	120	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.45	0.78	1.13	1.94				=		Y	1.44	2.48
0.68	3.34	1.13	5.57	U	ND		ND		Y	0.00	0.00
2.25	2.95	2.70	3.54				=		Y	3.27	4.28
0.68	1.40	1.13	2.33	U	ND		ND		Y	0.00	0.00
0.45	3.15	1.13	7.87	U	ND		ND		Y	0.00	0.00
0.23	0.58	1.13	2.88	U	ND		ND		Y	0.00	0.00
0.23	0.50	1.13	2.49	U	ND		ND		Y	0.00	0.00
0.45	1.75	1.13	4.37	U	ND		ND		Y	0.00	0.00
0.45	1.19	1.13	2.97	U	ND		ND		Y	0.00	0.00
2.25	4.25	14.45	27.27	U	ND		ND		Y	0.00	0.00
0.45	1.03	1.35	3.10	U	ND		ND		Y	0.00	0.00
0.45	2.53	1.13	6.33	U	ND		ND		Y	0.00	0.00
2.25	5.35	2.70	6.42				=		Y	6.62	15.75
0.90	2.22	5.63	13.85	J	J		=		Y	2.61	6.43
0.45	1.37	4.50	13.66	U	ND		ND		Y	0.00	0.00
0.45	2.63	1.35	7.90	U	ND		ND		Y	0.00	0.00
0.23	0.89	1.13	4.46	U	ND		ND		Y	0.00	0.00
0.90	1.96	1.35	2.94	U	ND		ND		Y	0.00	0.00
0.23	1.73	1.13	8.63	U	ND		ND		Y	0.00	0.00
0.23	0.70	4.50	14.10	U	ND		ND		Y	0.00	0.00
0.23	0.78	1.13	3.91	U	ND		ND		Y	0.00	0.00
0.45	1.40	1.13	3.51	U	ND		ND		Y	0.00	0.00
0.23	0.89	0.90	3.57	U	ND		ND		Y	0.00	0.00
0.45	1.62	0.90	3.25	U	ND		ND		Y	0.00	0.00
1.13	2.54	1.80	4.06	U	ND		ND		Y	0.00	0.00
0.22	0.91	1.13	4.56	U	ND		ND		Y	0.00	0.00
0.45	1.88	1.13	4.71	U	ND		ND		Y	0.00	0.00
0.23	0.79	4.50	15.87	U	ND		ND		Y	0.00	0.00
0.45	1.33	1.35	3.99				=		Y	3.59	10.60
0.45	1.88	2.70	11.30	U	ND		ND		Y	0.00	0.00
0.45	1.59	1.13	3.97	U	ND		ND		Y	0.00	0.00
0.45	1.24	1.13	3.09	U	ND		ND		Y	0.00	0.00
0.45	1.62	1.13	4.06	U	ND		ND		Y	0.00	0.00
0.23	1.19	1.13	5.96	U	ND		ND		Y	0.00	0.00

0.45	1.59	2.25	7.93	U	ND	ND	Y	0.00	0.00
0.23	0.67	1.35	3.99	U	ND	ND	Y	0.00	0.00
0.90	2.73	3.60	10.93	U	ND	ND	Y	0.00	0.00
0.23	0.89	1.13	4.46	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.13	5.21	U	ND	ND	Y	0.00	0.00
0.23	1.10	1.13	5.50	U	ND	ND	Y	0.00	0.00
0.23	1.23	1.13	6.15	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.13	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.23	0.78	1.13	3.88	U	ND	ND	Y	0.00	0.00
1.58	5.04	2.25	7.20	U	ND	ND	Y	0.00	0.00
0.23	1.42	1.13	7.09	U	ND	ND	Y	0.00	0.00
0.45	1.88	2.25	9.42	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	1.85	1.13	4.62	U	ND	ND	Y	0.00	0.00
0.23	1.04	1.13	5.21	U	ND	ND	Y	0.00	0.00
0.45	1.62	2.25	8.12	U	ND	ND	Y	0.00	0.00
0.23	1.60	1.13	8.01	U	ND	ND	Y	0.00	0.00
0.11	0.61	1.13	6.05	U	ND	ND	Y	0.00	0.00
0.23	1.51	1.13	7.55	U	ND	ND	Y	0.00	0.00
0.45	1.84	1.13	4.61	U	ND	ND	Y	0.00	0.00
0.45	1.85	3.60	14.77	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.90	3.39	1.13	4.24	U	ND	ND	Y	0.00	0.00
0.23	1.02	1.13	5.11	U	ND	ND	Y	0.00	0.00
0.23	1.23	1.13	6.15	U	ND	ND	Y	0.00	0.00
0.45	2.10	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	1.85	3.60	14.77	U	ND	ND	Y	0.00	0.00
0.23	1.04	3.15	14.58	U	ND	ND	Y	0.00	0.00
0.45	2.10	1.13	5.26	U	ND	ND	Y	0.00	0.00
0.45	3.84	1.13	9.60	U	ND	ND	Y	0.00	0.00
0.45	3.46	1.13	8.66	U	ND	ND	Y	0.00	0.00
0.11	0.76	1.13	7.64	U	ND	ND	Y	0.00	0.00
0.45	2.08	1.13	5.19	U	ND	ND	Y	0.00	0.00
0.45	3.09	1.13	7.73	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.45	2.36	1.13	5.91	U	ND	ND	Y	0.00	0.00
0.68	2.88	1.13	4.80	U	ND	ND	Y	0.00	0.00
0.45	4.66	1.13	11.64	U	ND	ND	Y	0.00	0.00
0.45	1.96	1.13	4.89	U	ND	ND	Y	0.00	0.00
0.90	6.19	2.25	15.46	U	ND	ND	Y	0.00	0.00
0.90	5.43	2.70	16.30	U	ND	ND	Y	0.00	0.00
0.90	4.61	2.70	13.82	U	ND	ND	Y	0.00	0.00
0.90	4.43	3.15	15.51	U	ND	ND	Y	0.00	0.00
0.90	4.43	3.15	15.51	U	ND	ND	Y	0.00	0.00
0.90	4.43	7.20	35.44	U	ND	ND	Y	0.00	0.00
0.90	4.43	4.05	19.94	U	ND	ND	Y	0.00	0.00
0.90	5.25	2.70	15.74	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	4.43	4.05	19.94	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00

0.90	4.95	3.15	17.31	U	ND	ND	Y	0.00	0.00
0.90	5.42	3.60	21.67	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	4.67	2.25	11.67	U	ND	ND	Y	0.00	0.00
0.90	5.42	2.25	13.55	U	ND	ND	Y	0.00	0.00
0.90	4.95	2.70	14.84	U	ND	ND	Y	0.00	0.00
0.90	5.42	3.15	18.96	U	ND	ND	Y	0.00	0.00
1.35	13.06	3.15	30.48	U	ND	ND	Y	0.00	0.00
1.35	10.03	2.25	16.72	U	ND	ND	Y	0.00	0.00
2.25	11.81	0.45	2.36	U	ND	ND	Y	0.00	0.00
1.35	10.03	2.25	16.72	U	ND	ND	Y	0.00	0.00
1.13	12.02	1.35	14.42	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 43
Sample ID: T-611

Can Factor: 1.35
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	
ND	**0.7**	**1.5**	3.2	6.75	3.15	12.90	6.75	27.64	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**43**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.35	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	31456	20.0	10005180	0.320	1.44	2.48
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	10005180	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	78597	20.0	10005180	0.726	3.27	4.28
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	10005180	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	10005180	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	10005180	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	10005180	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	10005180	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	10005180	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	10005180	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	10005180	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	10005180	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	149557	20.0	10005180	1.471	6.62	15.75
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	114240	20.0	10005180	0.580	2.61	6.43
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	10005180	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	10005180	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	10005180	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	10005180	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	10005180	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	10005180	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	10005180	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	27060	20.0	10005180	0.082	0.37	1.16
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	10005180	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	10005180	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	10005180	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	10005180	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	10005180	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	10005180	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	52966	20.0	10005180	0.798	3.59	10.60
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	10005180	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	10005180	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	10005180	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	10005180	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	10005180	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	10005180	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	10005180	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	10005180	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	10005180	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	10005180	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	10005180	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11120594	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11120594	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11120594	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11120594	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	56278	20.0	11120594	0.127	0.57	1.83
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11120594	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	11120594	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11120594	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11120594	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11120594	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11120594	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11120594	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11120594	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11120594	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11120594	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11120594	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11120594	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	96330	20.0	11120594	0.155	0.70	2.63
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11120594	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11120594	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11120594	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11120594	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11120594	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11120594	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11120594	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11120594	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11120594	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18806892	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18806892	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	39975	20.0	18806892	0.028	0.13	0.56
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	72588	20.0	18806892	0.063	0.29	1.24
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18806892	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	18806892	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18806892	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	37950	20.0	18806892	0.030	0.14	0.60
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	18806892	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18806892	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18806892	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	30541	20.0	18806892	0.014	0.06	0.30
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	77795	20.0	18806892	0.019	0.08	0.41

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	77795	20.0	18806892	0.045	0.20	0.99
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	40336	20.0	18806892	0.022	0.10	0.49
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	18806892	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	18806892	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	45402	20.0	18806892	0.032	0.14	0.70
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	18806892	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	18806892	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	18806892	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	18806892	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18806892	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18806892	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18806892	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18806892	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18806892	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18806892	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18806892	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18806892	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18806892	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	10005180	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11120594	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18806892	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	7931136	10.0		12.013	120.13	120

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443543A.D
Acq Time : 13 Dec 124 8:34 pm Operator: SS
Sample : T-611 Inst : 5970 - M
Misc : SCHMIDT Multiplr: 1.00
Quant Time: Dec 20 10:40 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	10005180	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	11120594	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.23	117	18806892	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	7931136	12.01	ppbV		120.13
Target Compounds							Qvalue
2) Propylene	4.29	42	31456	0.32	ppbV		91
4) Methanol	4.77	31	78597	0.73	ppbV	#	51
14) Acetone	6.26	58	149557	1.47	ppbV	#	1
15) 2-propanol (isopropylalcoh	6.31	45	114240	0.58	ppbV	#	80
23) Carbon disulfide	7.39	76	27060	0.08	ppbV	#	73
30) 2-Butanone (MEK)	8.53	72	52966	0.80	ppbV	#	79
47) Benzene	10.43	78	56278	0.13	ppbV	m	72
61) Toluene	13.20	91	96330	0.16	ppbV		95
74) Ethylbenzene	15.55	91	39975	0.03	ppbV		99
75) m,p-Xylenes	15.72	91	72588	0.06	ppbV	#	77
79) o-Xylene	16.36	91	37950	0.03	ppbV		97
83) n-Propylbenzene	17.69	91	30541	0.01	ppbV	#	82
84) Isopropylbenzene	17.87	105	77795	0.02	ppbV	#	89
85) 4-Ethyltoluene	17.87	105	77795	0.04	ppbV	#	84
86) 1,3,5-Trimethylbenzene	17.96	105	40336	0.02	ppbV	m	85
89) 1,2,4-Trimethylbenzene	18.57	105	45402	0.03	ppbV	#	90

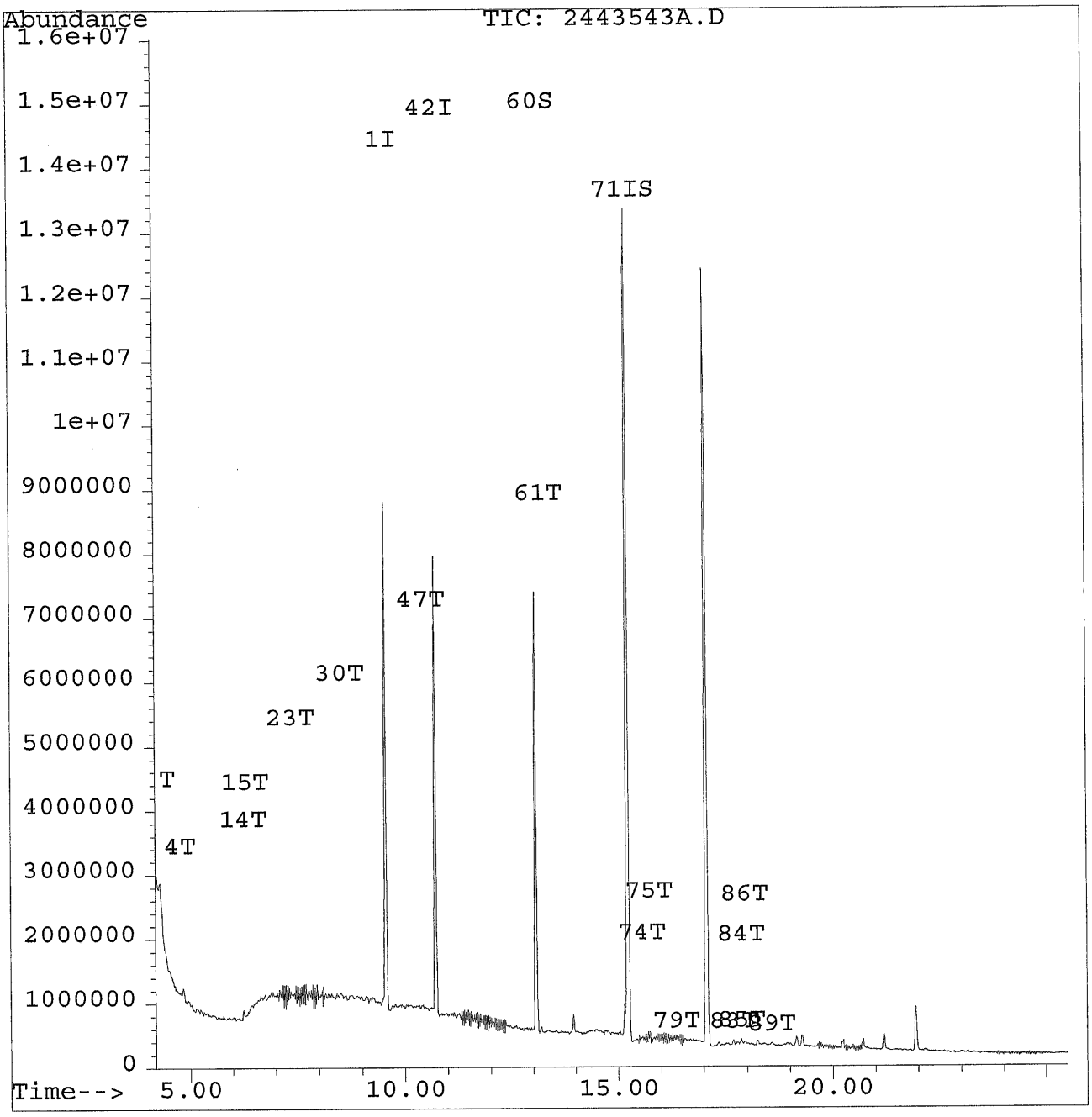
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443543A.D
Acq Time : 13 Dec 124 8:34 pm
Sample : T-611
Misc : SCHMIDT
Quant Time: Dec 20 10:40 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443543A.D
Acq Time : 13 Dec 124 8:34 pm
Sample : T-611
Misc : SCHMIDT

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	17.62 ppbV	38070006	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 44

Client ID T-612

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 44**

File Name: 2443544A.D **Date Sampled:** 11/21/24 **Time:** 11:20
Description: T-612 **Date Analyzed:** 12/13/24 **Time:** 21:16
Canister: 514 **Can Dilution Factor:** 1.39
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.16	ND	0.80	2.00	ND	
75-71-8	Dichlorodifluoromethane	0.70	1.16	ND	3.44	5.74	ND	
67-56-1	Methanol	2.32	2.78	4.04	3.04	3.64	5.30	
74-87-3	Chloromethane	0.70	1.16	ND	1.44	2.40	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.16	ND	3.24	8.11	ND	
75-01-4	Vinyl chloride	0.23	1.16	ND	0.60	2.96	ND	
106-99-0	1,3-Butadiene	0.23	1.16	ND	0.52	2.57	ND	
74-83-9	Bromomethane	0.46	1.16	ND	1.80	4.50	ND	
75-00-3	Chloroethane	0.46	1.16	ND	1.22	3.06	ND	
64-17-5	Ethanol	2.32	14.87	ND	4.37	28.08	ND	
107-02-8	Acrolein	0.46	1.39	ND	1.06	3.19	ND	
75-69-4	Trichlorofluoromethane	0.46	1.16	ND	2.61	6.52	ND	
67-64-1	Acetone	2.32	2.78	5.13	5.51	6.61	12.19	
67-63-0	2-propanol (isopropylalcohol)	0.93	5.79	ND	2.28	14.26	ND	
75-65-0	t-Butyl alcohol	0.46	4.63	ND	1.41	14.06	ND	
4227-95-6	Methyl iodide	0.46	1.39	ND	2.71	8.13	ND	
75-35-4	1,1-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	
107-13-1	Acrylonitrile	0.93	1.39	ND	2.02	3.02	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.16	ND	1.78	8.89	ND	
107-05-1	Allyl chloride	0.23	4.63	ND	0.73	14.52	ND	
75-09-2	Methylene chloride	0.23	1.16	ND	0.81	4.03	ND	
75-15-0	Carbon disulfide	0.46	1.16	ND	1.44	3.61	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.93	ND	0.92	3.68	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.93	ND	1.67	3.34	ND	
107-12-0	Propionitrile	1.16	1.85	ND	2.61	4.18	ND	
75-34-3	1,1-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.16	ND	1.94	4.85	ND	
108-05-4	Vinyl acetate	0.23	4.63	ND	0.82	16.34	ND	
78-93-3	2-Butanone (MEK)	0.46	1.39	ND	1.37	4.10	ND	
108-20-3	Diisopropyl ether	0.46	2.78	ND	1.94	11.64	ND	
110-54-3	Hexane	0.46	1.16	ND	1.64	4.09	ND	
126-98-7	Methacrylonitrile	0.46	1.16	ND	1.27	3.18	ND	
141-78-6	Ethyl acetate	0.46	1.16	ND	1.67	4.18	ND	
74-97-5	Bromochloromethane	0.23	1.16	ND	1.23	6.14	ND	
96-33-3	Methyl acrylate	0.46	2.32	ND	1.63	8.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.39	ND	0.69	4.10	ND	
78-83-1	Isobutyl alcohol	0.93	3.71	ND	2.81	11.25	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	
594-20-7	2,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
67-66-3	Chloroform	0.23	1.16	ND	1.14	5.66	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
107-06-2	1,2-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
563-58-6	1,1-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
110-82-7	Cyclohexane	0.23	1.16	ND	0.80	3.99	ND	
71-43-2	Benzene	1.62	2.32	ND	5.19	7.41	ND	
56-23-5	Carbon tetrachloride	0.23	1.16	ND	1.46	7.30	ND	
994-05-8	t-Amyl methyl ether	0.46	2.32	ND	1.94	9.70	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.16	ND	1.08	5.42	ND	
142-82-5	n-Heptane	0.46	1.16	ND	1.90	4.75	ND	
78-87-5	1,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
123-91-1	1,4 Dioxane	0.46	2.32	ND	1.67	8.36	ND	
74-95-3	Dibromomethane	0.23	1.16	ND	1.65	8.25	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.16	ND	0.62	6.23	ND	
75-27-4	Bromodichloromethane	0.23	1.16	ND	1.55	7.77	ND	
80-62-6	Methyl methacrylate	0.46	1.16	ND	1.90	4.75	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.71	ND	1.90	15.21	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
108-88-3	Toluene	0.93	1.16	ND	3.50	4.37	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
97-63-2	Ethyl methacrylate	0.46	1.16	ND	2.17	5.42	ND	
591-78-6	2-Hexanone	0.46	3.71	ND	1.90	15.21	ND	
142-28-9	1,3-Dichloropropane	0.23	3.24	ND	1.07	15.01	ND	
111-65-9	Octane	0.46	1.16	ND	2.17	5.42	ND	
124-48-1	Dibromochloromethane	0.46	1.16	ND	3.95	9.88	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.16	ND	3.57	8.91	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.16	ND	0.79	7.87	ND	
108-90-7	Chlorobenzene	0.46	1.16	ND	2.14	5.34	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.16	ND	3.18	7.96	ND	
100-41-4	Ethylbenzene	0.46	1.16	ND	2.02	5.04	ND	
1330-20-7	m,p-Xylenes	0.46	1.16	ND	2.02	5.04	ND	
111-84-2	Nonane	0.46	1.16	ND	2.43	6.09	ND	
100-42-5	Styrene	0.70	1.16	ND	2.97	4.94	ND	
75-25-2	Bromoform	0.46	1.16	ND	4.80	11.99	ND	
95-47-6	o-Xylene	0.46	1.16	ND	2.02	5.04	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.93	2.32	ND	6.37	15.92	ND	
96-18-4	1,2,3-Trichloropropane	0.93	2.78	ND	5.59	16.78	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.93	2.78	ND	4.74	14.23	ND	
103-65-1	n-Propylbenzene	0.93	3.24	ND	4.56	15.97	ND	
98-82-8	Isopropylbenzene	0.93	3.24	ND	4.56	15.97	ND	
622-96-8	4-Ethyltoluene	0.93	7.41	ND	4.56	36.49	ND	
108-67-8	1,3,5-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
124-18-5	Decane	0.93	2.78	ND	5.40	16.20	ND	
98-06-6	tert-butyl benzene	0.93	2.78	ND	5.09	15.28	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
538-93-2	i-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
135-98-8	sec-butylbenzene	0.93	3.24	ND	5.09	17.83	ND	
541-73-1	1,3-Dichlorobenzene	0.93	3.71	ND	5.58	22.32	ND	
99-87-6	Isopropyltoluene	0.93	2.78	ND	5.09	15.28	ND	
100-44-7	Benzyl chloride	0.93	2.32	ND	4.80	12.01	ND	
106-46-7	1,4-Dichlorobenzene	0.93	2.32	ND	5.58	13.95	ND	
104-51-8	n-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
95-50-1	1,2-Dichlorobenzene	0.93	3.24	ND	5.58	19.53	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.39	3.24	ND	13.45	31.39	ND	
120-82-1	1,2,4-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
91-20-3	Naphthalene	2.32	0.46	ND	12.16	2.43	ND	
87-61-6	1,2,3-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
87-68-3	Hexachlorobutadiene	1.16	1.39	ND	12.37	14.85	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	124	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 44

File Name: 224435
Descriptio 44
Canister: 514
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/13/24 **Time:** 21:16
Can Dilution Factor: 1.39
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.24	6.95	ND	13.28	28.46	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**44**		
File Name:	2443544A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**11:20**
Sample ID:	T-612	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**21:16**
Anal Date:	13 Dec 124 9:16 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**514**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.39**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.872	4.86	31.00	69369
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	1.106	6.42	58.00	82573
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.122	10.70	78.00	40992
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.059	13.50	91.00	27634
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	0.00	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.005	18.23	105.00	17638
622-96-8	4-Ethyltoluene	85	TRG	0.012	18.23	105.00	17638
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.007	18.31	105.00	10852
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	120
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7348040**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8451852**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**15669723**
2037-26-5	Toluene-d8	60	SURR	12.436	13.40	98.00	**6240166**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 44
File Name: 2443544A.D
Run Method: A1563_L.M
Can Factor: 1.39
Air Volume: 300.0 ml
Can/Tube Number: 514
Dilution Factor: 0.4170
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4170
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.87	4.04	5.30	4.04	5.30	5.30	5.30	**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	1.11	5.13	12.19	5.13	12.19	12.19	12.19	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.12	0.57	1.81	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.06	0.27	1.02	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.01	0.02	0.12	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.01	0.06	0.28	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.01	0.03	0.16	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.44	124	124	124	124	124	124	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.46	0.80	1.16	2.00	U	ND		ND		Y	0.00	0.00
0.70	3.44	1.16	5.74	U	ND		ND		Y	0.00	0.00
2.32	3.04	2.78	3.64				=		Y	4.04	5.30
0.70	1.44	1.16	2.40	U	ND		ND		Y	0.00	0.00
0.46	3.24	1.16	8.11	U	ND		ND		Y	0.00	0.00
0.23	0.60	1.16	2.96	U	ND		ND		Y	0.00	0.00
0.23	0.52	1.16	2.57	U	ND		ND		Y	0.00	0.00
0.46	1.80	1.16	4.50	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.16	3.06	U	ND		ND		Y	0.00	0.00
2.32	4.37	14.87	28.08	U	ND		ND		Y	0.00	0.00
0.46	1.06	1.39	3.19	U	ND		ND		Y	0.00	0.00
0.46	2.61	1.16	6.52	U	ND		ND		Y	0.00	0.00
2.32	5.51	2.78	6.61				=		Y	5.13	12.19
0.93	2.28	5.79	14.26	U	ND		ND		Y	0.00	0.00
0.46	1.41	4.63	14.06	U	ND		ND		Y	0.00	0.00
0.46	2.71	1.39	8.13	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.16	4.60	U	ND		ND		Y	0.00	0.00
0.93	2.02	1.39	3.02	U	ND		ND		Y	0.00	0.00
0.23	1.78	1.16	8.89	U	ND		ND		Y	0.00	0.00
0.23	0.73	4.63	14.52	U	ND		ND		Y	0.00	0.00
0.23	0.81	1.16	4.03	U	ND		ND		Y	0.00	0.00
0.46	1.44	1.16	3.61	U	ND		ND		Y	0.00	0.00
0.23	0.92	0.93	3.68	U	ND		ND		Y	0.00	0.00
0.46	1.67	0.93	3.34	U	ND		ND		Y	0.00	0.00
1.16	2.61	1.85	4.18	U	ND		ND		Y	0.00	0.00
0.23	0.94	1.16	4.70	U	ND		ND		Y	0.00	0.00
0.46	1.94	1.16	4.85	U	ND		ND		Y	0.00	0.00
0.23	0.82	4.63	16.34	U	ND		ND		Y	0.00	0.00
0.46	1.37	1.39	4.10	U	ND		ND		Y	0.00	0.00
0.46	1.94	2.78	11.64	U	ND		ND		Y	0.00	0.00
0.46	1.64	1.16	4.09	U	ND		ND		Y	0.00	0.00
0.46	1.27	1.16	3.18	U	ND		ND		Y	0.00	0.00
0.46	1.67	1.16	4.18	U	ND		ND		Y	0.00	0.00
0.23	1.23	1.16	6.14	U	ND		ND		Y	0.00	0.00

0.46	1.63	2.32	8.17	U	ND	ND	Y	0.00	0.00
0.23	0.69	1.39	4.10	U	ND	ND	Y	0.00	0.00
0.93	2.81	3.71	11.25	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.16	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.07	1.16	5.36	U	ND	ND	Y	0.00	0.00
0.23	1.14	1.16	5.66	U	ND	ND	Y	0.00	0.00
0.23	1.27	1.16	6.33	U	ND	ND	Y	0.00	0.00
0.23	0.94	1.16	4.70	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.16	5.27	U	ND	ND	Y	0.00	0.00
0.23	0.80	1.16	3.99	U	ND	ND	Y	0.00	0.00
1.62	5.19	2.32	7.41	U	ND	ND	Y	0.00	0.00
0.23	1.46	1.16	7.30	U	ND	ND	Y	0.00	0.00
0.46	1.94	2.32	9.70	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.16	5.42	U	ND	ND	Y	0.00	0.00
0.46	1.90	1.16	4.75	U	ND	ND	Y	0.00	0.00
0.23	1.07	1.16	5.36	U	ND	ND	Y	0.00	0.00
0.46	1.67	2.32	8.36	U	ND	ND	Y	0.00	0.00
0.23	1.65	1.16	8.25	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.16	6.23	U	ND	ND	Y	0.00	0.00
0.23	1.55	1.16	7.77	U	ND	ND	Y	0.00	0.00
0.46	1.90	1.16	4.75	U	ND	ND	Y	0.00	0.00
0.46	1.90	3.71	15.21	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.16	5.27	U	ND	ND	Y	0.00	0.00
0.93	3.50	1.16	4.37	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.16	5.27	U	ND	ND	Y	0.00	0.00
0.23	1.27	1.16	6.33	U	ND	ND	Y	0.00	0.00
0.46	2.17	1.16	5.42	U	ND	ND	Y	0.00	0.00
0.46	1.90	3.71	15.21	U	ND	ND	Y	0.00	0.00
0.23	1.07	3.24	15.01	U	ND	ND	Y	0.00	0.00
0.46	2.17	1.16	5.42	U	ND	ND	Y	0.00	0.00
0.46	3.95	1.16	9.88	U	ND	ND	Y	0.00	0.00
0.46	3.57	1.16	8.91	U	ND	ND	Y	0.00	0.00
0.12	0.79	1.16	7.87	U	ND	ND	Y	0.00	0.00
0.46	2.14	1.16	5.34	U	ND	ND	Y	0.00	0.00
0.46	3.18	1.16	7.96	U	ND	ND	Y	0.00	0.00
0.46	2.02	1.16	5.04	U	ND	ND	Y	0.00	0.00
0.46	2.02	1.16	5.04	U	ND	ND	Y	0.00	0.00
0.46	2.43	1.16	6.09	U	ND	ND	Y	0.00	0.00
0.70	2.97	1.16	4.94	U	ND	ND	Y	0.00	0.00
0.46	4.80	1.16	11.99	U	ND	ND	Y	0.00	0.00
0.46	2.02	1.16	5.04	U	ND	ND	Y	0.00	0.00
0.93	6.37	2.32	15.92	U	ND	ND	Y	0.00	0.00
0.93	5.59	2.78	16.78	U	ND	ND	Y	0.00	0.00
0.93	4.74	2.78	14.23	U	ND	ND	Y	0.00	0.00
0.93	4.56	3.24	15.97	U	ND	ND	Y	0.00	0.00
0.93	4.56	3.24	15.97	U	ND	ND	Y	0.00	0.00
0.93	4.56	7.41	36.49	U	ND	ND	Y	0.00	0.00
0.93	4.56	4.17	20.53	U	ND	ND	Y	0.00	0.00
0.93	5.40	2.78	16.20	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00
0.93	4.56	4.17	20.53	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00

0.93	5.09	3.24	17.83	U	ND	ND	Y	0.00	0.00
0.93	5.58	3.71	22.32	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00
0.93	4.80	2.32	12.01	U	ND	ND	Y	0.00	0.00
0.93	5.58	2.32	13.95	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00
0.93	5.58	3.24	19.53	U	ND	ND	Y	0.00	0.00
1.39	13.45	3.24	31.39	U	ND	ND	Y	0.00	0.00
1.39	10.33	2.32	17.21	U	ND	ND	Y	0.00	0.00
2.32	12.16	0.46	2.43	U	ND	ND	Y	0.00	0.00
1.39	10.33	2.32	17.21	U	ND	ND	Y	0.00	0.00
1.16	12.37	1.39	14.85	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 44
Sample ID: T-612

Can Factor: 1.39
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**44**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.39
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) **= Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	7348040	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	7348040	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	69369	20.0	7348040	0.872	4.04	5.30
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	7348040	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	7348040	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	7348040	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	7348040	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	7348040	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	7348040	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	7348040	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	7348040	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	7348040	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	82573	20.0	7348040	1.106	5.13	12.19
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	7348040	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	7348040	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	7348040	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	7348040	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	7348040	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	7348040	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	7348040	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	7348040	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	7348040	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	7348040	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	7348040	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	7348040	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	7348040	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	7348040	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	7348040	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	7348040	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	7348040	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	7348040	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	7348040	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	7348040	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	7348040	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	7348040	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	7348040	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	7348040	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	7348040	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	7348040	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	7348040	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	8451852	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	8451852	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	8451852	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	8451852	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	40992	20.0	8451852	0.122	0.57	1.81
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	8451852	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	8451852	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	8451852	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	8451852	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	8451852	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	8451852	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	8451852	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	8451852	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	8451852	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	8451852	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	8451852	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	8451852	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	27634	20.0	8451852	0.059	0.27	1.02
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	8451852	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	8451852	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	8451852	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	8451852	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	8451852	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	8451852	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	8451852	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	8451852	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	8451852	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	15669723	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	15669723	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	15669723	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	15669723	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	15669723	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	15669723	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	15669723	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	15669723	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	15669723	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	15669723	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	15669723	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	15669723	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	17638	20.0	15669723	0.005	0.02	0.12

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	17638	20.0	15669723	0.012	0.06	0.28
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	10852	20.0	15669723	0.007	0.03	0.16
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	15669723	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	15669723	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	15669723	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	15669723	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	15669723	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	15669723	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	120	20.0	15669723	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	15669723	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	15669723	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	15669723	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	15669723	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	15669723	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	15669723	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	15669723	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	15669723	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	15669723	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	7348040	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	8451852	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	15669723	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6240166	10.0		12.436	124.36	124

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443544A.D
Acq Time : 13 Dec 124 9:16 pm
Sample : T-612
Misc : SCHMIDT
Quant Time: Dec 20 12:06 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	7348040	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	8451852	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.21	117	15669723	20.00	ppbV		-0.36
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	6240166	12.44	ppbV		124.36
Target Compounds							Qvalue
4) Methanol	4.81	31	69369	0.87	ppbV	#	95
14) Acetone	6.26	58	82573	1.11	ppbV	#	1
47) Benzene	10.43	78	40992	0.12	ppbV	m	67
61) Toluene	13.20	91	27634	0.06	ppbV	#	83
84) Isopropylbenzene	17.88	105	17638	0.01	ppbV	#	82
85) 4-Ethyltoluene	17.88	105	17638	0.01	ppbV	#	81
86) 1,3,5-Trimethylbenzene	17.96	105	10852	0.01	ppbV	m	85
93) Isopropyltoluene	19.43	119	120	0.00	ppbV	m	72

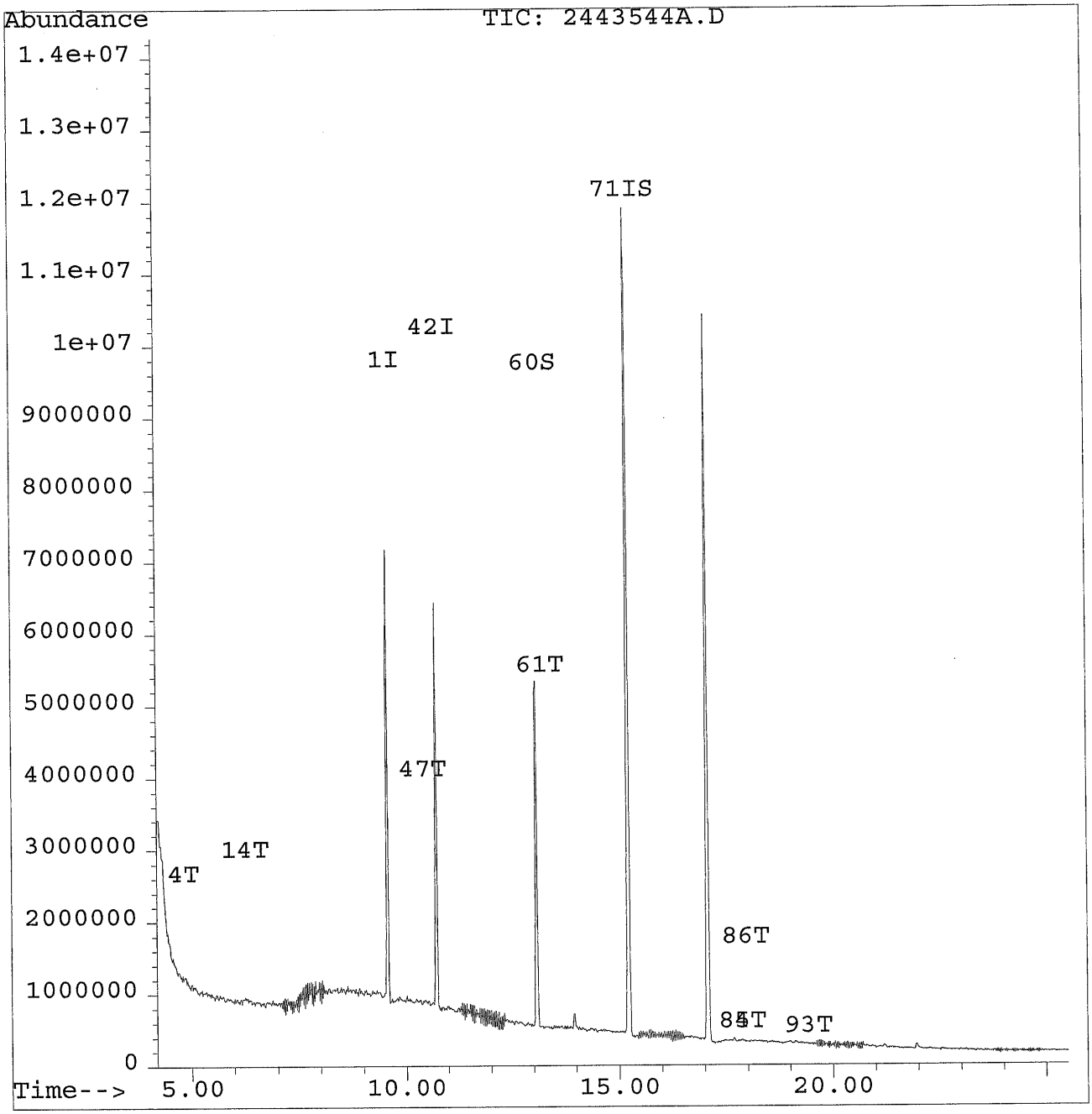
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443544A.D
Acq Time : 13 Dec 124 9:16 pm
Sample : T-612
Misc : SCHMIDT
Quant Time: Dec 20 12:06 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443544A.D
Acq Time : 13 Dec 124 9:16 pm
Sample : T-612
Misc : SCHMIDT

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.08	17.36 ppbV	30919531	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	91
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	83
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number **224435**

Lab Id Number **45**

Client ID T-613

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 45**

File Name: 2443545A.D **Date Sampled:** 11/21/24 **Time:** 11:25
Description: T-613 **Date Analyzed:** 12/13/24 **Time:** 22:06
Canister: 694 **Can Dilution Factor:** 1.39
QC_Batch: 121324-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.16	ND	0.80	2.00	ND	
75-71-8	Dichlorodifluoromethane	0.70	1.16	ND	3.44	5.74	ND	
67-56-1	Methanol	2.32	2.78	3.76	3.04	3.64	4.93	
74-87-3	Chloromethane	0.70	1.16	ND	1.44	2.40	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.16	ND	3.24	8.11	ND	
75-01-4	Vinyl chloride	0.23	1.16	ND	0.60	2.96	ND	
106-99-0	1,3-Butadiene	0.23	1.16	ND	0.52	2.57	ND	
74-83-9	Bromomethane	0.46	1.16	ND	1.80	4.50	ND	
75-00-3	Chloroethane	0.46	1.16	ND	1.22	3.06	ND	
64-17-5	Ethanol	2.32	14.87	ND	4.37	28.08	ND	
107-02-8	Acrolein	0.46	1.39	ND	1.06	3.19	ND	
75-69-4	Trichlorofluoromethane	0.46	1.16	ND	2.61	6.52	ND	
67-64-1	Acetone	2.32	2.78	3.66	5.51	6.61	8.72	
67-63-0	2-propanol (isopropylalcohol)	0.93	5.79	ND	2.28	14.26	ND	
75-65-0	t-Butyl alcohol	0.46	4.63	ND	1.41	14.06	ND	
4227-95-6	Methyl iodide	0.46	1.39	ND	2.71	8.13	ND	
75-35-4	1,1-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	
107-13-1	Acrylonitrile	0.93	1.39	ND	2.02	3.02	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.16	ND	1.78	8.89	ND	
107-05-1	Allyl chloride	0.23	4.63	ND	0.73	14.52	ND	
75-09-2	Methylene chloride	0.23	1.16	ND	0.81	4.03	ND	
75-15-0	Carbon disulfide	0.46	1.16	ND	1.44	3.61	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.93	ND	0.92	3.68	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.93	ND	1.67	3.34	ND	
107-12-0	Propionitrile	1.16	1.85	ND	2.61	4.18	ND	
75-34-3	1,1-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.16	ND	1.94	4.85	ND	
108-05-4	Vinyl acetate	0.23	4.63	ND	0.82	16.34	ND	
78-93-3	2-Butanone (MEK)	0.46	1.39	ND	1.37	4.10	ND	
108-20-3	Diisopropyl ether	0.46	2.78	ND	1.94	11.64	ND	
110-54-3	Hexane	0.46	1.16	ND	1.64	4.09	ND	
126-98-7	Methacrylonitrile	0.46	1.16	ND	1.27	3.18	ND	
141-78-6	Ethyl acetate	0.46	1.16	ND	1.67	4.18	ND	
74-97-5	Bromochloromethane	0.23	1.16	ND	1.23	6.14	ND	
96-33-3	Methyl acrylate	0.46	2.32	ND	1.63	8.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.39	ND	0.69	4.10	ND	
78-83-1	Isobutyl alcohol	0.93	3.71	ND	2.81	11.25	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.16	ND	0.92	4.60	ND	
594-20-7	2,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
67-66-3	Chloroform	0.23	1.16	ND	1.14	5.66	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
107-06-2	1,2-Dichloroethane	0.23	1.16	ND	0.94	4.70	ND	
563-58-6	1,1-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
110-82-7	Cyclohexane	0.23	1.16	ND	0.80	3.99	ND	
71-43-2	Benzene	1.62	2.32	ND	5.19	7.41	ND	
56-23-5	Carbon tetrachloride	0.23	1.16	ND	1.46	7.30	ND	
994-05-8	t-Amyl methyl ether	0.46	2.32	ND	1.94	9.70	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.16	ND	1.08	5.42	ND	
142-82-5	n-Heptane	0.46	1.16	ND	1.90	4.75	ND	
78-87-5	1,2-Dichloropropane	0.23	1.16	ND	1.07	5.36	ND	
123-91-1	1,4 Dioxane	0.46	2.32	ND	1.67	8.36	ND	
74-95-3	Dibromomethane	0.23	1.16	ND	1.65	8.25	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.16	ND	0.62	6.23	ND	
75-27-4	Bromodichloromethane	0.23	1.16	ND	1.55	7.77	ND	
80-62-6	Methyl methacrylate	0.46	1.16	ND	1.90	4.75	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.71	ND	1.90	15.21	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
108-88-3	Toluene	0.93	1.16	ND	3.50	4.37	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.16	ND	1.05	5.27	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.16	ND	1.27	6.33	ND	
97-63-2	Ethyl methacrylate	0.46	1.16	ND	2.17	5.42	ND	
591-78-6	2-Hexanone	0.46	3.71	ND	1.90	15.21	ND	
142-28-9	1,3-Dichloropropane	0.23	3.24	ND	1.07	15.01	ND	
111-65-9	Octane	0.46	1.16	ND	2.17	5.42	ND	
124-48-1	Dibromochloromethane	0.46	1.16	ND	3.95	9.88	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.16	ND	3.57	8.91	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.16	ND	0.79	7.87	ND	
108-90-7	Chlorobenzene	0.46	1.16	ND	2.14	5.34	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.16	ND	3.18	7.96	ND	
100-41-4	Ethylbenzene	0.46	1.16	ND	2.02	5.04	ND	
1330-20-7	m,p-Xylenes	0.46	1.16	ND	2.02	5.04	ND	
111-84-2	Nonane	0.46	1.16	ND	2.43	6.09	ND	
100-42-5	Styrene	0.70	1.16	ND	2.97	4.94	ND	
75-25-2	Bromoform	0.46	1.16	ND	4.80	11.99	ND	
95-47-6	o-Xylene	0.46	1.16	ND	2.02	5.04	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.93	2.32	ND	6.37	15.92	ND	
96-18-4	1,2,3-Trichloropropane	0.93	2.78	ND	5.59	16.78	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.93	2.78	ND	4.74	14.23	ND	
103-65-1	n-Propylbenzene	0.93	3.24	ND	4.56	15.97	ND	
98-82-8	Isopropylbenzene	0.93	3.24	ND	4.56	15.97	ND	
622-96-8	4-Ethyltoluene	0.93	7.41	ND	4.56	36.49	ND	
108-67-8	1,3,5-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
124-18-5	Decane	0.93	2.78	ND	5.40	16.20	ND	
98-06-6	tert-butyl benzene	0.93	2.78	ND	5.09	15.28	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.93	4.17	ND	4.56	20.53	ND	
538-93-2	i-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
135-98-8	sec-butylbenzene	0.93	3.24	ND	5.09	17.83	ND	
541-73-1	1,3-Dichlorobenzene	0.93	3.71	ND	5.58	22.32	ND	
99-87-6	Isopropyltoluene	0.93	2.78	ND	5.09	15.28	ND	
100-44-7	Benzyl chloride	0.93	2.32	ND	4.80	12.01	ND	
106-46-7	1,4-Dichlorobenzene	0.93	2.32	ND	5.58	13.95	ND	
104-51-8	n-Butylbenzene	0.93	2.78	ND	5.09	15.28	ND	
95-50-1	1,2-Dichlorobenzene	0.93	3.24	ND	5.58	19.53	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.39	3.24	ND	13.45	31.39	ND	
120-82-1	1,2,4-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
91-20-3	Naphthalene	2.32	0.46	ND	12.16	2.43	ND	
87-61-6	1,2,3-Trichlorobenzene	1.39	2.32	ND	10.33	17.21	ND	
87-68-3	Hexachlorobutadiene	1.16	1.39	ND	12.37	14.85	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	127	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: 224435
Laboratory ID: 45

File Name: 224435
Descriptio 45
Canister: 694
QC_Batch: 121324-MA1

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/13/24 **Time:** 22:06
Can Dilution Factor: 1.39
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.24	6.95	ND	13.28	28.46	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**45**		
File Name:	2443545A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**11:25**
Sample ID:	T-613	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**22:06**
Anal Date:	13 Dec 124 10:06 pm	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**694**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.39**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	SS	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**2.0**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.812	4.86	31.00	85737
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.791	6.42	58.00	78381
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.206	10.70	78.00	91010
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.095	13.50	91.00	59136
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.59	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.015	18.23	105.00	62758
622-96-8	4-Ethyltoluene	85	TRG	0.025	18.23	105.00	44732
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.017	18.31	105.00	31193
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.013	19.53	119.00	28324
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	0.00	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**9757443**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**11146474**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**19061972**
2037-26-5	Toluene-d8	60	SURR	12.691	13.40	98.00	**8398503**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 45
File Name: 2443545A.D
Run Method: A1563_L.M
Can Factor: 1.39
Air Volume: 300.0 ml
Can/Tube Number: 694
Dilution Factor: 0.4170
Base Volume: 1000 ml
Unit Factor (ppbv): 1000

EDD SURR: PERCENT
Sam Type: SA
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.4170
Sig Figs: 2
MDLSF: 2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	2.0

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	PPBV ResultV PPBV	UG/M3 Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.81	3.76	4.93	3.76	4.93	4.93	4.93	**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.79	3.66	8.72	3.66	8.72	8.72	8.72	**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.21	0.95	3.05	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.10	0.44	1.66	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.01	0.07	0.34	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.03	0.12	0.58	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.02	0.08	0.39	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.01	0.06	0.32	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.69	127	127	127	127	127	127	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.46	0.80	1.16	2.00	U	ND		ND		Y	0.00	0.00
0.70	3.44	1.16	5.74	U	ND		ND		Y	0.00	0.00
2.32	3.04	2.78	3.64				=		Y	3.76	4.93
0.70	1.44	1.16	2.40	U	ND		ND		Y	0.00	0.00
0.46	3.24	1.16	8.11	U	ND		ND		Y	0.00	0.00
0.23	0.60	1.16	2.96	U	ND		ND		Y	0.00	0.00
0.23	0.52	1.16	2.57	U	ND		ND		Y	0.00	0.00
0.46	1.80	1.16	4.50	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.16	3.06	U	ND		ND		Y	0.00	0.00
2.32	4.37	14.87	28.08	U	ND		ND		Y	0.00	0.00
0.46	1.06	1.39	3.19	U	ND		ND		Y	0.00	0.00
0.46	2.61	1.16	6.52	U	ND		ND		Y	0.00	0.00
2.32	5.51	2.78	6.61				=		Y	3.66	8.72
0.93	2.28	5.79	14.26	U	ND		ND		Y	0.00	0.00
0.46	1.41	4.63	14.06	U	ND		ND		Y	0.00	0.00
0.46	2.71	1.39	8.13	U	ND		ND		Y	0.00	0.00
0.23	0.92	1.16	4.60	U	ND		ND		Y	0.00	0.00
0.93	2.02	1.39	3.02	U	ND		ND		Y	0.00	0.00
0.23	1.78	1.16	8.89	U	ND		ND		Y	0.00	0.00
0.23	0.73	4.63	14.52	U	ND		ND		Y	0.00	0.00
0.23	0.81	1.16	4.03	U	ND		ND		Y	0.00	0.00
0.46	1.44	1.16	3.61	U	ND		ND		Y	0.00	0.00
0.23	0.92	0.93	3.68	U	ND		ND		Y	0.00	0.00
0.46	1.67	0.93	3.34	U	ND		ND		Y	0.00	0.00
1.16	2.61	1.85	4.18	U	ND		ND		Y	0.00	0.00
0.23	0.94	1.16	4.70	U	ND		ND		Y	0.00	0.00
0.46	1.94	1.16	4.85	U	ND		ND		Y	0.00	0.00
0.23	0.82	4.63	16.34	U	ND		ND		Y	0.00	0.00
0.46	1.37	1.39	4.10	U	ND		ND		Y	0.00	0.00
0.46	1.94	2.78	11.64	U	ND		ND		Y	0.00	0.00
0.46	1.64	1.16	4.09	U	ND		ND		Y	0.00	0.00
0.46	1.27	1.16	3.18	U	ND		ND		Y	0.00	0.00
0.46	1.67	1.16	4.18	U	ND		ND		Y	0.00	0.00
0.23	1.23	1.16	6.14	U	ND		ND		Y	0.00	0.00

0.46	1.63	2.32	8.17	U	ND	ND	Y	0.00	0.00
0.23	0.69	1.39	4.10	U	ND	ND	Y	0.00	0.00
0.93	2.81	3.71	11.25	U	ND	ND	Y	0.00	0.00
0.23	0.92	1.16	4.60	U	ND	ND	Y	0.00	0.00
0.23	1.07	1.16	5.36	U	ND	ND	Y	0.00	0.00
0.23	1.14	1.16	5.66	U	ND	ND	Y	0.00	0.00
0.23	1.27	1.16	6.33	U	ND	ND	Y	0.00	0.00
0.23	0.94	1.16	4.70	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.16	5.27	U	ND	ND	Y	0.00	0.00
0.23	0.80	1.16	3.99	U	ND	ND	Y	0.00	0.00
1.62	5.19	2.32	7.41	U	ND	ND	Y	0.00	0.00
0.23	1.46	1.16	7.30	U	ND	ND	Y	0.00	0.00
0.46	1.94	2.32	9.70	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.16	5.42	U	ND	ND	Y	0.00	0.00
0.46	1.90	1.16	4.75	U	ND	ND	Y	0.00	0.00
0.23	1.07	1.16	5.36	U	ND	ND	Y	0.00	0.00
0.46	1.67	2.32	8.36	U	ND	ND	Y	0.00	0.00
0.23	1.65	1.16	8.25	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.16	6.23	U	ND	ND	Y	0.00	0.00
0.23	1.55	1.16	7.77	U	ND	ND	Y	0.00	0.00
0.46	1.90	1.16	4.75	U	ND	ND	Y	0.00	0.00
0.46	1.90	3.71	15.21	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.16	5.27	U	ND	ND	Y	0.00	0.00
0.93	3.50	1.16	4.37	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.16	5.27	U	ND	ND	Y	0.00	0.00
0.23	1.27	1.16	6.33	U	ND	ND	Y	0.00	0.00
0.46	2.17	1.16	5.42	U	ND	ND	Y	0.00	0.00
0.46	1.90	3.71	15.21	U	ND	ND	Y	0.00	0.00
0.23	1.07	3.24	15.01	U	ND	ND	Y	0.00	0.00
0.46	2.17	1.16	5.42	U	ND	ND	Y	0.00	0.00
0.46	3.95	1.16	9.88	U	ND	ND	Y	0.00	0.00
0.46	3.57	1.16	8.91	U	ND	ND	Y	0.00	0.00
0.12	0.79	1.16	7.87	U	ND	ND	Y	0.00	0.00
0.46	2.14	1.16	5.34	U	ND	ND	Y	0.00	0.00
0.46	3.18	1.16	7.96	U	ND	ND	Y	0.00	0.00
0.46	2.02	1.16	5.04	U	ND	ND	Y	0.00	0.00
0.46	2.02	1.16	5.04	U	ND	ND	Y	0.00	0.00
0.46	2.43	1.16	6.09	U	ND	ND	Y	0.00	0.00
0.70	2.97	1.16	4.94	U	ND	ND	Y	0.00	0.00
0.46	4.80	1.16	11.99	U	ND	ND	Y	0.00	0.00
0.46	2.02	1.16	5.04	U	ND	ND	Y	0.00	0.00
0.93	6.37	2.32	15.92	U	ND	ND	Y	0.00	0.00
0.93	5.59	2.78	16.78	U	ND	ND	Y	0.00	0.00
0.93	4.74	2.78	14.23	U	ND	ND	Y	0.00	0.00
0.93	4.56	3.24	15.97	U	ND	ND	Y	0.00	0.00
0.93	4.56	3.24	15.97	U	ND	ND	Y	0.00	0.00
0.93	4.56	7.41	36.49	U	ND	ND	Y	0.00	0.00
0.93	4.56	4.17	20.53	U	ND	ND	Y	0.00	0.00
0.93	5.40	2.78	16.20	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00
0.93	4.56	4.17	20.53	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00

0.93	5.09	3.24	17.83	U	ND	ND	Y	0.00	0.00
0.93	5.58	3.71	22.32	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00
0.93	4.80	2.32	12.01	U	ND	ND	Y	0.00	0.00
0.93	5.58	2.32	13.95	U	ND	ND	Y	0.00	0.00
0.93	5.09	2.78	15.28	U	ND	ND	Y	0.00	0.00
0.93	5.58	3.24	19.53	U	ND	ND	Y	0.00	0.00
1.39	13.45	3.24	31.39	U	ND	ND	Y	0.00	0.00
1.39	10.33	2.32	17.21	U	ND	ND	Y	0.00	0.00
2.32	12.16	0.46	2.43	U	ND	ND	Y	0.00	0.00
1.39	10.33	2.32	17.21	U	ND	ND	Y	0.00	0.00
1.16	12.37	1.39	14.85	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 45
Sample ID: T-613

Can Factor: 1.39
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	
ND	**0.7**	**1.5**	3.2	6.95	3.24	13.28	6.95	28.46	

eport Page Used

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**
Laboratory Number:		**45**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.39
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum (Astdni) (Cistdi) / (Cstdni) (Aistdi) i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	9757443	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	9757443	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	85737	20.0	9757443	0.812	3.76	4.93
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	9757443	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	9757443	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	9757443	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	9757443	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	9757443	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	9757443	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	9757443	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	9757443	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	9757443	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	78381	20.0	9757443	0.791	3.66	8.72
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	9757443	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	9757443	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	9757443	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	9757443	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	9757443	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	9757443	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	9757443	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	9757443	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	9757443	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	9757443	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	9757443	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	9757443	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	9757443	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	9757443	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	9757443	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	9757443	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	9757443	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	9757443	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	9757443	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	9757443	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	9757443	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	9757443	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	9757443	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	9757443	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	9757443	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	9757443	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	9757443	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	11146474	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	11146474	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	11146474	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	11146474	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	91010	20.0	11146474	0.206	0.95	3.05
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	11146474	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	11146474	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	11146474	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	11146474	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	11146474	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	11146474	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	11146474	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	11146474	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	11146474	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	11146474	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	11146474	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	11146474	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	59136	20.0	11146474	0.095	0.44	1.66
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	11146474	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	11146474	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	11146474	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	11146474	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	11146474	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	11146474	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	11146474	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	11146474	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	11146474	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	19061972	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	19061972	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	19061972	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	19061972	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	19061972	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	19061972	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	19061972	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	19061972	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	19061972	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	19061972	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	19061972	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	19061972	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	62758	20.0	19061972	0.015	0.07	0.34

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	44732	20.0	19061972	0.025	0.12	0.58
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	31193	20.0	19061972	0.017	0.08	0.39
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	19061972	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	19061972	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	19061972	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	19061972	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	19061972	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	19061972	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	28324	20.0	19061972	0.013	0.06	0.32
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	19061972	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	19061972	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	19061972	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	19061972	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	19061972	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	19061972	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	19061972	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	19061972	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	19061972	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	9757443	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	11146474	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	19061972	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	8398503	10.0		12.691	126.91	127

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443545A.D
Acq Time : 13 Dec 124 10:06 pm Operator: SS
Sample : T-613 Inst : 5970 - M
Misc : SCHMIDT Multiplr: 1.00
Quant Time: Dec 20 12:12 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	9757443	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	11146474	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.23	117	19061972	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	8398503	12.69	ppbV		126.91
Target Compounds							Qvalue
4) Methanol	4.79	31	85737	0.81	ppbV	#	76
14) Acetone	6.26	58	78381	0.79	ppbV	m	1
47) Benzene	10.41	78	91010	0.21	ppbV	m	74
61) Toluene	13.19	91	59136	0.10	ppbV	m	93
84) Isopropylbenzene	17.87	105	62758	0.01	ppbV	#	90
85) 4-Ethyltoluene	17.87	105	44732	0.03	ppbV	m	91
86) 1,3,5-Trimethylbenzene	17.97	105	31193	0.02	ppbV	m	76
93) Isopropyltoluene	19.17	119	28324	0.01	ppbV	#	65

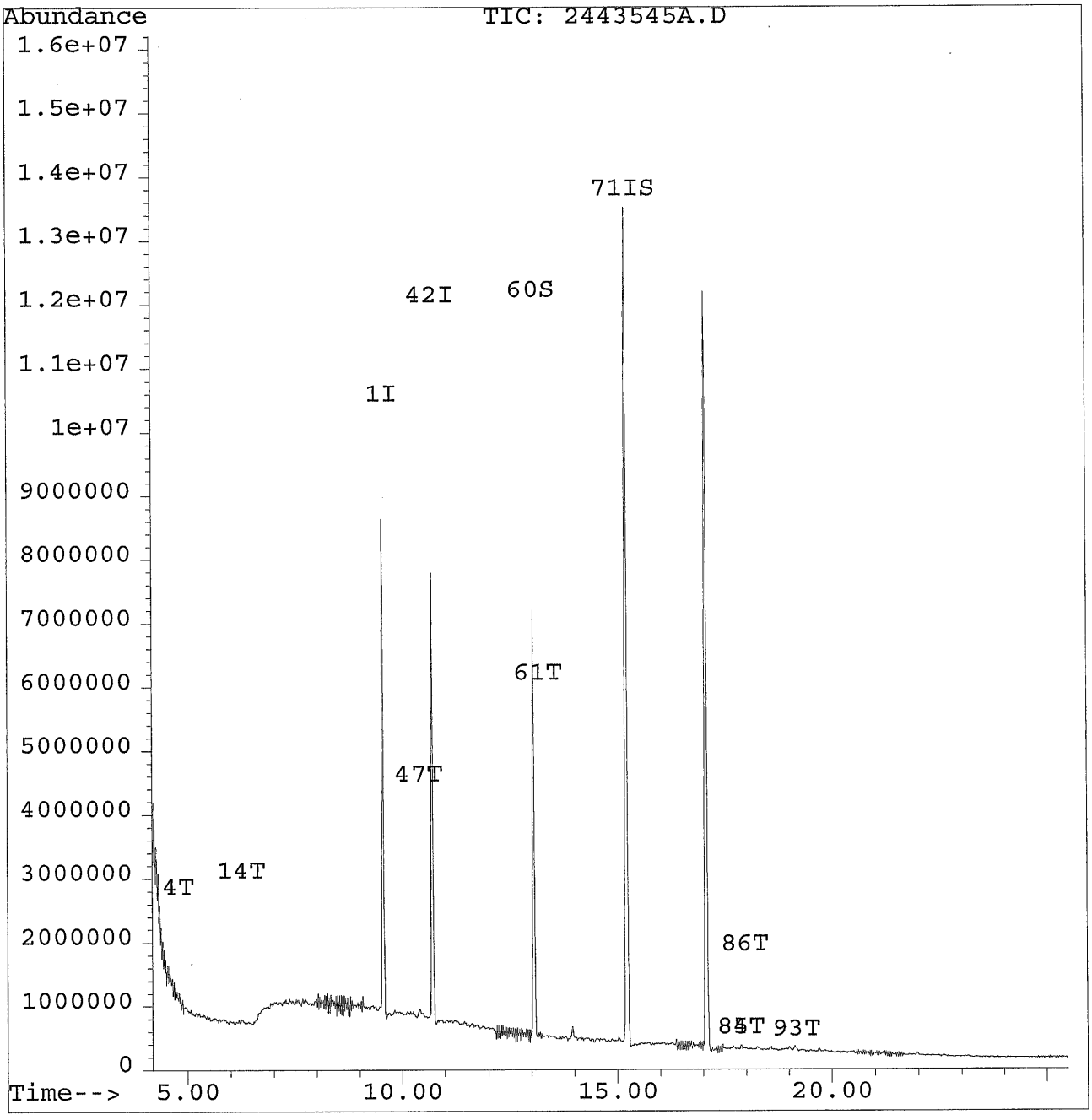
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\2443545A.D
Acq Time : 13 Dec 124 10:06 pm
Sample : T-613
Misc : SCHMIDT
Quant Time: Dec 20 12:12 19124

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\2443545A.D
Acq Time : 13 Dec 124 10:06 pm
Sample : T-613
Misc : SCHMIDT

Operator: SS
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	17.51 ppbV	38306940	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	90
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	37
4	2-Furancarbonyl chloride	4649	000527-69-5	8

Sample Data Packages

SDG Number 224435

Lab Id Number 46

Client ID T-614

Analytical Method TO-15

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435

Analytical Method: TO-15 **Laboratory ID: 46**

File Name: 2443546A.D **Date Sampled:** 11/21/24 **Time:** 11:36
Description: T-614 **Date Analyzed:** 12/10/24 **Time:** 16:32
Canister: 880 **Can Dilution Factor:** 1.38
QC_Batch: 121024-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.46	1.15	ND	0.79	1.98	ND	
75-71-8	Dichlorodifluoromethane	0.69	1.15	ND	3.42	5.69	ND	
67-56-1	Methanol	2.30	2.76	ND	3.01	3.62	ND	
74-87-3	Chloromethane	0.69	1.15	ND	1.43	2.38	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.46	1.15	ND	3.22	8.05	ND	
75-01-4	Vinyl chloride	0.23	1.15	ND	0.59	2.94	ND	
106-99-0	1,3-Butadiene	0.23	1.15	ND	0.51	2.55	ND	
74-83-9	Bromomethane	0.46	1.15	ND	1.79	4.47	ND	
75-00-3	Chloroethane	0.46	1.15	ND	1.22	3.04	ND	
64-17-5	Ethanol	2.30	14.77	ND	4.34	27.88	ND	
107-02-8	Acrolein	0.46	1.38	ND	1.06	3.17	ND	
75-69-4	Trichlorofluoromethane	0.46	1.15	ND	2.59	6.47	ND	
67-64-1	Acetone	2.30	2.76	ND	5.47	6.57	ND	
67-63-0	2-propanol (isopropylalcohol)	0.92	5.75	ND	2.26	14.15	ND	
75-65-0	t-Butyl alcohol	0.46	4.60	ND	1.40	13.96	ND	
4227-95-6	Methyl iodide	0.46	1.38	ND	2.69	8.08	ND	
75-35-4	1,1-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
107-13-1	Acrylonitrile	0.92	1.38	ND	2.00	3.00	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.23	1.15	ND	1.77	8.83	ND	
107-05-1	Allyl chloride	0.23	4.60	ND	0.72	14.41	ND	
75-09-2	Methylene chloride	0.23	1.15	ND	0.80	4.00	ND	
75-15-0	Carbon disulfide	0.46	1.15	ND	1.43	3.58	ND	
156-60-5	trans-1,2-Dichloroethene	0.23	0.92	ND	0.91	3.65	ND	
1634-04-4	Methyl tert butyl ether	0.46	0.92	ND	1.66	3.32	ND	
107-12-0	Propionitrile	1.15	1.84	ND	2.60	4.15	ND	
75-34-3	1,1-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
637-92-3	Ethyl tert butyl ether	0.46	1.15	ND	1.93	4.81	ND	
108-05-4	Vinyl acetate	0.23	4.60	ND	0.81	16.22	ND	
78-93-3	2-Butanone (MEK)	0.46	1.38	ND	1.36	4.07	ND	
108-20-3	Diisopropyl ether	0.46	2.76	ND	1.93	11.55	ND	
110-54-3	Hexane	0.46	1.15	ND	1.62	4.06	ND	
126-98-7	Methacrylonitrile	0.46	1.15	ND	1.26	3.16	ND	
141-78-6	Ethyl acetate	0.46	1.15	ND	1.66	4.15	ND	
74-97-5	Bromochloromethane	0.23	1.15	ND	1.22	6.09	ND	
96-33-3	Methyl acrylate	0.46	2.30	ND	1.62	8.11	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.23	1.38	ND	0.68	4.07	ND	
78-83-1	Isobutyl alcohol	0.92	3.68	ND	2.79	11.17	ND	
156-59-2	cis-1,2-Dichloroethene	0.23	1.15	ND	0.91	4.56	ND	
594-20-7	2,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
67-66-3	Chloroform	0.23	1.15	ND	1.13	5.62	ND	
71-55-6	1,1,1-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
107-06-2	1,2-Dichloroethane	0.23	1.15	ND	0.93	4.66	ND	
563-58-6	1,1-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
110-82-7	Cyclohexane	0.23	1.15	ND	0.79	3.97	ND	
71-43-2	Benzene	1.61	2.30	ND	5.15	7.36	ND	
56-23-5	Carbon tetrachloride	0.23	1.15	ND	1.45	7.24	ND	
994-05-8	t-Amyl methyl ether	0.46	2.30	ND	1.93	9.63	ND	
540-84-1	2,2,4-Trimethylpentane	0.23	1.15	ND	1.08	5.38	ND	
142-82-5	n-Heptane	0.46	1.15	ND	1.89	4.72	ND	
78-87-5	1,2-Dichloropropane	0.23	1.15	ND	1.06	5.32	ND	
123-91-1	1,4 Dioxane	0.46	2.30	ND	1.66	8.30	ND	
74-95-3	Dibromomethane	0.23	1.15	ND	1.64	8.19	ND	
79-01-6	Trichloroethene (TCE)	0.12	1.15	ND	0.62	6.19	ND	
75-27-4	Bromodichloromethane	0.23	1.15	ND	1.54	7.71	ND	
80-62-6	Methyl methacrylate	0.46	1.15	ND	1.89	4.71	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.46	3.68	ND	1.89	15.10	ND	
10061-01-5	cis-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
108-88-3	Toluene	0.92	1.15	ND	3.47	4.34	ND	
10061-02-6	trans-1,3-Dichloropropene	0.23	1.15	ND	1.05	5.23	ND	
79-00-5	1,1,2-Trichloroethane	0.23	1.15	ND	1.26	6.28	ND	
97-63-2	Ethyl methacrylate	0.46	1.15	ND	2.15	5.38	ND	
591-78-6	2-Hexanone	0.46	3.68	ND	1.89	15.10	ND	
142-28-9	1,3-Dichloropropane	0.23	3.22	ND	1.06	14.90	ND	
111-65-9	Octane	0.46	1.15	ND	2.15	5.38	ND	
124-48-1	Dibromochloromethane	0.46	1.15	ND	3.92	9.81	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.46	1.15	ND	3.54	8.85	ND	
127-18-4	Tetrachloroethene (PCE)	0.12	1.15	ND	0.78	7.81	ND	
108-90-7	Chlorobenzene	0.46	1.15	ND	2.12	5.30	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.46	1.15	ND	3.16	7.90	ND	
100-41-4	Ethylbenzene	0.46	1.15	ND	2.00	5.00	ND	
1330-20-7	m,p-Xylenes	0.46	1.15	ND	2.00	5.00	ND	
111-84-2	Nonane	0.46	1.15	ND	2.42	6.04	ND	
100-42-5	Styrene	0.69	1.15	ND	2.94	4.91	ND	
75-25-2	Bromoform	0.46	1.15	ND	4.76	11.90	ND	
95-47-6	o-Xylene	0.46	1.15	ND	2.00	5.00	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.92	2.30	ND	6.32	15.81	ND	
96-18-4	1,2,3-Trichloropropane	0.92	2.76	ND	5.55	16.66	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.92	2.76	ND	4.71	14.13	ND	
103-65-1	n-Propylbenzene	0.92	3.22	ND	4.53	15.85	ND	
98-82-8	Isopropylbenzene	0.92	3.22	ND	4.53	15.85	ND	
622-96-8	4-Ethyltoluene	0.92	7.36	ND	4.53	36.23	ND	
108-67-8	1,3,5-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
124-18-5	Decane	0.92	2.76	ND	5.36	16.08	ND	
98-06-6	tert-butyl benzene	0.92	2.76	ND	5.06	15.17	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.92	4.14	ND	4.53	20.38	ND	
538-93-2	i-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
135-98-8	sec-butylbenzene	0.92	3.22	ND	5.06	17.70	ND	
541-73-1	1,3-Dichlorobenzene	0.92	3.68	ND	5.54	22.16	ND	
99-87-6	Isopropyltoluene	0.92	2.76	ND	5.06	15.17	ND	
100-44-7	Benzyl chloride	0.92	2.30	ND	4.77	11.93	ND	
106-46-7	1,4-Dichlorobenzene	0.92	2.30	ND	5.54	13.85	ND	
104-51-8	n-Butylbenzene	0.92	2.76	ND	5.06	15.17	ND	
95-50-1	1,2-Dichlorobenzene	0.92	3.22	ND	5.54	19.39	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.38	3.22	ND	13.36	31.16	ND	
120-82-1	1,2,4-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
91-20-3	Naphthalene	2.30	0.46	ND	12.08	2.42	ND	
87-61-6	1,2,3-Trichlorobenzene	1.38	2.30	ND	10.25	17.09	ND	
87-68-3	Hexachlorobutadiene	1.15	1.38	ND	12.28	14.74	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	110	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: 224435
Descriptio 46
Canister: 880
QC_Batch: 121024-MA1

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/10/24 **Time:** 16:32
Can Dilution Factor: 1.38
Air Volume: 300.00 ml

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	3.22	6.90	ND	13.19	28.26	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**224435**		
				EAS ID:	**46**		
File Name:	2443546A.D	**Method:**	**TO-15**	**Date Sampled:**	**11/21/24**	**Time:**	**11:36**
Sample ID:	T-614	**Matrix:**	**AA**	**Date Received:**	**11/21/24**	**Time:**	**13:00**
MiscInfo-Vol:	SCHMIDT, 300 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**16:32**
Anal Date:	10 Dec 124 4:32 pm	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**880**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.38**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**SA**		
Analyst:	DA	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.346	6.42	58.00	35926
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.58	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.32	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**10226658**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**10604331**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17273753**
2037-26-5	Toluene-d8	60	SURR	11.016	13.40	98.00	**6935451**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: 224435
Laboratory Number: 46
File Name: 2443546A.D
Run Method: A1563_L.M
Can Factor: 1.38
Air Volume: 300.0 ml
Can/Tube Number: 880
Dilution Factor: 0.4140
Base Volume: 1000 ml
Unit Factor (ppbv): 1000

EDD SURR:	PERCENT
Sam Type:	SA
Instrument:	MA1
DETECT:	ND
Matrix:	AA
Type:	TRG
Diluton:	0.4140
Sig Figs:	2
MDLSF:	2

IS LCL	**50**
IS UCL	**200**
SUR LCL	**70**
SUR UCL	**130**
MDL Factor	**1.0**
E Flag	1.3

Gas Constant	
T	24.5
P	**760**
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	PPBV ResultV PPBV	UG/M3 Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.35	1.59	3.78	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.02	110	110	110	110	110	110	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.46	0.79	1.15	1.98	U	ND		ND		Y	0.00	0.00
0.69	3.42	1.15	5.69	U	ND		ND		Y	0.00	0.00
2.30	3.01	2.76	3.62	U	ND		ND		Y	0.00	0.00
0.69	1.43	1.15	2.38	U	ND		ND		Y	0.00	0.00
0.46	3.22	1.15	8.05	U	ND		ND		Y	0.00	0.00
0.23	0.59	1.15	2.94	U	ND		ND		Y	0.00	0.00
0.23	0.51	1.15	2.55	U	ND		ND		Y	0.00	0.00
0.46	1.79	1.15	4.47	U	ND		ND		Y	0.00	0.00
0.46	1.22	1.15	3.04	U	ND		ND		Y	0.00	0.00
2.30	4.34	14.77	27.88	U	ND		ND		Y	0.00	0.00
0.46	1.06	1.38	3.17	U	ND		ND		Y	0.00	0.00
0.46	2.59	1.15	6.47	U	ND		ND		Y	0.00	0.00
2.30	5.47	2.76	6.57	U	ND		ND		Y	0.00	0.00
0.92	2.26	5.75	14.15	U	ND		ND		Y	0.00	0.00
0.46	1.40	4.60	13.96	U	ND		ND		Y	0.00	0.00
0.46	2.69	1.38	8.08	U	ND		ND		Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND		ND		Y	0.00	0.00
0.92	2.00	1.38	3.00	U	ND		ND		Y	0.00	0.00
0.23	1.77	1.15	8.83	U	ND		ND		Y	0.00	0.00
0.23	0.72	4.60	14.41	U	ND		ND		Y	0.00	0.00
0.23	0.80	1.15	4.00	U	ND		ND		Y	0.00	0.00
0.46	1.43	1.15	3.58	U	ND		ND		Y	0.00	0.00
0.23	0.91	0.92	3.65	U	ND		ND		Y	0.00	0.00
0.46	1.66	0.92	3.32	U	ND		ND		Y	0.00	0.00
1.15	2.60	1.84	4.15	U	ND		ND		Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND		ND		Y	0.00	0.00
0.46	1.93	1.15	4.81	U	ND		ND		Y	0.00	0.00
0.23	0.81	4.60	16.22	U	ND		ND		Y	0.00	0.00
0.46	1.36	1.38	4.07	U	ND		ND		Y	0.00	0.00
0.46	1.93	2.76	11.55	U	ND		ND		Y	0.00	0.00
0.46	1.62	1.15	4.06	U	ND		ND		Y	0.00	0.00
0.46	1.26	1.15	3.16	U	ND		ND		Y	0.00	0.00
0.46	1.66	1.15	4.15	U	ND		ND		Y	0.00	0.00
0.23	1.22	1.15	6.09	U	ND		ND		Y	0.00	0.00

0.46	1.62	2.30	8.11	U	ND	ND	Y	0.00	0.00
0.23	0.68	1.38	4.07	U	ND	ND	Y	0.00	0.00
0.92	2.79	3.68	11.17	U	ND	ND	Y	0.00	0.00
0.23	0.91	1.15	4.56	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.23	1.13	1.15	5.62	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.23	0.93	1.15	4.66	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	0.79	1.15	3.97	U	ND	ND	Y	0.00	0.00
1.61	5.15	2.30	7.36	U	ND	ND	Y	0.00	0.00
0.23	1.45	1.15	7.24	U	ND	ND	Y	0.00	0.00
0.46	1.93	2.30	9.63	U	ND	ND	Y	0.00	0.00
0.23	1.08	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.72	U	ND	ND	Y	0.00	0.00
0.23	1.06	1.15	5.32	U	ND	ND	Y	0.00	0.00
0.46	1.66	2.30	8.30	U	ND	ND	Y	0.00	0.00
0.23	1.64	1.15	8.19	U	ND	ND	Y	0.00	0.00
0.12	0.62	1.15	6.19	U	ND	ND	Y	0.00	0.00
0.23	1.54	1.15	7.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	1.15	4.71	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.92	3.47	1.15	4.34	U	ND	ND	Y	0.00	0.00
0.23	1.05	1.15	5.23	U	ND	ND	Y	0.00	0.00
0.23	1.26	1.15	6.28	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	1.89	3.68	15.10	U	ND	ND	Y	0.00	0.00
0.23	1.06	3.22	14.90	U	ND	ND	Y	0.00	0.00
0.46	2.15	1.15	5.38	U	ND	ND	Y	0.00	0.00
0.46	3.92	1.15	9.81	U	ND	ND	Y	0.00	0.00
0.46	3.54	1.15	8.85	U	ND	ND	Y	0.00	0.00
0.12	0.78	1.15	7.81	U	ND	ND	Y	0.00	0.00
0.46	2.12	1.15	5.30	U	ND	ND	Y	0.00	0.00
0.46	3.16	1.15	7.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.46	2.42	1.15	6.04	U	ND	ND	Y	0.00	0.00
0.69	2.94	1.15	4.91	U	ND	ND	Y	0.00	0.00
0.46	4.76	1.15	11.90	U	ND	ND	Y	0.00	0.00
0.46	2.00	1.15	5.00	U	ND	ND	Y	0.00	0.00
0.92	6.32	2.30	15.81	U	ND	ND	Y	0.00	0.00
0.92	5.55	2.76	16.66	U	ND	ND	Y	0.00	0.00
0.92	4.71	2.76	14.13	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	3.22	15.85	U	ND	ND	Y	0.00	0.00
0.92	4.53	7.36	36.23	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.36	2.76	16.08	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.53	4.14	20.38	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00

0.92	5.06	3.22	17.70	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.68	22.16	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	4.77	2.30	11.93	U	ND	ND	Y	0.00	0.00
0.92	5.54	2.30	13.85	U	ND	ND	Y	0.00	0.00
0.92	5.06	2.76	15.17	U	ND	ND	Y	0.00	0.00
0.92	5.54	3.22	19.39	U	ND	ND	Y	0.00	0.00
1.38	13.36	3.22	31.16	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
2.30	12.08	0.46	2.42	U	ND	ND	Y	0.00	0.00
1.38	10.25	2.30	17.09	U	ND	ND	Y	0.00	0.00
1.15	12.28	1.38	14.74	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: 224435
EASID: 46
Sample ID: T-614

Can Factor: 1.38
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	
ND	**0.7**	**1.5**	3.2	6.90	3.22	13.19	6.90	28.26	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**2E+05**	
Laboratory Number:		**46**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.38	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ **= Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	10226658	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	10226658	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	10226658	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	10226658	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	10226658	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	10226658	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	10226658	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	10226658	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	10226658	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	10226658	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	10226658	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	10226658	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	35926	20.0	10226658	0.346	1.59	3.78
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	10226658	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	10226658	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	10226658	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	10226658	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	10226658	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	10226658	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	10226658	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	10226658	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	10226658	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	10226658	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	10226658	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	10226658	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	10226658	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	10226658	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	10226658	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	10226658	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	10226658	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	10226658	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	10226658	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	10226658	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	10226658	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	10226658	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	10226658	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	10226658	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	10226658	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	10226658	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	10226658	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	10604331	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	10604331	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	10604331	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	10604331	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	0	20.0	10604331	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	10604331	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	10604331	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	10604331	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	10604331	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	10604331	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	10604331	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	10604331	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	10604331	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	10604331	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	10604331	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	10604331	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	10604331	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	0	20.0	10604331	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	10604331	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	10604331	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	10604331	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	10604331	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	10604331	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	10604331	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	10604331	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	10604331	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	10604331	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	17273753	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	17273753	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	17273753	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	17273753	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	17273753	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	17273753	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	17273753	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	17273753	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	17273753	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	17273753	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	17273753	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	17273753	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	17273753	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	17273753	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	17273753	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	17273753	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	17273753	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	17273753	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	17273753	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	17273753	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	17273753	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	17273753	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	17273753	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	17273753	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	17273753	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	17273753	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	17273753	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	17273753	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	17273753	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	17273753	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	17273753	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	10226658	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	10604331	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17273753	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	6935451	10.0		11.016	110.16	110

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443546A.D
Acq Time : 10 Dec 124 4:32 pm
Sample : T-614
Misc : SCHMIDT, 300 ML
Quant Time: Jan 2 11:51 19125

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.59	168	10226658	20.00	ppbV	-0.23
42) 1,4-Difluorobenzene	10.74	114	10604331	20.00	ppbV	-0.27
71) Chlorobenzene-d5	15.21	117	17273753	20.00	ppbV	-0.36
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	6935451	11.02	ppbV	110.16
Target Compounds						Qvalue
14) Acetone	6.33	58	35926	0.35	ppbV m	1

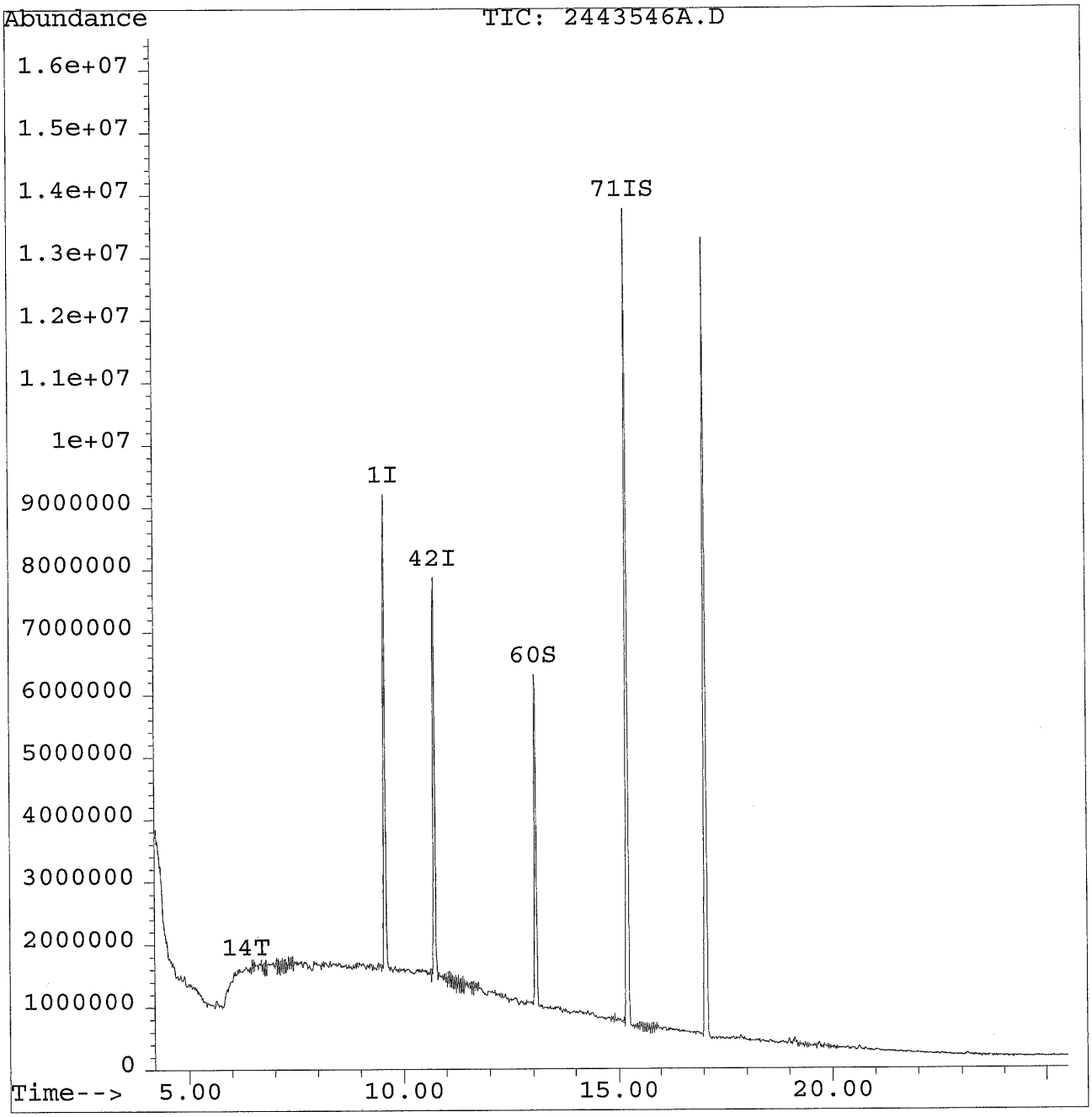
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443546A.D
Acq Time : 10 Dec 124 4:32 pm
Sample : T-614
Misc : SCHMIDT, 300 ML
Quant Time: Jan 2 11:51 19125

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12104A_C\2443546A.D
Acq Time : 10 Dec 124 4:32 pm
Sample : T-614
Misc : SCHMIDT, 300 ML

Operator: DA
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : NBS54K.L

No Library Search Compounds Detected

Method Blank Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Method Blank QC Batch report for each DAB in this SDG.

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B121044

File Name: B12104D.D
Description: METHOD BLANK
Canister:
QC_Batch: 12104-MA1

Date Sampled: **Time:**
Date Analyzed: 12/10/24 **Time:** 14:37
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	106	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: LABQC
Descriptio B121044
Canister:
QC_Batch: 12104-MA1

Date Sampled:
Date Analyzed: 12/10/24
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 14:37

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**B121044**		
File Name:	B12104D.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	METHOD BLANK	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	1000 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**14:37**
Anal Date:	10 Dec 124 2:37 pm	**SF:**	**2**	**QCbatch:**	**12104-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.117	6.42	58.00	20011
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.61	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.32	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**16769768**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**16778233**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**19620635**
2037-26-5	Toluene-d8	60	SURR	10.555	13.40	98.00	**10514163**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**LABQC**	EDD SURR:	PERCENT				
Laboratory Number:	**B121044**	Sam Type:	MB				
File Name:	B12104D.D	Instrument:	MA1	IS LCL	**50**		
Run Method:	A1563_L.M	DETECT:	ND	IS UCL	**200**	Gas Constant	
Can Factor:	1.00	Matrix:	AA	SUR LCL	**70**	T	24.5
Air Volume:	300.0 ml	Type:	TRG	SUR UCL	**130**	P	**760**
Can/Tube Number:	NA	Diluton:	0.3000	MDL Factor	**1.0**	MV	24.417
Dilution Factor:	0.3000	Sig Figs:	2	E Flag	1.3	GC	24.417
Base Volume:	1000 ml	MDLSF:	2				

Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)
Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.12	0.39	0.93	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		10.55	106	106	106	106	106	106	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.33	0.57	0.83	1.44	U	ND		ND		Y	0.00	0.00
0.50	2.48	0.83	4.13	U	ND		ND		Y	0.00	0.00
1.67	2.18	2.00	2.62	U	ND		ND		Y	0.00	0.00
0.50	1.03	0.83	1.72	U	ND		ND		Y	0.00	0.00
0.33	2.33	0.83	5.83	U	ND		ND		Y	0.00	0.00
0.17	0.43	0.83	2.13	U	ND		ND		Y	0.00	0.00
0.17	0.37	0.83	1.85	U	ND		ND		Y	0.00	0.00
0.33	1.30	0.83	3.24	U	ND		ND		Y	0.00	0.00
0.33	0.88	0.83	2.20	U	ND		ND		Y	0.00	0.00
1.67	3.15	10.70	20.20	U	ND		ND		Y	0.00	0.00
0.33	0.77	1.00	2.30	U	ND		ND		Y	0.00	0.00
0.33	1.88	0.83	4.69	U	ND		ND		Y	0.00	0.00
1.67	3.97	2.00	4.76	U	ND		ND		Y	0.00	0.00
0.67	1.64	4.17	10.26	U	ND		ND		Y	0.00	0.00
0.33	1.01	3.33	10.12	U	ND		ND		Y	0.00	0.00
0.33	1.95	1.00	5.85	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.67	1.45	1.00	2.17	U	ND		ND		Y	0.00	0.00
0.17	1.28	0.83	6.40	U	ND		ND		Y	0.00	0.00
0.17	0.52	3.33	10.44	U	ND		ND		Y	0.00	0.00
0.17	0.58	0.83	2.90	U	ND		ND		Y	0.00	0.00
0.33	1.04	0.83	2.60	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.67	2.65	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.67	2.41	U	ND		ND		Y	0.00	0.00
0.83	1.88	1.33	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.67	0.83	3.38	U	ND		ND		Y	0.00	0.00
0.33	1.40	0.83	3.49	U	ND		ND		Y	0.00	0.00
0.17	0.59	3.33	11.75	U	ND		ND		Y	0.00	0.00
0.33	0.98	1.00	2.95	U	ND		ND		Y	0.00	0.00
0.33	1.40	2.00	8.37	U	ND		ND		Y	0.00	0.00
0.33	1.18	0.83	2.94	U	ND		ND		Y	0.00	0.00
0.33	0.92	0.83	2.29	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.83	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.88	0.83	4.42	U	ND		ND		Y	0.00	0.00

0.33	1.18	1.67	5.88	U	ND	ND	Y	0.00	0.00
0.17	0.50	1.00	2.95	U	ND	ND	Y	0.00	0.00
0.67	2.02	2.67	8.09	U	ND	ND	Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.17	0.82	0.83	4.08	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.17	0.68	0.83	3.38	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.57	0.83	2.87	U	ND	ND	Y	0.00	0.00
1.17	3.73	1.67	5.33	U	ND	ND	Y	0.00	0.00
0.17	1.05	0.83	5.25	U	ND	ND	Y	0.00	0.00
0.33	1.40	1.67	6.98	U	ND	ND	Y	0.00	0.00
0.17	0.78	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.33	1.20	1.67	6.01	U	ND	ND	Y	0.00	0.00
0.17	1.19	0.83	5.93	U	ND	ND	Y	0.00	0.00
0.08	0.45	0.83	4.48	U	ND	ND	Y	0.00	0.00
0.17	1.12	0.83	5.59	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.67	2.51	0.83	3.14	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.77	2.33	10.80	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	2.84	0.83	7.11	U	ND	ND	Y	0.00	0.00
0.33	2.57	0.83	6.41	U	ND	ND	Y	0.00	0.00
0.08	0.57	0.83	5.66	U	ND	ND	Y	0.00	0.00
0.33	1.54	0.83	3.84	U	ND	ND	Y	0.00	0.00
0.33	2.29	0.83	5.73	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.75	0.83	4.38	U	ND	ND	Y	0.00	0.00
0.50	2.13	0.83	3.56	U	ND	ND	Y	0.00	0.00
0.33	3.45	0.83	8.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.67	4.58	1.67	11.45	U	ND	ND	Y	0.00	0.00
0.67	4.02	2.00	12.07	U	ND	ND	Y	0.00	0.00
0.67	3.41	2.00	10.24	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	5.33	26.25	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.89	2.00	11.66	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00

0.67	3.66	2.33	12.82	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.67	16.05	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.46	1.67	8.64	U	ND	ND	Y	0.00	0.00
0.67	4.01	1.67	10.03	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.33	14.05	U	ND	ND	Y	0.00	0.00
1.00	9.68	2.33	22.58	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
1.67	8.75	0.33	1.75	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
0.83	8.90	1.00	10.68	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: LABQC
EASID: B121044
Sample ID: METHOD BLANK

Can Factor: 1.00
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**LABQC**
Laboratory Number:		**B121044**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.00
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum [(Astdni) (Cistdi) / (Cstdni) (Aistdi)] i — Note: 1

2) Raw Amt = (Ansamp) (Cistdi) / (Avg RFn) (Aistdi) = **Cn**

3) Amount ppbv = (Raw Amt) 1000 (CDF) / (SV)

4) Amount ug/m3 = (amt(ppbv) MW / 24.42

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.077	0	20.0	16769768	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.388	0	20.0	16769768	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.325	0	20.0	16769768	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.125	0	20.0	16769768	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.338	0	20.0	16769768	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.154	0	20.0	16769768	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.136	0	20.0	16769768	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.175	0	20.0	16769768	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.080	0	20.0	16769768	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.013	0	20.0	16769768	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.057	0	20.0	16769768	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.349	0	20.0	16769768	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.109	20011	20.0	16769768	0.117	0.39	0.93
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.402	0	20.0	16769768	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.524	0	20.0	16769768	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.638	0	20.0	16769768	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.299	0	20.0	16769768	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.127	0	20.0	16769768	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.400	0	20.0	16769768	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.111	0	20.0	16769768	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.132	0	20.0	16769768	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.400	0	20.0	16769768	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.208	0	20.0	16769768	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.433	0	20.0	16769768	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.147	0	20.0	16769768	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.326	0	20.0	16769768	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.429	0	20.0	16769768	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.076	0	20.0	16769768	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.110	0	20.0	16769768	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.141	0	20.0	16769768	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.286	0	20.0	16769768	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.099	0	20.0	16769768	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.350	0	20.0	16769768	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.316	0	20.0	16769768	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.208	0	20.0	16769768	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.123	0	20.0	16769768	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.059	0	20.0	16769768	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.239	0	20.0	16769768	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.284	0	20.0	16769768	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.339	0	20.0	16769768	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.477	0	20.0	16778233	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.376	0	20.0	16778233	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.398	0	20.0	16778233	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.364	0	20.0	16778233	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.823	0	20.0	16778233	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.366	0	20.0	16778233	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.938	0	20.0	16778233	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.306	0	20.0	16778233	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.276	0	20.0	16778233	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.312	0	20.0	16778233	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.337	0	20.0	16778233	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.984	0	20.0	16778233	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.699	0	20.0	16778233	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.413	0	20.0	16778233	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.241	0	20.0	16778233	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.434	0	20.0	16778233	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.357	0	20.0	16778233	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.215	0	20.0	16778233	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.346	0	20.0	16778233	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.246	0	20.0	16778233	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.481	0	20.0	16778233	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.784	0	20.0	16778233	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.677	0	20.0	16778233	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.387	0	20.0	16778233	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.711	0	20.0	16778233	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.842	0	20.0	16778233	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	1.398	0	20.0	16778233	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	1.145	0	20.0	19620635	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.488	0	20.0	19620635	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.497	0	20.0	19620635	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.297	0	20.0	19620635	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.575	0	20.0	19620635	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	1.008	0	20.0	19620635	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.957	0	20.0	19620635	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.314	0	20.0	19620635	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.186	0	20.0	19620635	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.502	0	20.0	19620635	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.081	0	20.0	19620635	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.144	0	20.0	19620635	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	3.882	0	20.0	19620635	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.613	0	20.0	19620635	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.810	0	20.0	19620635	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	0.882	0	20.0	19620635	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	2.678	0	20.0	19620635	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.453	0	20.0	19620635	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	1.786	0	20.0	19620635	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.164	0	20.0	19620635	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	2.201	0	20.0	19620635	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.356	0	20.0	19620635	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.660	0	20.0	19620635	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	2.004	0	20.0	19620635	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.242	0	20.0	19620635	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	2.676	0	20.0	19620635	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.196	0	20.0	19620635	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.750	0	20.0	19620635	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.424	0	20.0	19620635	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.175	0	20.0	19620635	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	3.485	0	20.0	19620635	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	16769768	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	16778233	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	19620635	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	10514163	10.0		10.555	105.55	106

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\B12104D.D
Acq Time : 10 Dec 124 2:37 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Dec 11 14:13 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.56	168	16769768	20.00	ppbV	-0.27
42) 1,4-Difluorobenzene	10.72	114	16778233	20.00	ppbV	-0.28
71) Chlorobenzene-d5	15.21	117	19620635	20.00	ppbV	-0.36
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.06	98	10514163	10.55	ppbV	105.55
Target Compounds						Qvalue
14) Acetone	6.29	58	20011	0.12	ppbV m	18

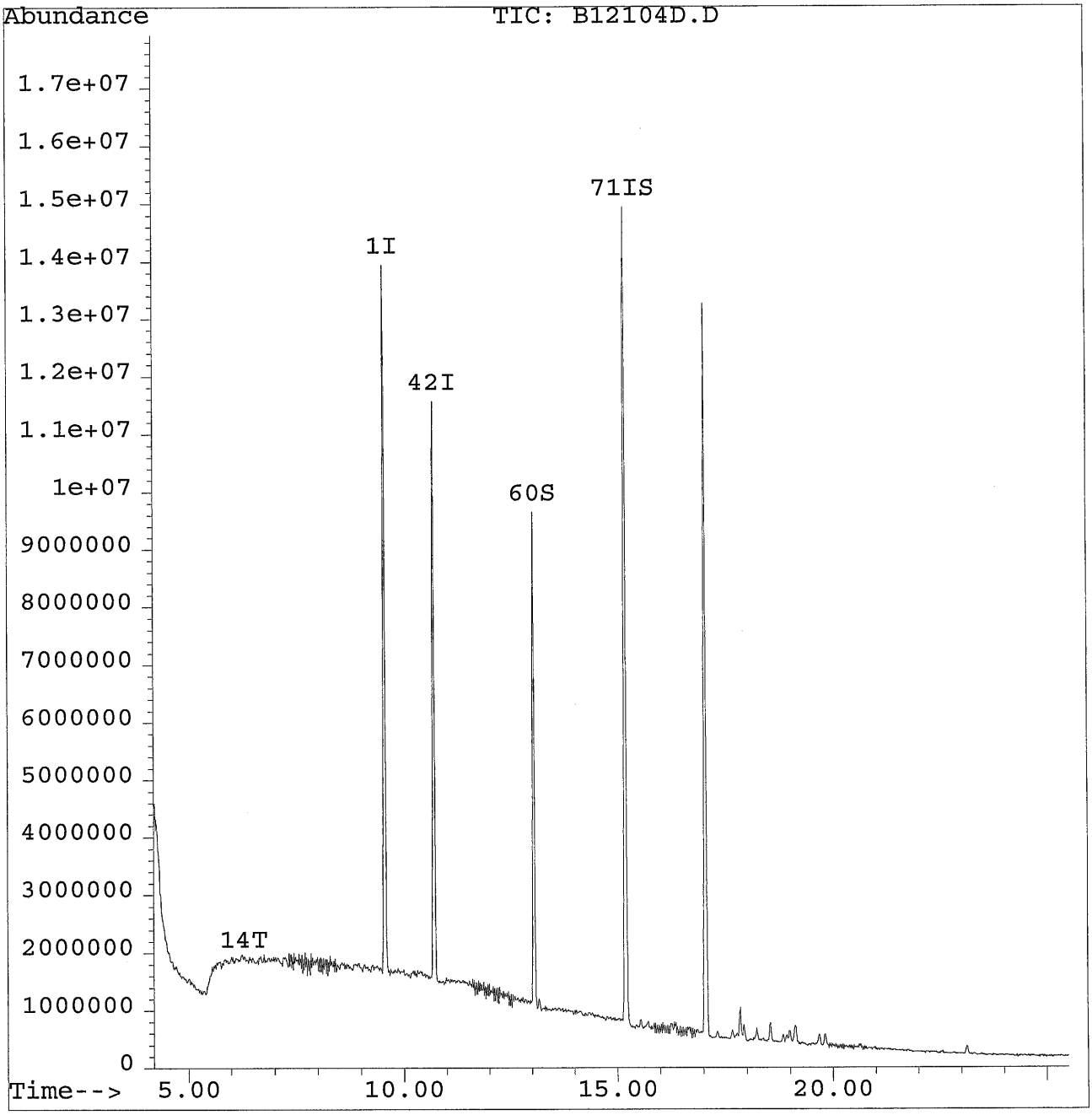
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A_C\B12104D.D
Acq Time : 10 Dec 124 2:37 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Dec 11 14:13 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC

Analytical Method: TO-15 **Laboratory ID: B121144**

File Name: B12114D.D **Date Sampled:** **Time:**
Description: METHOD BLANK **Date Analyzed:** 12/11/24 **Time:** 14:36
Canister: **Can Dilution Factor:** 1.00
QC_Batch: 12114-MA1 **Air Volume:** 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	104	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: LABQC
Descriptio B121144
Canister:
QC_Batch: 12114-MA1

Date Sampled:
Date Analyzed: 12/11/24
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 14:36

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**B121144**		
File Name:	B12114D.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	METHOD BLANK	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	1000 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**14:36**
Anal Date:	11 Dec 124 2:36 pm	**SF:**	**2**	**QCbatch:**	**12114-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.000	6.42	58.00	0
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.060	10.70	78.00	37736
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.087	13.50	91.00	76717
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.072	15.90	106	97876
1330-20-7	m,p-Xylenes	75	TRG	0.088	16.06	91.00	97014
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.107	16.61	104.00	95020
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.097	16.35	91.00	116572
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.047	17.02	83.00	52306
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	584
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.063	18.60	57.00	72077
98-06-6	tert-butyl benzene	88	TRG	0.049	18.93	119.00	84919

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.168	18.95	105.00	232601
538-93-2	i-Butylbenzene	90	TRG	0.055	19.24	91.00	109292
135-98-8	sec-butylbenzene	91	TRG	0.066	19.32	105.00	153320
541-73-1	1,3-Dichlorobenzene	92	TRG	0.001	19.39	146.00	947
99-87-6	Isopropyltoluene	93	TRG	0.073	19.53	119.00	155713
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**15344921**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**15735301**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**18182179**
2037-26-5	Toluene-d8	60	SURR	10.419	13.40	98.00	**9733686**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG: LABQC
Laboratory Number: B121144
File Name: B12114D.D
Run Method: A1563_L.M
Can Factor: 1.00
Air Volume: 300.0 ml
Can/Tube Number: NA
Dilution Factor: 0.3000
Base Volume: 1000 ml
Unit Factor (ppbv): 1000 PPBV UG/M3

EDD SURR: PERCENT
Sam Type: MB
Instrument: MA1
DETECT: ND
Matrix: AA
Type: TRG
Diluton: 0.3000
Sig Figs: 2
MDLSF: 2

IS LCL	50
IS UCL	200
SUR LCL	70
SUR UCL	130
MDL Factor	1.0
E Flag	1.3

Gas Constant	
T	24.5
P	760
MV	24.417
GC	24.417

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	Fixed ResultV PPBV	Fixed Result UG/M3	Fixed ResultQ UG/M3	Fixed ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		0.150	0.250
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		0.500	0.600
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		0.150	0.250
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		0.050	0.250
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		0.500	3.210
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Acetone	58.1	0.00	0.00	0.00	ND	ND	0		0.500	0.600
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		0.200	1.250
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		0.100	1.000
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		0.100	0.300
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		0.200	0.300
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		0.050	1.000
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		0.050	0.200
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.200
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		0.250	0.400
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		0.050	0.250
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		0.050	1.000
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		0.100	0.300
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		0.100	0.600
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		0.100	0.250
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		0.050	0.250

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.06	0.20	0.64	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.09	0.29	1.10	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.07	0.24	1.05	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.09	0.29	1.27	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.11	0.36	1.52	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.10	0.32	1.40	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.05	0.16	1.08	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.01	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.06	0.21	1.23	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.05	0.16	0.89	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.17	0.56	2.75	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.05	0.18	1.01	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.07	0.22	1.21	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.02	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.07	0.24	1.33	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		10.42	104	104	104	104	104	104	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.33	0.57	0.83	1.44	U	ND		ND		Y	0.00	0.00
0.50	2.48	0.83	4.13	U	ND		ND		Y	0.00	0.00
1.67	2.18	2.00	2.62	U	ND		ND		Y	0.00	0.00
0.50	1.03	0.83	1.72	U	ND		ND		Y	0.00	0.00
0.33	2.33	0.83	5.83	U	ND		ND		Y	0.00	0.00
0.17	0.43	0.83	2.13	U	ND		ND		Y	0.00	0.00
0.17	0.37	0.83	1.85	U	ND		ND		Y	0.00	0.00
0.33	1.30	0.83	3.24	U	ND		ND		Y	0.00	0.00
0.33	0.88	0.83	2.20	U	ND		ND		Y	0.00	0.00
1.67	3.15	10.70	20.20	U	ND		ND		Y	0.00	0.00
0.33	0.77	1.00	2.30	U	ND		ND		Y	0.00	0.00
0.33	1.88	0.83	4.69	U	ND		ND		Y	0.00	0.00
1.67	3.97	2.00	4.76	U	ND		ND		Y	0.00	0.00
0.67	1.64	4.17	10.26	U	ND		ND		Y	0.00	0.00
0.33	1.01	3.33	10.12	U	ND		ND		Y	0.00	0.00
0.33	1.95	1.00	5.85	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.67	1.45	1.00	2.17	U	ND		ND		Y	0.00	0.00
0.17	1.28	0.83	6.40	U	ND		ND		Y	0.00	0.00
0.17	0.52	3.33	10.44	U	ND		ND		Y	0.00	0.00
0.17	0.58	0.83	2.90	U	ND		ND		Y	0.00	0.00
0.33	1.04	0.83	2.60	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.67	2.65	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.67	2.41	U	ND		ND		Y	0.00	0.00
0.83	1.88	1.33	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.67	0.83	3.38	U	ND		ND		Y	0.00	0.00
0.33	1.40	0.83	3.49	U	ND		ND		Y	0.00	0.00
0.17	0.59	3.33	11.75	U	ND		ND		Y	0.00	0.00
0.33	0.98	1.00	2.95	U	ND		ND		Y	0.00	0.00
0.33	1.40	2.00	8.37	U	ND		ND		Y	0.00	0.00
0.33	1.18	0.83	2.94	U	ND		ND		Y	0.00	0.00
0.33	0.92	0.83	2.29	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.83	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.88	0.83	4.42	U	ND		ND		Y	0.00	0.00

0.33	1.18	1.67	5.88	U	ND	ND	Y	0.00	0.00
0.17	0.50	1.00	2.95	U	ND	ND	Y	0.00	0.00
0.67	2.02	2.67	8.09	U	ND	ND	Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.17	0.82	0.83	4.08	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.17	0.68	0.83	3.38	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.57	0.83	2.87	U	ND	ND	Y	0.00	0.00
1.17	3.73	1.67	5.33	U	ND	ND	Y	0.00	0.00
0.17	1.05	0.83	5.25	U	ND	ND	Y	0.00	0.00
0.33	1.40	1.67	6.98	U	ND	ND	Y	0.00	0.00
0.17	0.78	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.33	1.20	1.67	6.01	U	ND	ND	Y	0.00	0.00
0.17	1.19	0.83	5.93	U	ND	ND	Y	0.00	0.00
0.08	0.45	0.83	4.48	U	ND	ND	Y	0.00	0.00
0.17	1.12	0.83	5.59	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.67	2.51	0.83	3.14	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.77	2.33	10.80	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	2.84	0.83	7.11	U	ND	ND	Y	0.00	0.00
0.33	2.57	0.83	6.41	U	ND	ND	Y	0.00	0.00
0.08	0.57	0.83	5.66	U	ND	ND	Y	0.00	0.00
0.33	1.54	0.83	3.84	U	ND	ND	Y	0.00	0.00
0.33	2.29	0.83	5.73	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.75	0.83	4.38	U	ND	ND	Y	0.00	0.00
0.50	2.13	0.83	3.56	U	ND	ND	Y	0.00	0.00
0.33	3.45	0.83	8.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.67	4.58	1.67	11.45	U	ND	ND	Y	0.00	0.00
0.67	4.02	2.00	12.07	U	ND	ND	Y	0.00	0.00
0.67	3.41	2.00	10.24	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	5.33	26.25	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.89	2.00	11.66	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00

0.67	3.66	2.33	12.82	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.67	16.05	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.46	1.67	8.64	U	ND	ND	Y	0.00	0.00
0.67	4.01	1.67	10.03	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.33	14.05	U	ND	ND	Y	0.00	0.00
1.00	9.68	2.33	22.58	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
1.67	8.75	0.33	1.75	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
0.83	8.90	1.00	10.68	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: LABQC
EASID: B121144
Sample ID: METHOD BLANK

Can Factor: 1.00
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**LABQC**	
Laboratory Number:		**B121144**	
Standard Volume	STV	10.0	ml
Sample Volume	SV	300	ml
Can Dilution Factor	CDF	1.00	
Gas Constant		24.42	
Decimal Places:		2	

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	15344921	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	15344921	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	15344921	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	15344921	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	15344921	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	15344921	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	15344921	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	15344921	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	15344921	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	15344921	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	15344921	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	15344921	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	0	20.0	15344921	0.000	0.00	0.00
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	15344921	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	15344921	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	15344921	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	15344921	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	15344921	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	15344921	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	15344921	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	15344921	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	15344921	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	15344921	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	15344921	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	15344921	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	15344921	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	15344921	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	15344921	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	15344921	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	15344921	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	15344921	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	15344921	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	15344921	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	15344921	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	15344921	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	15344921	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	15344921	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	15344921	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	15344921	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	15344921	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	15735301	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	15735301	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	15735301	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	15735301	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	37736	20.0	15735301	0.060	0.20	0.64
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	15735301	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	15735301	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	15735301	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	15735301	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	15735301	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	15735301	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	15735301	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	15735301	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	15735301	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	15735301	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	15735301	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	15735301	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	76717	20.0	15735301	0.087	0.29	1.10
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	15735301	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	15735301	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	15735301	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	15735301	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	15735301	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	15735301	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	15735301	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	15735301	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	15735301	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	18182179	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	18182179	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	97876	20.0	18182179	0.072	0.24	1.05
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	97014	20.0	18182179	0.088	0.29	1.27
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	18182179	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	95020	20.0	18182179	0.107	0.36	1.52
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	18182179	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	116572	20.0	18182179	0.097	0.32	1.40
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	52306	20.0	18182179	0.047	0.16	1.08
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	18182179	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	18182179	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	18182179	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	18182179	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	584	20.0	18182179	0.000	0.00	0.01
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	18182179	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	72077	20.0	18182179	0.063	0.21	1.23
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	84919	20.0	18182179	0.049	0.16	0.89
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	232601	20.0	18182179	0.168	0.56	2.75
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	109292	20.0	18182179	0.055	0.18	1.01
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	153320	20.0	18182179	0.066	0.22	1.21
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	947	20.0	18182179	0.001	0.00	0.02
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	155713	20.0	18182179	0.073	0.24	1.33
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	18182179	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	18182179	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	18182179	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	18182179	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	18182179	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	18182179	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	18182179	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	18182179	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	18182179	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	15344921	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	15735301	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	18182179	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	9733686	10.0		10.419	104.19	104

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\B12114D.D
Acq Time : 11 Dec 124 2:36 pm Operator: TR
Sample : METHOD BLANK Inst : 5970 - M
Misc : 1000 ML Multiplr: 1.00
Quant Time: Dec 12 12:14 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	15344921	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	15735301	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.22	117	18182179	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	9733686	10.42	ppbV		104.19
Target Compounds							Qvalue
47) Benzene	10.43	78	37736	0.06	ppbV	#	70
61) Toluene	13.19	91	76717	0.09	ppbV		94
74) Ethylbenzene	15.57	91	97876	0.07	ppbV		90
75) m,p-Xylenes	15.72	91	97014	0.09	ppbV	#	84
77) Styrene	16.27	104	95020	0.11	ppbV	#	83
79) o-Xylene	16.35	91	116572	0.10	ppbV	#	81
80) 1,1,2,2-Tetrachloroethane	16.68	83	52306	0.05	ppbV	#	90
85) 4-Ethyltoluene	18.04	105	584	0.00	ppbV	m	87
87) Decane	18.25	57	72077	0.06	ppbV	#	80
88) tert-butyl benzene	18.57	119	84919	0.05	ppbV	#	81
89) 1,2,4-Trimethylbenzene	18.57	105	232601	0.17	ppbV	#	82
90) i-Butylbenzene	18.86	91	109292	0.05	ppbV		97
91) sec-butylbenzene	18.95	105	153320	0.07	ppbV	#	86
92) 1,3-Dichlorobenzene	19.20	146	947	0.00	ppbV	m	88
93) Isopropyltoluene	19.17	119	155713	0.07	ppbV	#	87

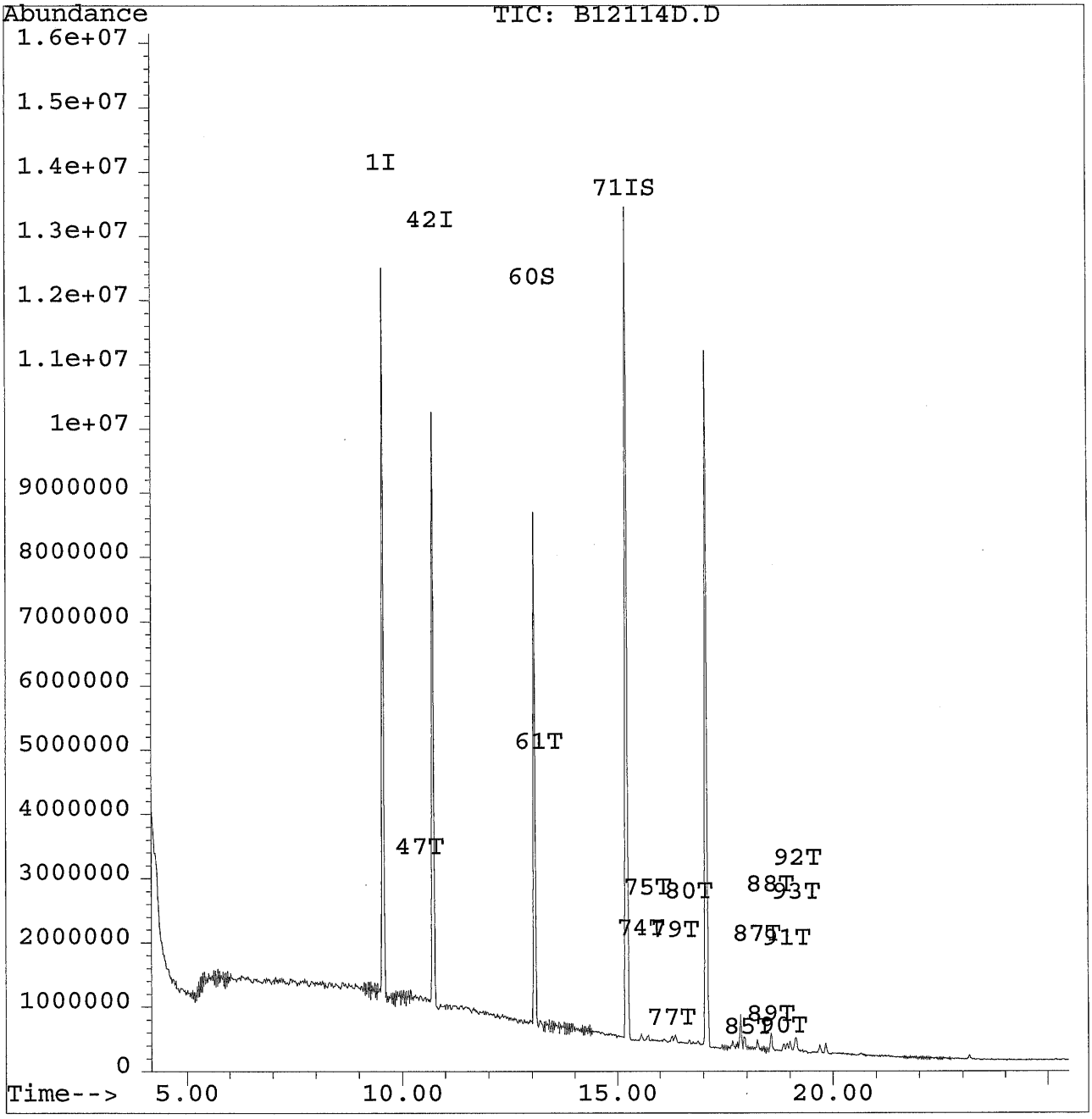
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_C\B12114D.D
Acq Time : 11 Dec 124 2:36 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Dec 12 12:14 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12114A_C\B12114D.D
Acq Time : 11 Dec 124 2:36 pm Operator: TR
Sample : METHOD BLANK Inst : 5970 - M
Misc : 1000 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	16.00 ppbV	33518467	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	91
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	37
4	2-Furancarbonyl chloride	4649	000527-69-5	8

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12124

File Name: B12124D.D
Description: METHOD BLANK
Canister:
QC_Batch: 121244-MA1

Date Sampled:
Date Analyzed: 12/12/24 **Time:** 13:46
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC LCL	Limits UCL	Flag
2037-26-5	Toluene-d8	110	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: LABQC
Descriptio B12124
Canister:
QC_Batch: 121244-MA1

Date Sampled:
Date Analyzed: 12/12/24
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 13:46

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**B12124**		
File Name:	B12124D.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	METHOD BLANK	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	1000 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/12/24**	**Time:**	**13:46**
Anal Date:	12 Dec 124 1:46 pm	**SF:**	**2**	**QCbatch:**	**121244-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.000	6.42	58.00	0
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.66	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.44	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**13166248**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**14374915**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17139591**
2037-26-5	Toluene-d8	60	SURR	11.038	13.40	98.00	**9420022**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**LABQC**		EDD SURR:	PERCENT		IS LCL	**50**		Gas Constant	
Laboratory Number:	**B12124**		Sam Type:	MB		IS UCL	**200**		T	24.5
File Name:	B12124D.D		Instrument:	MA1		SUR LCL	**70**		P	**760**
Run Method:	A1563_L.M		DETECT:	ND		SUR UCL	**130**		MV	24.417
Can Factor:	1.00		Matrix:	AA		MDL Factor	**1.0**		GC	24.417
Air Volume:	300.0	ml	Type:	TRG		E Flag	1.3			
Can/Tube Number:	NA		Diluton:	0.3000						
Dilution Factor:	0.3000		Sig Figs:	2						
Base Volume:	1000	ml	MDLSF:	2						
Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		11.04	110	110	110	110	110	110	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.33	0.57	0.83	1.44	U	ND		ND		Y	0.00	0.00
0.50	2.48	0.83	4.13	U	ND		ND		Y	0.00	0.00
1.67	2.18	2.00	2.62	U	ND		ND		Y	0.00	0.00
0.50	1.03	0.83	1.72	U	ND		ND		Y	0.00	0.00
0.33	2.33	0.83	5.83	U	ND		ND		Y	0.00	0.00
0.17	0.43	0.83	2.13	U	ND		ND		Y	0.00	0.00
0.17	0.37	0.83	1.85	U	ND		ND		Y	0.00	0.00
0.33	1.30	0.83	3.24	U	ND		ND		Y	0.00	0.00
0.33	0.88	0.83	2.20	U	ND		ND		Y	0.00	0.00
1.67	3.15	10.70	20.20	U	ND		ND		Y	0.00	0.00
0.33	0.77	1.00	2.30	U	ND		ND		Y	0.00	0.00
0.33	1.88	0.83	4.69	U	ND		ND		Y	0.00	0.00
1.67	3.97	2.00	4.76	U	ND		ND		Y	0.00	0.00
0.67	1.64	4.17	10.26	U	ND		ND		Y	0.00	0.00
0.33	1.01	3.33	10.12	U	ND		ND		Y	0.00	0.00
0.33	1.95	1.00	5.85	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.67	1.45	1.00	2.17	U	ND		ND		Y	0.00	0.00
0.17	1.28	0.83	6.40	U	ND		ND		Y	0.00	0.00
0.17	0.52	3.33	10.44	U	ND		ND		Y	0.00	0.00
0.17	0.58	0.83	2.90	U	ND		ND		Y	0.00	0.00
0.33	1.04	0.83	2.60	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.67	2.65	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.67	2.41	U	ND		ND		Y	0.00	0.00
0.83	1.88	1.33	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.67	0.83	3.38	U	ND		ND		Y	0.00	0.00
0.33	1.40	0.83	3.49	U	ND		ND		Y	0.00	0.00
0.17	0.59	3.33	11.75	U	ND		ND		Y	0.00	0.00
0.33	0.98	1.00	2.95	U	ND		ND		Y	0.00	0.00
0.33	1.40	2.00	8.37	U	ND		ND		Y	0.00	0.00
0.33	1.18	0.83	2.94	U	ND		ND		Y	0.00	0.00
0.33	0.92	0.83	2.29	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.83	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.88	0.83	4.42	U	ND		ND		Y	0.00	0.00

0.33	1.18	1.67	5.88	U	ND	ND	Y	0.00	0.00
0.17	0.50	1.00	2.95	U	ND	ND	Y	0.00	0.00
0.67	2.02	2.67	8.09	U	ND	ND	Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.17	0.82	0.83	4.08	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.17	0.68	0.83	3.38	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.57	0.83	2.87	U	ND	ND	Y	0.00	0.00
1.17	3.73	1.67	5.33	U	ND	ND	Y	0.00	0.00
0.17	1.05	0.83	5.25	U	ND	ND	Y	0.00	0.00
0.33	1.40	1.67	6.98	U	ND	ND	Y	0.00	0.00
0.17	0.78	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.33	1.20	1.67	6.01	U	ND	ND	Y	0.00	0.00
0.17	1.19	0.83	5.93	U	ND	ND	Y	0.00	0.00
0.08	0.45	0.83	4.48	U	ND	ND	Y	0.00	0.00
0.17	1.12	0.83	5.59	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.67	2.51	0.83	3.14	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.77	2.33	10.80	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	2.84	0.83	7.11	U	ND	ND	Y	0.00	0.00
0.33	2.57	0.83	6.41	U	ND	ND	Y	0.00	0.00
0.08	0.57	0.83	5.66	U	ND	ND	Y	0.00	0.00
0.33	1.54	0.83	3.84	U	ND	ND	Y	0.00	0.00
0.33	2.29	0.83	5.73	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.75	0.83	4.38	U	ND	ND	Y	0.00	0.00
0.50	2.13	0.83	3.56	U	ND	ND	Y	0.00	0.00
0.33	3.45	0.83	8.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.67	4.58	1.67	11.45	U	ND	ND	Y	0.00	0.00
0.67	4.02	2.00	12.07	U	ND	ND	Y	0.00	0.00
0.67	3.41	2.00	10.24	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	5.33	26.25	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.89	2.00	11.66	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00

0.67	3.66	2.33	12.82	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.67	16.05	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.46	1.67	8.64	U	ND	ND	Y	0.00	0.00
0.67	4.01	1.67	10.03	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.33	14.05	U	ND	ND	Y	0.00	0.00
1.00	9.68	2.33	22.58	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
1.67	8.75	0.33	1.75	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
0.83	8.90	1.00	10.68	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: LABQC
EASID: B12124
Sample ID: METHOD BLANK

Can Factor: 1.00
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	

eport Page Used

eliminate these automatically

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SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**LABQC**
Laboratory Number:		**B12124**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.00
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\left|\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}\right|_i$ Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	13166248	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	13166248	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	13166248	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	13166248	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	13166248	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	13166248	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	13166248	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	13166248	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	13166248	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	13166248	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	13166248	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	13166248	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	0	20.0	13166248	0.000	0.00	0.00
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	13166248	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	13166248	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	13166248	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	13166248	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	13166248	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	13166248	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	13166248	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	13166248	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	13166248	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	13166248	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	13166248	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	13166248	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	13166248	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	13166248	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	13166248	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	13166248	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	13166248	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	13166248	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	13166248	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	13166248	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	13166248	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	13166248	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	13166248	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	13166248	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	13166248	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	13166248	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	13166248	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	14374915	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	14374915	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	14374915	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	14374915	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	0	20.0	14374915	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	14374915	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	14374915	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	14374915	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	14374915	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	14374915	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	14374915	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	14374915	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	14374915	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	14374915	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	14374915	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	14374915	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	14374915	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	0	20.0	14374915	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	14374915	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	14374915	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	14374915	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	14374915	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	14374915	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	14374915	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	14374915	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	14374915	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	14374915	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	17139591	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	17139591	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	17139591	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	17139591	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	17139591	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	17139591	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	17139591	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	17139591	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	17139591	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	17139591	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	17139591	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	17139591	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	17139591	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	17139591	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	17139591	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	17139591	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	17139591	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	17139591	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	17139591	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	17139591	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	17139591	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	17139591	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	17139591	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	17139591	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	17139591	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	17139591	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	17139591	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	17139591	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	17139591	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	17139591	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	17139591	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	13166248	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	14374915	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17139591	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	9420022	10.0		11.038	110.38	110

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\B12124D.D
Acq Time : 12 Dec 124 1:46 pm Operator: TR
Sample : METHOD BLANK Inst : 5970 - M
Misc : 1000 ML Multiplr: 1.00
Quant Time: Dec 13 15:52 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.59	168	13166248	20.00	ppbV	-0.23
42) 1,4-Difluorobenzene	10.75	114	14374915	20.00	ppbV	-0.25
71) Chlorobenzene-d5	15.25	117	17139591	20.00	ppbV	-0.33
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.09	98	9420022	11.04	ppbV	110.38
Target Compounds						Qvalue

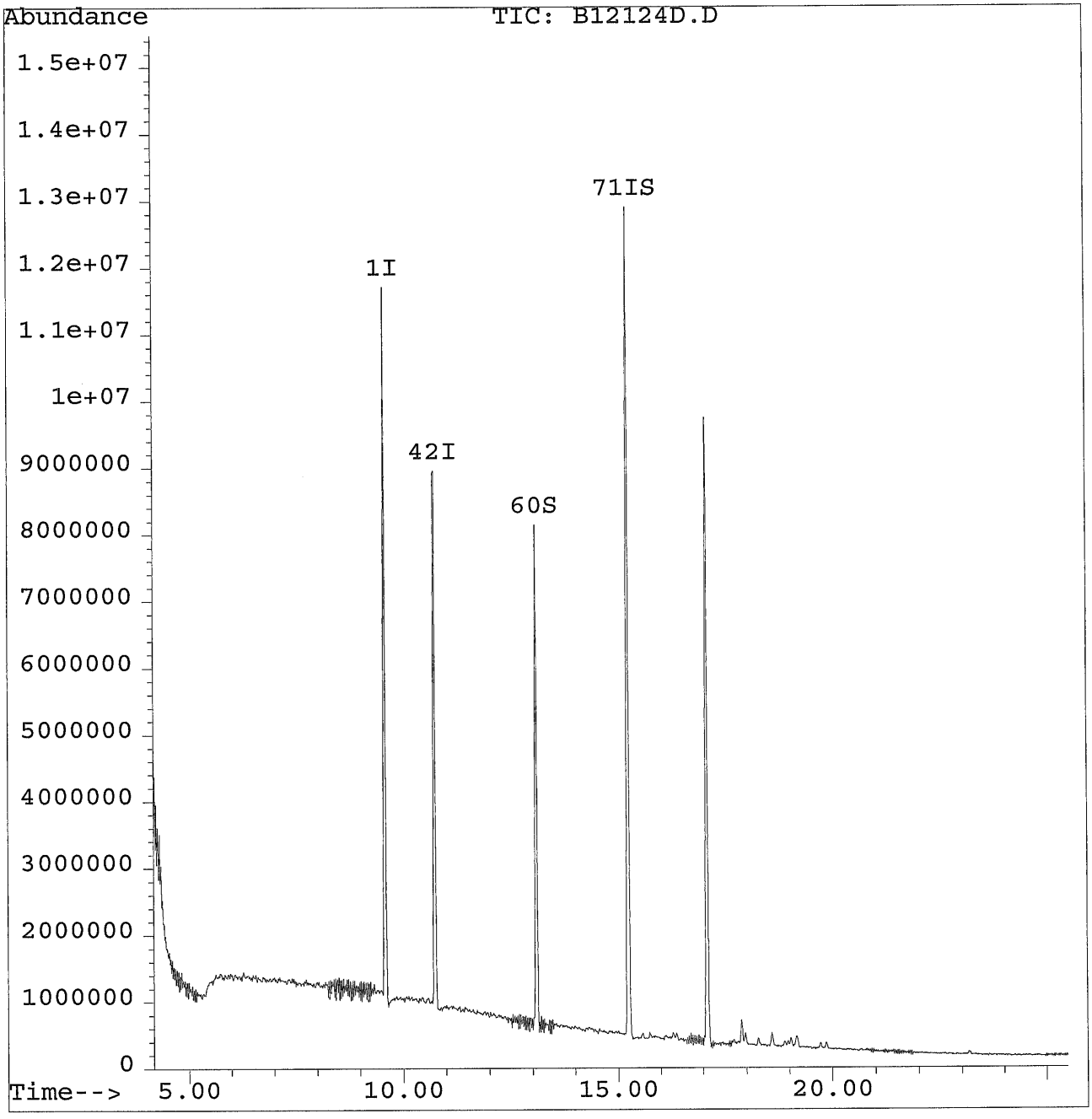
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\B12124D.D
Acq Time : 12 Dec 124 1:46 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Dec 13 15:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12124A\B12124D.D
Acq Time : 12 Dec 124 1:46 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : NBS54K.L

No Library Search Compounds Detected

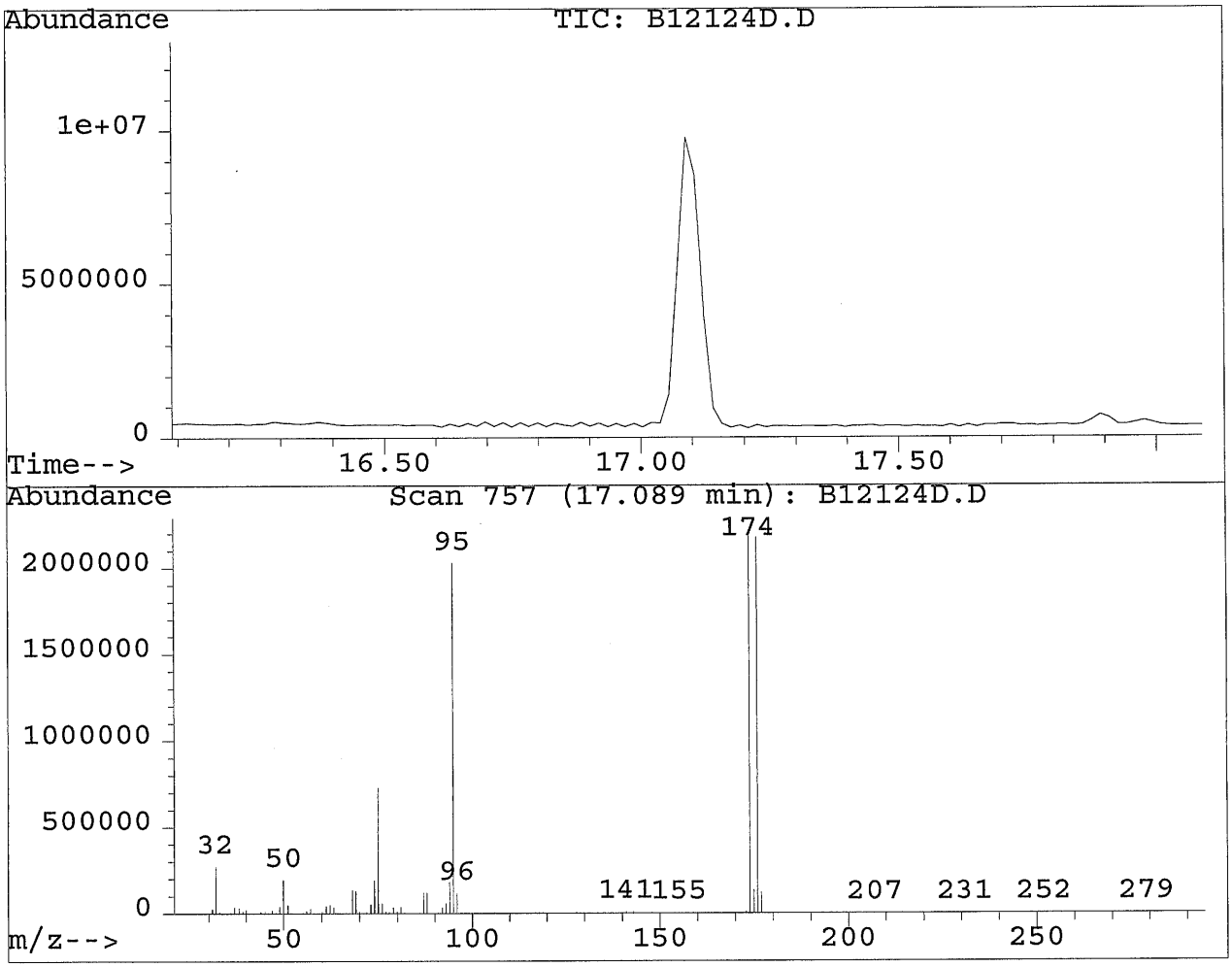
Page 421 of 3612

BFB

Data File : C:\MSCHEM\1\DATA\12124A\B12124D.D
Acq Time : 12 Dec 124 1:46 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15



Peak Apex is scan: 757

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	9.6	193728	PASS
75	95	30	66	35.9	728896	PASS
95	95	100	100	100.0	2028544	PASS
96	95	5	9	5.7	116064	PASS
173	174	0	2	0.4	9670	PASS
174	95	50	120	107.6	2182656	PASS
175	174	4	9	6.1	132544	PASS
176	174	93	101	99.7	2176512	PASS
177	176	5	9	5.5	120232	PASS

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12134

File Name: B12134D.D
Description: METHOD BLANK
Canister:
QC_Batch: 121344-MA1

Date Sampled: **Time:**
Date Analyzed: 12/13/24 **Time:** 14:44
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	UCL	Flag
2037-26-5	Toluene-d8	122	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: LABQC
Descriptio B12134
Canister:
QC_Batch: 121344-MA1

Date Sampled:
Date Analyzed: 12/13/24
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 14:44

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**B12134**		
File Name:	B12134D.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	METHOD BLANK	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	1000 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**14:44**
Anal Date:	13 Dec 124 2:44 pm	**SF:**	**2**	**QCbatch:**	**121344-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.000	6.42	58.00	0
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	-0.001	10.95	73.00	-344
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.53	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	615
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.39	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**11729939**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12862232**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17352839**
2037-26-5	Toluene-d8	60	SURR	12.192	13.40	98.00	**9310653**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**LABQC**		EDD SURR:	PERCENT		IS LCL	**50**		Gas Constant	
Laboratory Number:	**B12134**		Sam Type:	MB		IS UCL	**200**		T	24.5
File Name:	B12134D.D		Instrument:	MA1		SUR LCL	**70**		P	**760**
Run Method:	A1563_L.M		DETECT:	ND		SUR UCL	**130**		MV	24.417
Can Factor:	1.00		Matrix:	AA		MDL Factor	**1.0**		GC	24.417
Air Volume:	300.0	ml	Type:	TRG		E Flag	1.3			
Can/Tube Number:	NA		Diluton:	0.3000						
Dilution Factor:	0.3000		Sig Figs:	2						
Base Volume:	1000	ml	MDLSF:	2						
Unit Factor (ppbv):	1000	PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed	(1)	(2)

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	MDL	RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	-0.01	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.01	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.19	122	122	122	122	122	122	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	EPA Flag	Detect Flag	Cal Flag	R	DETECT PPBV	DETECT UG/M3
0.33	0.57	0.83	1.44	U	ND		ND		Y	0.00	0.00
0.50	2.48	0.83	4.13	U	ND		ND		Y	0.00	0.00
1.67	2.18	2.00	2.62	U	ND		ND		Y	0.00	0.00
0.50	1.03	0.83	1.72	U	ND		ND		Y	0.00	0.00
0.33	2.33	0.83	5.83	U	ND		ND		Y	0.00	0.00
0.17	0.43	0.83	2.13	U	ND		ND		Y	0.00	0.00
0.17	0.37	0.83	1.85	U	ND		ND		Y	0.00	0.00
0.33	1.30	0.83	3.24	U	ND		ND		Y	0.00	0.00
0.33	0.88	0.83	2.20	U	ND		ND		Y	0.00	0.00
1.67	3.15	10.70	20.20	U	ND		ND		Y	0.00	0.00
0.33	0.77	1.00	2.30	U	ND		ND		Y	0.00	0.00
0.33	1.88	0.83	4.69	U	ND		ND		Y	0.00	0.00
1.67	3.97	2.00	4.76	U	ND		ND		Y	0.00	0.00
0.67	1.64	4.17	10.26	U	ND		ND		Y	0.00	0.00
0.33	1.01	3.33	10.12	U	ND		ND		Y	0.00	0.00
0.33	1.95	1.00	5.85	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.67	1.45	1.00	2.17	U	ND		ND		Y	0.00	0.00
0.17	1.28	0.83	6.40	U	ND		ND		Y	0.00	0.00
0.17	0.52	3.33	10.44	U	ND		ND		Y	0.00	0.00
0.17	0.58	0.83	2.90	U	ND		ND		Y	0.00	0.00
0.33	1.04	0.83	2.60	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.67	2.65	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.67	2.41	U	ND		ND		Y	0.00	0.00
0.83	1.88	1.33	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.67	0.83	3.38	U	ND		ND		Y	0.00	0.00
0.33	1.40	0.83	3.49	U	ND		ND		Y	0.00	0.00
0.17	0.59	3.33	11.75	U	ND		ND		Y	0.00	0.00
0.33	0.98	1.00	2.95	U	ND		ND		Y	0.00	0.00
0.33	1.40	2.00	8.37	U	ND		ND		Y	0.00	0.00
0.33	1.18	0.83	2.94	U	ND		ND		Y	0.00	0.00
0.33	0.92	0.83	2.29	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.83	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.88	0.83	4.42	U	ND		ND		Y	0.00	0.00

0.33	1.18	1.67	5.88	U	ND	ND	Y	0.00	0.00
0.17	0.50	1.00	2.95	U	ND	ND	Y	0.00	0.00
0.67	2.02	2.67	8.09	U	ND	ND	Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.17	0.82	0.83	4.08	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.17	0.68	0.83	3.38	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.57	0.83	2.87	U	ND	ND	Y	0.00	0.00
1.17	3.73	1.67	5.33	U	ND	ND	Y	0.00	0.00
0.17	1.05	0.83	5.25	U	ND	ND	Y	0.00	0.00
0.33	1.40	1.67	6.98	U	ND	ND	Y	0.00	0.00
0.17	0.78	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.33	1.20	1.67	6.01	U	ND	ND	Y	0.00	0.00
0.17	1.19	0.83	5.93	U	ND	ND	Y	0.00	0.00
0.08	0.45	0.83	4.48	U	ND	ND	Y	0.00	0.00
0.17	1.12	0.83	5.59	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.67	2.51	0.83	3.14	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.77	2.33	10.80	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	2.84	0.83	7.11	U	ND	ND	Y	0.00	0.00
0.33	2.57	0.83	6.41	U	ND	ND	Y	0.00	0.00
0.08	0.57	0.83	5.66	U	ND	ND	Y	0.00	0.00
0.33	1.54	0.83	3.84	U	ND	ND	Y	0.00	0.00
0.33	2.29	0.83	5.73	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.75	0.83	4.38	U	ND	ND	Y	0.00	0.00
0.50	2.13	0.83	3.56	U	ND	ND	Y	0.00	0.00
0.33	3.45	0.83	8.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.67	4.58	1.67	11.45	U	ND	ND	Y	0.00	0.00
0.67	4.02	2.00	12.07	U	ND	ND	Y	0.00	0.00
0.67	3.41	2.00	10.24	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	5.33	26.25	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.89	2.00	11.66	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00

0.67	3.66	2.33	12.82	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.67	16.05	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.46	1.67	8.64	U	ND	ND	Y	0.00	0.00
0.67	4.01	1.67	10.03	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.33	14.05	U	ND	ND	Y	0.00	0.00
1.00	9.68	2.33	22.58	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
1.67	8.75	0.33	1.75	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
0.83	8.90	1.00	10.68	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: LABQC
EASID: B12134
Sample ID: METHOD BLANK

Can Factor: 1.00
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND

If more then 10 TIC see steve **TVOC SUM TIC** 0.0 0.0

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**LABQC**
Laboratory Number:		**B12134**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.00
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ i Note: 1

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000}{(SV)}$ (CDF)

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.918	0	20.0	11729939	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.362	0	20.0	11729939	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.757	0	20.0	11729939	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.349	0	20.0	11729939	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.243	0	20.0	11729939	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.299	0	20.0	11729939	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.177	0	20.0	11729939	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.078	0	20.0	11729939	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.655	0	20.0	11729939	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.217	0	20.0	11729939	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.687	0	20.0	11729939	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.702	0	20.0	11729939	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.425	0	20.0	11729939	0.000	0.00	0.00
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.227	0	20.0	11729939	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.639	0	20.0	11729939	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.290	0	20.0	11729939	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.897	0	20.0	11729939	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.669	0	20.0	11729939	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.074	0	20.0	11729939	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.140	0	20.0	11729939	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.635	0	20.0	11729939	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.708	0	20.0	11729939	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.190	0	20.0	11729939	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.320	0	20.0	11729939	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.526	0	20.0	11729939	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	1.166	0	20.0	11729939	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.633	0	20.0	11729939	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.653	0	20.0	11729939	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.647	0	20.0	11729939	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	1.383	0	20.0	11729939	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.348	0	20.0	11729939	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.401	0	20.0	11729939	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.479	0	20.0	11729939	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.274	0	20.0	11729939	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.526	0	20.0	11729939	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.587	0	20.0	11729939	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.231	0	20.0	11729939	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.354	0	20.0	11729939	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.539	0	20.0	11729939	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	1.325	0	20.0	11729939	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	6.479	0	20.0	12862232	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	4.694	0	20.0	12862232	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	2.774	0	20.0	12862232	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	11.308	0	20.0	12862232	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	12.341	0	20.0	12862232	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	11.804	0	20.0	12862232	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	17.528	-344	20.0	12862232	-0.001	0.00	-0.01
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	18.448	0	20.0	12862232	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	27.669	0	20.0	12862232	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	25.745	0	20.0	12862232	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	16.321	0	20.0	12862232	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	14.802	0	20.0	12862232	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	27.262	0	20.0	12862232	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	8.949	0	20.0	12862232	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	48.824	0	20.0	12862232	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	37.517	0	20.0	12862232	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	37.890	0	20.0	12862232	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	10.016	0	20.0	12862232	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	26.465	0	20.0	12862232	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	37.488	0	20.0	12862232	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	8.309	0	20.0	12862232	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	2.020	0	20.0	12862232	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	31.783	0	20.0	12862232	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	9.309	0	20.0	12862232	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	5.601	0	20.0	12862232	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	#DIV/0!	0	20.0	12862232	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	#DIV/0!	0	20.0	12862232	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	#DIV/0!	615	20.0	17352839	0.000	0.00	0.01
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	#DIV/0!	0	20.0	17352839	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	11729939	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	12862232	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	17352839	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	9310653	10.0		12.192	121.92	122

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\B12134D.D
Acq Time : 13 Dec 124 2:44 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Dec 19 14:28 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.57	168	11729939	20.00	ppbV	-0.25
42) 1,4-Difluorobenzene	10.72	114	12862232	20.00	ppbV	-0.28
71) Chlorobenzene-d5	15.23	117	17352839	20.00	ppbV	-0.34
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.08	98	9310653	12.19	ppbV	121.92
Target Compounds						Qvalue
96) n-Butylbenzene	20.16	91	615	0.00	ppbV m	95

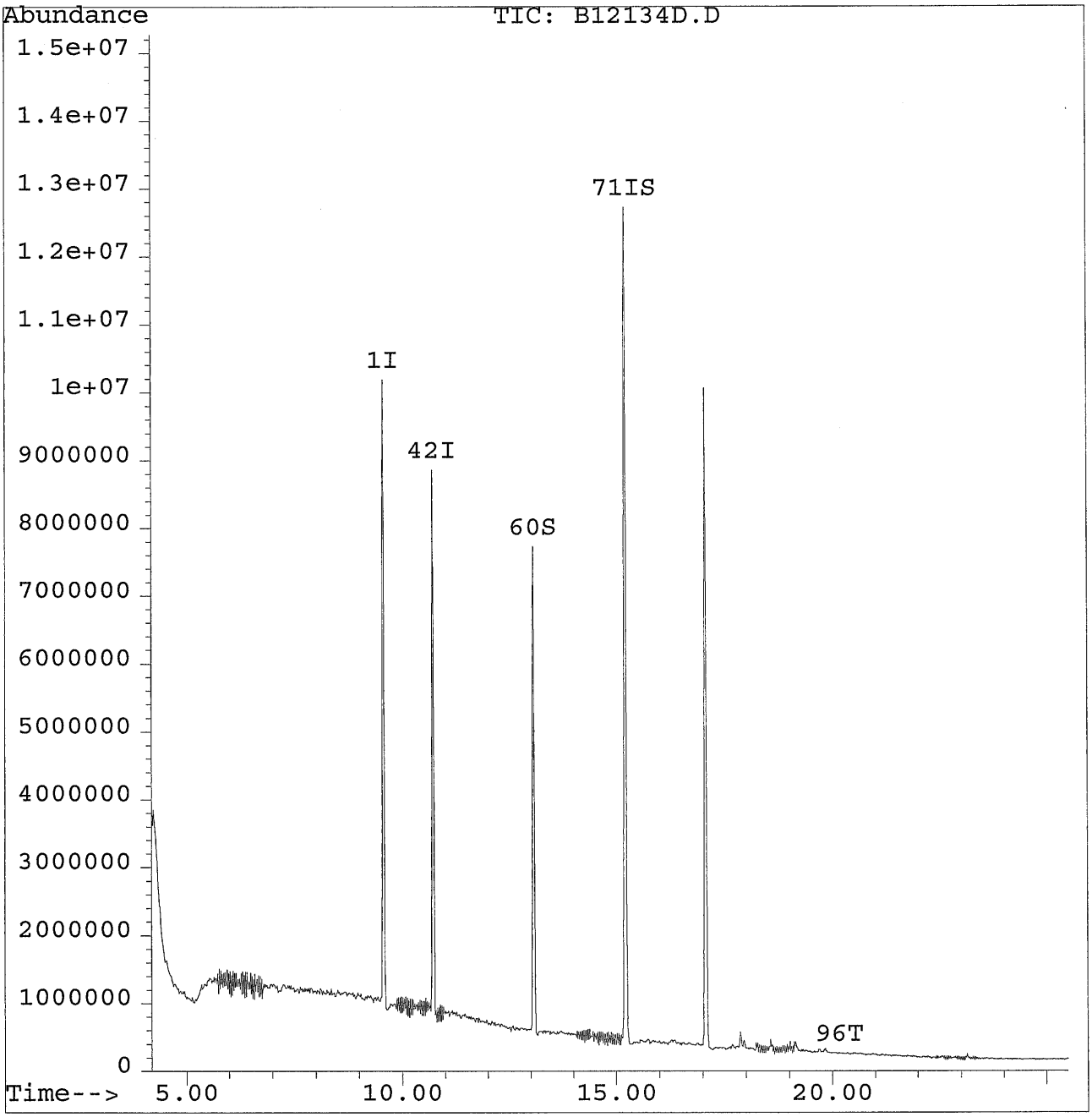
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A\B12134D.D
Acq Time : 13 Dec 124 2:44 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Dec 19 14:28 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12134A\B12134D.D
Acq Time : 13 Dec 124 2:44 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.07	14.69 ppbV	29102815	Chlorobenzene-d5	15

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	94
2	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	94
3	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
4	2-Furancarbonyl chloride	4649	000527-69-5	8

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B12164

File Name: B12164D.D
Description: METHOD BLANK
Canister:
QC_Batch: 121644-MA1

Date Sampled:
Date Analyzed: 12/16/24 **Time:** 15:07
Can Dilution Factor: 1.00
Air Volume: 300 ml

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
115-07-1	Propylene	0.33	0.83	ND	0.57	1.44	ND	
75-71-8	Dichlorodifluoromethane	0.50	0.83	ND	2.48	4.13	ND	
67-56-1	Methanol	1.67	2.00	ND	2.18	2.62	ND	
74-87-3	Chloromethane	0.50	0.83	ND	1.03	1.72	ND	
76-14-2	1,2-Dichlorotetrafluoroethane	0.33	0.83	ND	2.33	5.83	ND	
75-01-4	Vinyl chloride	0.17	0.83	ND	0.43	2.13	ND	
106-99-0	1,3-Butadiene	0.17	0.83	ND	0.37	1.85	ND	
74-83-9	Bromomethane	0.33	0.83	ND	1.30	3.24	ND	
75-00-3	Chloroethane	0.33	0.83	ND	0.88	2.20	ND	
64-17-5	Ethanol	1.67	10.70	ND	3.15	20.20	ND	
107-02-8	Acrolein	0.33	1.00	ND	0.77	2.30	ND	
75-69-4	Trichlorofluoromethane	0.33	0.83	ND	1.88	4.69	ND	
67-64-1	Acetone	1.67	2.00	ND	3.97	4.76	ND	
67-63-0	2-propanol (isopropylalcohol)	0.67	4.17	ND	1.64	10.26	ND	
75-65-0	t-Butyl alcohol	0.33	3.33	ND	1.01	10.12	ND	
4227-95-6	Methyl iodide	0.33	1.00	ND	1.95	5.85	ND	
75-35-4	1,1-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
107-13-1	Acrylonitrile	0.67	1.00	ND	1.45	2.17	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	0.17	0.83	ND	1.28	6.40	ND	
107-05-1	Allyl chloride	0.17	3.33	ND	0.52	10.44	ND	
75-09-2	Methylene chloride	0.17	0.83	ND	0.58	2.90	ND	
75-15-0	Carbon disulfide	0.33	0.83	ND	1.04	2.60	ND	
156-60-5	trans-1,2-Dichloroethene	0.17	0.67	ND	0.66	2.65	ND	
1634-04-4	Methyl tert butyl ether	0.33	0.67	ND	1.20	2.41	ND	
107-12-0	Propionitrile	0.83	1.33	ND	1.88	3.01	ND	
75-34-3	1,1-Dichloroethane	0.17	0.83	ND	0.67	3.38	ND	
637-92-3	Ethyl tert butyl ether	0.33	0.83	ND	1.40	3.49	ND	
108-05-4	Vinyl acetate	0.17	3.33	ND	0.59	11.75	ND	
78-93-3	2-Butanone (MEK)	0.33	1.00	ND	0.98	2.95	ND	
108-20-3	Diisopropyl ether	0.33	2.00	ND	1.40	8.37	ND	
110-54-3	Hexane	0.33	0.83	ND	1.18	2.94	ND	
126-98-7	Methacrylonitrile	0.33	0.83	ND	0.92	2.29	ND	
141-78-6	Ethyl acetate	0.33	0.83	ND	1.20	3.01	ND	
74-97-5	Bromochloromethane	0.17	0.83	ND	0.88	4.42	ND	
96-33-3	Methyl acrylate	0.33	1.67	ND	1.18	5.88	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
109-99-9	Tetrahydrofuran	0.17	1.00	ND	0.50	2.95	ND	
78-83-1	Isobutyl alcohol	0.67	2.67	ND	2.02	8.09	ND	
156-59-2	cis-1,2-Dichloroethene	0.17	0.83	ND	0.66	3.31	ND	
594-20-7	2,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
67-66-3	Chloroform	0.17	0.83	ND	0.82	4.08	ND	
71-55-6	1,1,1-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
107-06-2	1,2-Dichloroethane	0.17	0.83	ND	0.68	3.38	ND	
563-58-6	1,1-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
110-82-7	Cyclohexane	0.17	0.83	ND	0.57	2.87	ND	
71-43-2	Benzene	1.17	1.67	ND	3.73	5.33	ND	
56-23-5	Carbon tetrachloride	0.17	0.83	ND	1.05	5.25	ND	
994-05-8	t-Amyl methyl ether	0.33	1.67	ND	1.40	6.98	ND	
540-84-1	2,2,4-Trimethylpentane	0.17	0.83	ND	0.78	3.90	ND	
142-82-5	n-Heptane	0.33	0.83	ND	1.37	3.42	ND	
78-87-5	1,2-Dichloropropane	0.17	0.83	ND	0.77	3.86	ND	
123-91-1	1,4 Dioxane	0.33	1.67	ND	1.20	6.01	ND	
74-95-3	Dibromomethane	0.17	0.83	ND	1.19	5.93	ND	
79-01-6	Trichloroethene (TCE)	0.08	0.83	ND	0.45	4.48	ND	
75-27-4	Bromodichloromethane	0.17	0.83	ND	1.12	5.59	ND	
80-62-6	Methyl methacrylate	0.33	0.83	ND	1.37	3.42	ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	0.33	2.67	ND	1.37	10.94	ND	
10061-01-5	cis-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
108-88-3	Toluene	0.67	0.83	ND	2.51	3.14	ND	
10061-02-6	trans-1,3-Dichloropropene	0.17	0.83	ND	0.76	3.79	ND	
79-00-5	1,1,2-Trichloroethane	0.17	0.83	ND	0.91	4.55	ND	
97-63-2	Ethyl methacrylate	0.33	0.83	ND	1.56	3.90	ND	
591-78-6	2-Hexanone	0.33	2.67	ND	1.37	10.94	ND	
142-28-9	1,3-Dichloropropane	0.17	2.33	ND	0.77	10.80	ND	
111-65-9	Octane	0.33	0.83	ND	1.56	3.90	ND	
124-48-1	Dibromochloromethane	0.33	0.83	ND	2.84	7.11	ND	
106-93-4	1,2-Dibromoethane (EDB)	0.33	0.83	ND	2.57	6.41	ND	
127-18-4	Tetrachloroethene (PCE)	0.08	0.83	ND	0.57	5.66	ND	
108-90-7	Chlorobenzene	0.33	0.83	ND	1.54	3.84	ND	
630-20-6	1,1,1,2-Tetrachloroethane	0.33	0.83	ND	2.29	5.73	ND	
100-41-4	Ethylbenzene	0.33	0.83	ND	1.45	3.62	ND	
1330-20-7	m,p-Xylenes	0.33	0.83	ND	1.45	3.62	ND	
111-84-2	Nonane	0.33	0.83	ND	1.75	4.38	ND	
100-42-5	Styrene	0.50	0.83	ND	2.13	3.56	ND	
75-25-2	Bromoform	0.33	0.83	ND	3.45	8.62	ND	
95-47-6	o-Xylene	0.33	0.83	ND	1.45	3.62	ND	
79-34-5	1,1,2,2-Tetrachloroethane	0.67	1.67	ND	4.58	11.45	ND	
96-18-4	1,2,3-Trichloropropane	0.67	2.00	ND	4.02	12.07	ND	
110-57-6	t-1,4-Dichloro-2-butene	0.67	2.00	ND	3.41	10.24	ND	
103-65-1	n-Propylbenzene	0.67	2.33	ND	3.28	11.49	ND	
98-82-8	Isopropylbenzene	0.67	2.33	ND	3.28	11.49	ND	
622-96-8	4-Ethyltoluene	0.67	5.33	ND	3.28	26.25	ND	
108-67-8	1,3,5-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
124-18-5	Decane	0.67	2.00	ND	3.89	11.66	ND	
98-06-6	tert-butyl benzene	0.67	2.00	ND	3.66	10.99	ND	

CAS#	Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3	Flag
95-63-6	1,2,4-Trimethylbenzene	0.67	3.00	ND	3.28	14.77	ND	
538-93-2	i-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
135-98-8	sec-butylbenzene	0.67	2.33	ND	3.66	12.82	ND	
541-73-1	1,3-Dichlorobenzene	0.67	2.67	ND	4.01	16.05	ND	
99-87-6	Isopropyltoluene	0.67	2.00	ND	3.66	10.99	ND	
100-44-7	Benzyl chloride	0.67	1.67	ND	3.46	8.64	ND	
106-46-7	1,4-Dichlorobenzene	0.67	1.67	ND	4.01	10.03	ND	
104-51-8	n-Butylbenzene	0.67	2.00	ND	3.66	10.99	ND	
95-50-1	1,2-Dichlorobenzene	0.67	2.33	ND	4.01	14.05	ND	
96-12-8	1,2-Dibromo-3-chloropropane	1.00	2.33	ND	9.68	22.58	ND	
120-82-1	1,2,4-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
91-20-3	Naphthalene	1.67	0.33	ND	8.75	1.75	ND	
87-61-6	1,2,3-Trichlorobenzene	1.00	1.67	ND	7.43	12.38	ND	
87-68-3	Hexachlorobutadiene	0.83	1.00	ND	8.90	10.68	ND	

	Surrogate Recovery	% Rec.	QC Limits LCL	QC Limits UCL	Flag
2037-26-5	Toluene-d8	121	70	130	

Tentatively Identified Compounds

ENVIRONMENTAL
Analytical Service, Inc.

EPA Method TO-15 Modified Full Scan GC/MS

Analytical Method: TO-15

SDG: LABQC
Laboratory ID: B09124

File Name: LABQC
Descriptio B12164
Canister:
QC_Batch: 121644-MA1

Date Sampled:
Date Analyzed: 12/16/24
Can Dilution Factor: 1.00
Air Volume: 300.00 ml

Time:
Time: 15:07

TIC Compound	MDL PPBV	RL PPBV	Amount PPBV	MDL UG/M3	RL UG/M3	Amount UG/M3
None	2.33	5.00	ND	9.56	20.48	ND

Tentatively Identified Compounds are Identified by a Computer Match and Semi-Quantitated against an Internal Standard
1) The identity of the compound is determined by a match to a computer library.
2) Many compounds have similar mass spectra so the actual compound can be different from the one reported
3) Hydrocarbons especially have similar mass spectra so it is difficult to determine which hydrocarbon is present
4) If there is not a good computer match, a type of compound may be indicated or it may be called "Unknown"
5) The Amount of the compound is calculated against an Internal Standard, so the reported Amounts are approximate.
6) The conversion from ppbv to ug/m3 is done assuming an average molecular weight of 100 since the identity of the compound is often not known with certainty.

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**B12164**		
File Name:	B12164D.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	METHOD BLANK	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	1000 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/16/24**	**Time:**	**15:07**
Anal Date:	16 Dec 124 3:07 pm	**SF:**	**2**	**QCbatch:**	**121644-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**300.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	0.000	4.41	42.00	0
75-71-8	Dichlorodifluoromethane	3	TRG	0.000	4.48	85.00	0
67-56-1	Methanol	4	TRG	0.000	4.86	31.00	0
74-87-3	Chloromethane	5	TRG	0.000	4.77	50.00	0
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	0.000	4.77	85.00	0
75-01-4	Vinyl chloride	7	TRG	0.000	5.02	62.00	0
106-99-0	1,3-Butadiene	8	TRG	0.000	5.14	54.00	0
74-83-9	Bromomethane	9	TRG	0.000	5.56	94.00	0
75-00-3	Chloroethane	10	TRG	0.000	5.72	64.00	0
64-17-5	Ethanol	11	TRG	0.000	5.72	46.00	0
107-02-8	Acrolein	12	TRG	0.000	6.32	56.00	0
75-69-4	Trichlorofluoromethane	13	TRG	0.000	6.38	101.00	0
67-64-1	Acetone	14	TRG	0.000	6.42	58.00	0
67-63-0	2-propanol (isopropylalcoh	15	TRG	0.000	6.45	45.00	0
75-65-0	t-Butyl alcohol	16	TRG	0.000	7.03	59.00	0
4227-95-6	Methyl iodide	17	TRG	0.000	7.19	142.00	0
75-35-4	1,1-Dichloroethene	18	TRG	0.000	7.07	61.00	0
107-13-1	Acrylonitrile	19	TRG	0.000	7.07	53.00	0
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	0.000	7.21	151.00	0
107-05-1	Allyl chloride	21	TRG	0.000	7.37	76.00	0
75-09-2	Methylene chloride	22	TRG	0.000	7.35	84.00	0
75-15-0	Carbon disulfide	23	TRG	0.000	7.61	76.00	0
156-60-5	trans-1,2-Dichloroethene	24	TRG	0.000	8.06	96.00	0
1634-04-4	Methyl tert butyl ether	25	TRG	0.000	8.11	73.00	0
107-12-0	Propionitrile	26	TRG	0.000	8.31	54.00	0
75-34-3	1,1-Dichloroethane	27	TRG	0.000	8.41	63.00	0
637-92-3	Ethyl tert butyl ether	28	TRG	0.000	9.40	59.00	0
108-05-4	Vinyl acetate	29	TRG	0.000	8.39	43.00	0
78-93-3	2-Butanone (MEK)	30	TRG	0.000	8.75	72.00	0
108-20-3	Diisopropyl ether	31	TRG	0.000	8.90	87.00	0
110-54-3	Hexane	32	TRG	0.000	8.86	57.00	0
126-98-7	Methacrylonitrile	33	TRG	0.000	8.88	67.00	0
141-78-6	Ethyl acetate	34	TRG	0.000	9.17	61.00	0
74-97-5	Bromochloromethane	35	TRG	0.000	9.43	49.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	0.000	9.25	55.00	0
109-99-9	Tetrahydrofuran	37	TRG	0.000	9.72	72.00	0
78-83-1	Isobutyl alcohol	38	TRG	0.000	9.51	74.00	0
156-59-2	cis-1,2-Dichloroethene	39	TRG	0.000	9.16	96.00	0
594-20-7	2,2-Dichloropropane	40	TRG	0.000	9.37	77.00	0
67-66-3	Chloroform	41	TRG	0.000	9.42	83.00	**0**
71-55-6	1,1,1-Trichloroethane	43	TRG	0.000	10.24	97.00	0
107-06-2	1,2-Dichloroethane	44	TRG	0.000	10.27	61.95	0
563-58-6	1,1-Dichloropropene	45	TRG	0.000	10.50	75.00	0
110-82-7	Cyclohexane	46	TRG	0.000	10.74	56.00	0
71-43-2	Benzene	47	TRG	0.000	10.70	78.00	0
56-23-5	Carbon tetrachloride	48	TRG	0.000	10.73	116.90	0
994-05-8	t-Amyl methyl ether	49	TRG	0.000	10.95	73.00	0
540-84-1	2,2,4-Trimethylpentane	50	TRG	0.000	11.25	57.00	0
142-82-5	n-Heptane	51	TRG	0.000	11.48	71.00	0
78-87-5	1,2-Dichloropropane	52	TRG	0.000	11.64	63.00	0
123-91-1	1,4 Dioxane	53	TRG	0.000	11.79	88.00	0
74-95-3	Dibromomethane	54	TRG	0.000	11.75	174.00	0
79-01-6	Trichloroethene (TCE)	55	TRG	0.000	10.70	130.00	0
75-27-4	Bromodichloromethane	56	TRG	0.000	11.85	83.00	0
80-62-6	Methyl methacrylate	57	TRG	0.000	11.76	69.00	0
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	0.000	12.55	58.00	0
10061-01-5	cis-1,3-Dichloropropene	59	TRG	0.000	12.67	75.00	**0**
108-88-3	Toluene	61	TRG	0.000	13.50	91.00	0
10061-02-6	trans-1,3-Dichloropropene	62	TRG	0.000	13.28	75.00	0
79-00-5	1,1,2-Trichloroethane	63	TRG	0.000	13.52	61.00	0
97-63-2	Ethyl methacrylate	64	TRG	0.000	13.63	69.00	0
591-78-6	2-Hexanone	65	TRG	0.000	13.79	58.00	0
142-28-9	1,3-Dichloropropane	66	TRG	0.000	13.86	76.00	0
111-65-9	Octane	67	TRG	0.000	14.04	85.00	0
124-48-1	Dibromochloromethane	68	TRG	0.000	14.30	129.00	0
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	0.000	14.62	107.00	0
127-18-4	Tetrachloroethene (PCE)	70	TRG	0.000	14.69	166.00	0
108-90-7	Chlorobenzene	72	TRG	0.000	15.62	112.00	0
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	0.000	15.64	131.00	0
100-41-4	Ethylbenzene	74	TRG	0.000	15.90	106	0
1330-20-7	m,p-Xylenes	75	TRG	0.000	16.06	91.00	0
111-84-2	Nonane	76	TRG	0.000	16.43	57.00	0
100-42-5	Styrene	77	TRG	0.000	16.61	104.00	0
75-25-2	Bromoform	78	TRG	0.000	16.67	173.00	0
95-47-6	o-Xylene	79	TRG	0.000	16.52	91.00	0
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	0.000	17.02	83.00	0
96-18-4	1,2,3-Trichloropropane	81	TRG	0.000	17.22	110.00	0
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	0.000	17.24	53.00	0
103-65-1	n-Propylbenzene	83	TRG	0.000	18.04	91.00	0
98-82-8	Isopropylbenzene	84	TRG	0.000	18.23	105.00	0
622-96-8	4-Ethyltoluene	85	TRG	0.000	18.23	105.00	0
108-67-8	1,3,5-Trimethylbenzene	86	TRG	0.000	18.31	105.00	0
124-18-5	Decane	87	TRG	0.000	18.60	57.00	0
98-06-6	tert-butyl benzene	88	TRG	0.000	18.93	119.00	0

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	0.000	18.95	105.00	0
538-93-2	i-Butylbenzene	90	TRG	0.000	19.24	91.00	0
135-98-8	sec-butylbenzene	91	TRG	0.000	19.32	105.00	0
541-73-1	1,3-Dichlorobenzene	92	TRG	0.000	19.39	146.00	0
99-87-6	Isopropyltoluene	93	TRG	0.000	19.53	119.00	0
100-44-7	Benzyl chloride	94	TRG	0.000	19.46	91.00	0
106-46-7	1,4-Dichlorobenzene	95	TRG	0.000	19.39	146.00	0
104-51-8	n-Butylbenzene	96	TRG	0.000	20.20	91.00	0
95-50-1	1,2-Dichlorobenzene	97	TRG	0.000	20.07	146.00	0
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	0.000	21.02	75.00	0
120-82-1	1,2,4-Trichlorobenzene	99	TRG	0.000	22.95	180.00	0
91-20-3	Naphthalene	100	TRG	0.000	23.23	128.00	0
87-61-6	1,2,3-Trichlorobenzene	101	TRG	0.000	23.71	180.00	0
87-68-3	Hexachlorobutadiene	102	TRG	0.000	23.38	225.00	0
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**14794131**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**18861629**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**19990625**
2037-26-5	Toluene-d8	60	SURR	12.069	13.40	98.00	**13515410**

CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

SDG:	**LABQC**	EDD SURR:	PERCENT	IS LCL	**50**	Gas Constant	
Laboratory Number:	**B12164**	Sam Type:	MB	IS UCL	**200**	T	24.5
File Name:	B12164D.D	Instrument:	MA1	SUR LCL	**70**	P	**760**
Run Method:	A1563_L.M	DETECT:	ND	SUR UCL	**130**	MV	24.417
Can Factor:	1.00	Matrix:	AA	MDL Factor	**1.0**	GC	24.417
Air Volume:	300.0 ml	Type:	TRG	E Flag	1.3		
Can/Tube Number:	NA	Diluton:	0.3000				
Dilution Factor:	0.3000	Sig Figs:	2				
Base Volume:	1000 ml	MDLSF:	2				
Unit Factor (ppbv):	1000 PPBV	UG/M3		Fixed	Fixed	Fixed	Fixed

Compound	M.W.	Raw Amount	ResultV PPBV	Result UG/M3	ResultV PPBV	Result UG/M3	ResultQ UG/M3	ResultG UG/M3	(1) MDL	(2) RL PPBV
Propylene	42.08	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Dichlorodifluoromethane	120.9	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
Methanol	32.0	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
Chloromethane	50.5	0.00	0.00	0.00	ND	ND	0		**0.150**	**0.250**
1,2-Dichlorotetrafluoroethane	170.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl chloride	62.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
1,3-Butadiene	54.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Bromomethane	94.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Chloroethane	64.5	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethanol	46.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**3.210**
Acrolein	56.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Trichlorofluoromethane	137.4	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Acetone	58.1	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.600**
2-propanol (isopropylalcohol)	60.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**1.250**
t-Butyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**1.000**
Methyl iodide	142.9	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
1,1-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Acrylonitrile	53.1	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.300**
1,1,2-Trichlorotrifluoroethane	187.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Allyl chloride	76.5	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
Methylene chloride	84.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Carbon disulfide	76.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
trans-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.200**
Methyl tert butyl ether	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.200**
Propionitrile	55.1	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.400**
1,1-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**
Ethyl tert butyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Vinyl acetate	86.1	0.00	0.00	0.00	ND	ND	0		**0.050**	**1.000**
2-Butanone (MEK)	72.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.300**
Diisopropyl ether	102.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.600**
Hexane	86.2	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Methacrylonitrile	67.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Ethyl acetate	88.1	0.00	0.00	0.00	ND	ND	0		**0.100**	**0.250**
Bromochloromethane	129.4	0.00	0.00	0.00	ND	ND	0		**0.050**	**0.250**

Methyl acrylate	86.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Tetrahydrofuran	72.1	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.300**
Isobutyl alcohol	74.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.800**
cis-1,2-Dichloroethene	96.9	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
2,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Chloroform	119.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,1-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,2-Dichloroethane	99.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Cyclohexane	84.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Benzene	78.1	0.00	0.00	0.00	ND	ND	0	**0.350**	**0.500**
Carbon tetrachloride	153.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
t-Amyl methyl ether	102.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
2,2,4-Trimethylpentane	114.2	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
n-Heptane	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,4 Dioxane	88.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.500**
Dibromomethane	173.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Trichloroethene (TCE)	131.4	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Bromodichloromethane	163.8	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Methyl methacrylate	100.1	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
4-Methyl-2-pentanone (MIBK)	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
cis-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Toluene	92.1	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.250**
trans-1,3-Dichloropropene	111.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
1,1,2-Trichloroethane	133.4	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.250**
Ethyl methacrylate	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
2-Hexanone	100.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.800**
1,3-Dichloropropane	113.0	0.00	0.00	0.00	ND	ND	0	**0.050**	**0.700**
Octane	114.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Dibromochloromethane	208.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,2-Dibromoethane (EDB)	187.9	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Tetrachloroethene (PCE)	165.8	0.00	0.00	0.00	ND	ND	0	**0.025**	**0.250**
Chlorobenzene	112.6	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,1,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Ethylbenzene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
m,p-Xylenes	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Nonane	128.3	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
Styrene	104.2	0.00	0.00	0.00	ND	ND	0	**0.150**	**0.250**
Bromoform	252.7	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
o-Xylene	106.2	0.00	0.00	0.00	ND	ND	0	**0.100**	**0.250**
1,1,2,2-Tetrachloroethane	167.8	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.500**
1,2,3-Trichloropropane	147.4	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
t-1,4-Dichloro-2-butene	125.0	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
n-Propylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
Isopropylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.700**
4-Ethyltoluene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**1.600**
1,3,5-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
Decane	142.3	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
tert-butyl benzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**
1,2,4-Trimethylbenzene	120.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.900**
i-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0	**0.200**	**0.600**

sec-butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,3-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.800**
Isopropyltoluene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
Benzyl chloride	126.6	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
1,4-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.500**
n-Butylbenzene	134.2	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.600**
1,2-Dichlorobenzene	147.0	0.00	0.00	0.00	ND	ND	0		**0.200**	**0.700**
1,2-Dibromo-3-chloropropane	236.3	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.700**
1,2,4-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Naphthalene	128.2	0.00	0.00	0.00	ND	ND	0		**0.500**	**0.100**
1,2,3-Trichlorobenzene	181.4	0.00	0.00	0.00	ND	ND	0		**0.300**	**0.500**
Hexachlorobutadiene	260.8	0.00	0.00	0.00	ND	ND	0		**0.250**	**0.300**
Pentafluorobenzene		20.00							**20.0**	**20.0**
1,4-Difluorobenzene		20.00							**20.0**	**20.0**
Chlorobenzene-d5		20.00							**20.0**	**20.0**
Toluene-d8		12.07	121	121	121	121	121	121	**10.0**	**10.0**

Calc MDL PPBV	Calc MDL UG/M3	Calc RL PPBV	Calc RL UG/M3	U Flag	ND Flag	**EPA Flag**	Detect Flag	Cal Flag	**R**	DETECT PPBV	DETECT UG/M3
0.33	0.57	0.83	1.44	U	ND		ND		Y	0.00	0.00
0.50	2.48	0.83	4.13	U	ND		ND		Y	0.00	0.00
1.67	2.18	2.00	2.62	U	ND		ND		Y	0.00	0.00
0.50	1.03	0.83	1.72	U	ND		ND		Y	0.00	0.00
0.33	2.33	0.83	5.83	U	ND		ND		Y	0.00	0.00
0.17	0.43	0.83	2.13	U	ND		ND		Y	0.00	0.00
0.17	0.37	0.83	1.85	U	ND		ND		Y	0.00	0.00
0.33	1.30	0.83	3.24	U	ND		ND		Y	0.00	0.00
0.33	0.88	0.83	2.20	U	ND		ND		Y	0.00	0.00
1.67	3.15	10.70	20.20	U	ND		ND		Y	0.00	0.00
0.33	0.77	1.00	2.30	U	ND		ND		Y	0.00	0.00
0.33	1.88	0.83	4.69	U	ND		ND		Y	0.00	0.00
1.67	3.97	2.00	4.76	U	ND		ND		Y	0.00	0.00
0.67	1.64	4.17	10.26	U	ND		ND		Y	0.00	0.00
0.33	1.01	3.33	10.12	U	ND		ND		Y	0.00	0.00
0.33	1.95	1.00	5.85	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND		ND		Y	0.00	0.00
0.67	1.45	1.00	2.17	U	ND		ND		Y	0.00	0.00
0.17	1.28	0.83	6.40	U	ND		ND		Y	0.00	0.00
0.17	0.52	3.33	10.44	U	ND		ND		Y	0.00	0.00
0.17	0.58	0.83	2.90	U	ND		ND		Y	0.00	0.00
0.33	1.04	0.83	2.60	U	ND		ND		Y	0.00	0.00
0.17	0.66	0.67	2.65	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.67	2.41	U	ND		ND		Y	0.00	0.00
0.83	1.88	1.33	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.67	0.83	3.38	U	ND		ND		Y	0.00	0.00
0.33	1.40	0.83	3.49	U	ND		ND		Y	0.00	0.00
0.17	0.59	3.33	11.75	U	ND		ND		Y	0.00	0.00
0.33	0.98	1.00	2.95	U	ND		ND		Y	0.00	0.00
0.33	1.40	2.00	8.37	U	ND		ND		Y	0.00	0.00
0.33	1.18	0.83	2.94	U	ND		ND		Y	0.00	0.00
0.33	0.92	0.83	2.29	U	ND		ND		Y	0.00	0.00
0.33	1.20	0.83	3.01	U	ND		ND		Y	0.00	0.00
0.17	0.88	0.83	4.42	U	ND		ND		Y	0.00	0.00

0.33	1.18	1.67	5.88	U	ND	ND	Y	0.00	0.00
0.17	0.50	1.00	2.95	U	ND	ND	Y	0.00	0.00
0.67	2.02	2.67	8.09	U	ND	ND	Y	0.00	0.00
0.17	0.66	0.83	3.31	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.17	0.82	0.83	4.08	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.17	0.68	0.83	3.38	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.57	0.83	2.87	U	ND	ND	Y	0.00	0.00
1.17	3.73	1.67	5.33	U	ND	ND	Y	0.00	0.00
0.17	1.05	0.83	5.25	U	ND	ND	Y	0.00	0.00
0.33	1.40	1.67	6.98	U	ND	ND	Y	0.00	0.00
0.17	0.78	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.17	0.77	0.83	3.86	U	ND	ND	Y	0.00	0.00
0.33	1.20	1.67	6.01	U	ND	ND	Y	0.00	0.00
0.17	1.19	0.83	5.93	U	ND	ND	Y	0.00	0.00
0.08	0.45	0.83	4.48	U	ND	ND	Y	0.00	0.00
0.17	1.12	0.83	5.59	U	ND	ND	Y	0.00	0.00
0.33	1.37	0.83	3.42	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.67	2.51	0.83	3.14	U	ND	ND	Y	0.00	0.00
0.17	0.76	0.83	3.79	U	ND	ND	Y	0.00	0.00
0.17	0.91	0.83	4.55	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	1.37	2.67	10.94	U	ND	ND	Y	0.00	0.00
0.17	0.77	2.33	10.80	U	ND	ND	Y	0.00	0.00
0.33	1.56	0.83	3.90	U	ND	ND	Y	0.00	0.00
0.33	2.84	0.83	7.11	U	ND	ND	Y	0.00	0.00
0.33	2.57	0.83	6.41	U	ND	ND	Y	0.00	0.00
0.08	0.57	0.83	5.66	U	ND	ND	Y	0.00	0.00
0.33	1.54	0.83	3.84	U	ND	ND	Y	0.00	0.00
0.33	2.29	0.83	5.73	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.33	1.75	0.83	4.38	U	ND	ND	Y	0.00	0.00
0.50	2.13	0.83	3.56	U	ND	ND	Y	0.00	0.00
0.33	3.45	0.83	8.62	U	ND	ND	Y	0.00	0.00
0.33	1.45	0.83	3.62	U	ND	ND	Y	0.00	0.00
0.67	4.58	1.67	11.45	U	ND	ND	Y	0.00	0.00
0.67	4.02	2.00	12.07	U	ND	ND	Y	0.00	0.00
0.67	3.41	2.00	10.24	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	2.33	11.49	U	ND	ND	Y	0.00	0.00
0.67	3.28	5.33	26.25	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.89	2.00	11.66	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.28	3.00	14.77	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00

0.67	3.66	2.33	12.82	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.67	16.05	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	3.46	1.67	8.64	U	ND	ND	Y	0.00	0.00
0.67	4.01	1.67	10.03	U	ND	ND	Y	0.00	0.00
0.67	3.66	2.00	10.99	U	ND	ND	Y	0.00	0.00
0.67	4.01	2.33	14.05	U	ND	ND	Y	0.00	0.00
1.00	9.68	2.33	22.58	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
1.67	8.75	0.33	1.75	U	ND	ND	Y	0.00	0.00
1.00	7.43	1.67	12.38	U	ND	ND	Y	0.00	0.00
0.83	8.90	1.00	10.68	U	ND	ND	Y	0.00	0.00
						=	Y		
						=	Y		
						=	Y		
						=	Y		

Quantitation Report - TIC

SDG: LABQC
EASID: B12164
Sample ID: METHOD BLANK

Can Factor: 1.00
Gas Constant 24.417049
Volume: 300.00
SF 2
UNIT Factor: 1000

CAS	Probable	RT	Match Qual	LSC Report ppbv	MW	Type	CALC Result PPBV	CALC Result UG/M3	Fixed Result PPBV
	None	**12.35**	**50**	**0.00**	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
				0.00	**100**	TIC	0.0	0.0	ND
If more then 10 TIC see steve				**TVOC SUM TIC**			0.0	0.0	

Processing Notes:

1) A CAS Number is not necessary unless the client wants it and it is a 90+ match - It has to be mapped to the
2) We use an approximate molectular weight unless the client wants an exact weight and it is a 90+ match
3) Put in Match Quality from the LSC Report
4) Enter Retention Time from LSC Report
5) Enter the calculated concentration form the LSC Report in ppbv
6) Do not include 1,4-Difluorobenzene (our IS) - also do not include any target compounds - the machine should
7) Do not call hexane, ethyl ether, or acetonitrile since they are common lab solvents.
8) Check with Lab Director before calling high siloxanes - a couple of low siloxanes are ok. call as unknown silo

Fixed Result UG/M3	MDL PPBV	RL PPBV	CALC MDL PPBV	CALC RL PPBV	FIXED MDL PPBV	FIXED MDL UG/M3	FIXED RL PPBV	FIXED RL UG/M3	Flag
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	
ND	**0.7**	**1.5**	2.3	5.00	2.33	9.56	5.00	20.48	

eport Page Used

eliminate these automatically

ane

SAMPLE CALCULATION

EPA Method TO-15 Modified Full Scan GC/MS

SDG:		**LABQC**
Laboratory Number:		**B12164**
Standard Volume	STV	10.0 ml
Sample Volume	SV	300 ml
Can Dilution Factor	CDF	1.00
Gas Constant		24.42
Decimal Places:		2

Sample Calculation:

1) Avg RFn = Sum $\frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)}$ Note: 1 i

2) Raw Amt = $\frac{(Ansamp)\ (Cistdi)}{(Avg\ RFn)\ (Aistdi)}$ = **Cn**

3) Amount ppbv = $\frac{(Raw\ Amt)\ 1000\ (CDF)}{(SV)}$

4) Amount ug/m3 = $\frac{(amt(ppbv)\ MW}{24.42}$

n	Compound	IS	Type	MW	AvgRFn	Area Ansamp	Cistdi ppmv	Aistdi Ais	**Cn** ppmV Raw Amt	Amount PPBV	Amount UG/M3
2	Propylene	PFB	TRG	42.1	0.197	0	20.0	14794131	0.000	0.00	0.00
3	Dichlorodifluoromethane	PFB	TRG	120.9	0.782	0	20.0	14794131	0.000	0.00	0.00
4	Methanol	PFB	TRG	32.0	0.216	0	20.0	14794131	0.000	0.00	0.00
5	Chloromethane	PFB	TRG	50.5	0.234	0	20.0	14794131	0.000	0.00	0.00
6	1,2-Dichlorotetrafluoroethane	PFB	TRG	170.9	0.630	0	20.0	14794131	0.000	0.00	0.00
7	Vinyl chloride	PFB	TRG	62.5	0.287	0	20.0	14794131	0.000	0.00	0.00
8	1,3-Butadiene	PFB	TRG	54.1	0.198	0	20.0	14794131	0.000	0.00	0.00
9	Bromomethane	PFB	TRG	94.9	0.244	0	20.0	14794131	0.000	0.00	0.00
10	Chloroethane	PFB	TRG	64.5	0.129	0	20.0	14794131	0.000	0.00	0.00
11	Ethanol	PFB	TRG	46.1	0.062	0	20.0	14794131	0.000	0.00	0.00
12	Acrolein	PFB	TRG	56.1	0.086	0	20.0	14794131	0.000	0.00	0.00
13	Trichlorofluoromethane	PFB	TRG	137.4	0.476	0	20.0	14794131	0.000	0.00	0.00
14	Acetone	PFB	TRG	58.1	0.203	0	20.0	14794131	0.000	0.00	0.00
15	2-propanol (isopropylalcohol)	PFB	TRG	60.1	0.393	0	20.0	14794131	0.000	0.00	0.00
16	t-Butyl alcohol	PFB	TRG	74.1	0.444	0	20.0	14794131	0.000	0.00	0.00
17	Methyl iodide	PFB	TRG	142.9	0.700	0	20.0	14794131	0.000	0.00	0.00
18	1,1-Dichloroethene	PFB	TRG	96.9	0.475	0	20.0	14794131	0.000	0.00	0.00
19	Acrylonitrile	PFB	TRG	53.1	0.203	0	20.0	14794131	0.000	0.00	0.00
20	1,1,2-Trichlorotrifluoroethane	PFB	TRG	187.4	0.417	0	20.0	14794131	0.000	0.00	0.00
21	Allyl chloride	PFB	TRG	76.5	0.081	0	20.0	14794131	0.000	0.00	0.00
22	Methylene chloride	PFB	TRG	84.9	0.223	0	20.0	14794131	0.000	0.00	0.00
23	Carbon disulfide	PFB	TRG	76.1	0.657	0	20.0	14794131	0.000	0.00	0.00
24	trans-1,2-Dichloroethene	PFB	TRG	96.9	0.275	0	20.0	14794131	0.000	0.00	0.00
25	Methyl tert butyl ether	PFB	TRG	88.1	0.637	0	20.0	14794131	0.000	0.00	0.00
26	Propionitrile	PFB	TRG	55.1	0.180	0	20.0	14794131	0.000	0.00	0.00
27	1,1-Dichloroethane	PFB	TRG	99.0	0.488	0	20.0	14794131	0.000	0.00	0.00
28	Ethyl tert butyl ether	PFB	TRG	102.2	0.535	0	20.0	14794131	0.000	0.00	0.00
29	Vinyl acetate	PFB	TRG	86.1	0.103	0	20.0	14794131	0.000	0.00	0.00
30	2-Butanone (MEK)	PFB	TRG	72.1	0.133	0	20.0	14794131	0.000	0.00	0.00
31	Diisopropyl ether	PFB	TRG	102.2	0.172	0	20.0	14794131	0.000	0.00	0.00
32	Hexane	PFB	TRG	86.2	0.382	0	20.0	14794131	0.000	0.00	0.00

33	Methacrylonitrile	PFB	TRG	67.1	0.154	0	20.0	14794131	0.000	0.00	0.00
34	Ethyl acetate	PFB	TRG	88.1	0.405	0	20.0	14794131	0.000	0.00	0.00
35	Bromochloromethane	PFB	TRG	129.4	0.358	0	20.0	14794131	0.000	0.00	0.00
36	Methyl acrylate	PFB	TRG	86.1	0.147	0	20.0	14794131	0.000	0.00	0.00
37	Tetrahydrofuran	PFB	TRG	72.1	0.137	0	20.0	14794131	0.000	0.00	0.00
38	Isobutyl alcohol	PFB	TRG	74.1	0.030	0	20.0	14794131	0.000	0.00	0.00
39	cis-1,2-Dichloroethene	PFB	TRG	96.9	0.292	0	20.0	14794131	0.000	0.00	0.00
40	2,2-Dichloropropane	PFB	TRG	113.0	0.382	0	20.0	14794131	0.000	0.00	0.00
41	Chloroform	PFB	TRG	119.4	0.452	0	20.0	14794131	0.000	0.00	0.00
43	1,1,1-Trichloroethane	14DF	TRG	133.4	0.479	0	20.0	18861629	0.000	0.00	0.00
44	1,2-Dichloroethane	14DF	TRG	99.0	0.297	0	20.0	18861629	0.000	0.00	0.00
45	1,1-Dichloropropene	14DF	TRG	111.0	0.393	0	20.0	18861629	0.000	0.00	0.00
46	Cyclohexane	14DF	TRG	84.2	0.333	0	20.0	18861629	0.000	0.00	0.00
47	Benzene	14DF	TRG	78.1	0.794	0	20.0	18861629	0.000	0.00	0.00
48	Carbon tetrachloride	14DF	TRG	153.8	0.299	0	20.0	18861629	0.000	0.00	0.00
49	t-Amyl methyl ether	14DF	TRG	102.2	0.719	0	20.0	18861629	0.000	0.00	0.00
50	2,2,4-Trimethylpentane	14DF	TRG	114.2	1.133	0	20.0	18861629	0.000	0.00	0.00
51	n-Heptane	14DF	TRG	100.2	0.254	0	20.0	18861629	0.000	0.00	0.00
52	1,2-Dichloropropane	14DF	TRG	113.0	0.296	0	20.0	18861629	0.000	0.00	0.00
53	1,4 Dioxane	14DF	TRG	88.1	0.239	0	20.0	18861629	0.000	0.00	0.00
54	Dibromomethane	14DF	TRG	173.8	0.615	0	20.0	18861629	0.000	0.00	0.00
55	Trichloroethene (TCE)	14DF	TRG	131.4	0.487	0	20.0	18861629	0.000	0.00	0.00
56	Bromodichloromethane	14DF	TRG	163.8	0.438	0	20.0	18861629	0.000	0.00	0.00
57	Methyl methacrylate	14DF	TRG	100.1	0.149	0	20.0	18861629	0.000	0.00	0.00
58	4-Methyl-2-pentanone (MIBK)	14DF	TRG	100.2	0.237	0	20.0	18861629	0.000	0.00	0.00
59	cis-1,3-Dichloropropene	14DF	TRG	111.0	0.360	0	20.0	18861629	0.000	0.00	0.00
61	Toluene	14DF	TRG	92.1	1.116	0	20.0	18861629	0.000	0.00	0.00
62	trans-1,3-Dichloropropene	14DF	TRG	111.0	0.315	0	20.0	18861629	0.000	0.00	0.00
63	1,1,2-Trichloroethane	14DF	TRG	133.4	0.192	0	20.0	18861629	0.000	0.00	0.00
64	Ethyl methacrylate	14DF	TRG	114.2	0.273	0	20.0	18861629	0.000	0.00	0.00
65	2-Hexanone	14DF	TRG	100.2	0.350	0	20.0	18861629	0.000	0.00	0.00
66	1,3-Dichloropropane	14DF	TRG	113.0	0.694	0	20.0	18861629	0.000	0.00	0.00
67	Octane	14DF	TRG	114.2	0.434	0	20.0	18861629	0.000	0.00	0.00
68	Dibromochloromethane	14DF	TRG	208.3	0.672	0	20.0	18861629	0.000	0.00	0.00
69	1,2-Dibromoethane (EDB)	14DF	TRG	187.9	0.818	0	20.0	18861629	0.000	0.00	0.00
70	Tetrachloroethene (PCE)	14DF	TRG	165.8	0.839	0	20.0	18861629	0.000	0.00	0.00
72	Chlorobenzene	d5CB	TRG	112.6	0.942	0	20.0	19990625	0.000	0.00	0.00
73	1,1,1,2-Tetrachloroethane	d5CB	TRG	167.8	0.320	0	20.0	19990625	0.000	0.00	0.00
74	Ethylbenzene	d5CB	TRG	106.2	1.492	0	20.0	19990625	0.000	0.00	0.00
75	m,p-Xylenes	d5CB	TRG	106.2	1.216	0	20.0	19990625	0.000	0.00	0.00
76	Nonane	d5CB	TRG	128.3	0.711	0	20.0	19990625	0.000	0.00	0.00
77	Styrene	d5CB	TRG	104.2	0.978	0	20.0	19990625	0.000	0.00	0.00
78	Bromoform	d5CB	TRG	252.7	0.743	0	20.0	19990625	0.000	0.00	0.00
79	o-Xylene	d5CB	TRG	106.2	1.324	0	20.0	19990625	0.000	0.00	0.00
80	1,1,2,2-Tetrachloroethane	d5CB	TRG	167.8	1.220	0	20.0	19990625	0.000	0.00	0.00
81	1,2,3-Trichloropropane	d5CB	TRG	147.4	0.304	0	20.0	19990625	0.000	0.00	0.00
82	t-1,4-Dichloro-2-butene	d5CB	TRG	125.0	0.072	0	20.0	19990625	0.000	0.00	0.00
83	n-Propylbenzene	d5CB	TRG	120.2	2.369	0	20.0	19990625	0.000	0.00	0.00
84	Isopropylbenzene	d5CB	TRG	120.2	4.439	0	20.0	19990625	0.000	0.00	0.00

85	4-Ethyltoluene	d5CB	TRG	120.2	1.859	0	20.0	19990625	0.000	0.00	0.00
86	1,3,5-Trimethylbenzene	d5CB	TRG	120.2	1.922	0	20.0	19990625	0.000	0.00	0.00
87	Decane	d5CB	TRG	142.3	1.250	0	20.0	19990625	0.000	0.00	0.00
88	tert-butyl benzene	d5CB	TRG	134.2	1.914	0	20.0	19990625	0.000	0.00	0.00
89	1,2,4-Trimethylbenzene	d5CB	TRG	120.2	1.525	0	20.0	19990625	0.000	0.00	0.00
90	i-Butylbenzene	d5CB	TRG	134.2	2.188	0	20.0	19990625	0.000	0.00	0.00
91	sec-butylbenzene	d5CB	TRG	134.2	2.560	0	20.0	19990625	0.000	0.00	0.00
92	1,3-Dichlorobenzene	d5CB	TRG	147.0	1.227	0	20.0	19990625	0.000	0.00	0.00
93	Isopropyltoluene	d5CB	TRG	134.2	2.351	0	20.0	19990625	0.000	0.00	0.00
94	Benzyl chloride	d5CB	TRG	126.6	0.632	0	20.0	19990625	0.000	0.00	0.00
95	1,4-Dichlorobenzene	d5CB	TRG	147.0	1.278	0	20.0	19990625	0.000	0.00	0.00
96	n-Butylbenzene	d5CB	TRG	134.2	2.239	0	20.0	19990625	0.000	0.00	0.00
97	1,2-Dichlorobenzene	d5CB	TRG	147.0	1.311	0	20.0	19990625	0.000	0.00	0.00
98	1,2-Dibromo-3-chloropropane	d5CB	TRG	236.3	0.200	0	20.0	19990625	0.000	0.00	0.00
99	1,2,4-Trichlorobenzene	d5CB	TRG	181.4	0.091	0	20.0	19990625	0.000	0.00	0.00
100	Naphthalene	d5CB	TRG	128.2	0.064	0	20.0	19990625	0.000	0.00	0.00
101	1,2,3-Trichlorobenzene	d5CB	TRG	181.4	0.021	0	20.0	19990625	0.000	0.00	0.00
102	Hexachlorobutadiene	d5CB	TRG	260.8	1.087	0	20.0	19990625	0.000	0.00	0.00
1	Pentafluorobenzene	0	IS	0.0	0.000	14794131	20.0		20.000	0.00	0.00
42	1,4-Difluorobenzene	0	IS	0.0	0.000	18861629	20.0		20.000	0.00	0.00
71	Chlorobenzene-d5	0	IS	0.0	0.000	19990625	20.0		20.000	0.00	0.00
60	Toluene-d8	0	SURR	0.0	0.000	13515410	10.0		12.069	120.69	121

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\B12164D.D
Acq Time : 16 Dec 124 3:07 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Jan 2 10:02 19125

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.57	168	14794131	20.00	ppbV	-0.25
42) 1,4-Difluorobenzene	10.73	114	18861629	20.00	ppbV	-0.27
71) Chlorobenzene-d5	15.22	117	19990625	20.00	ppbV	-0.35
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.07	98	13515410	12.07	ppbV	120.69
Target Compounds						Qvalue

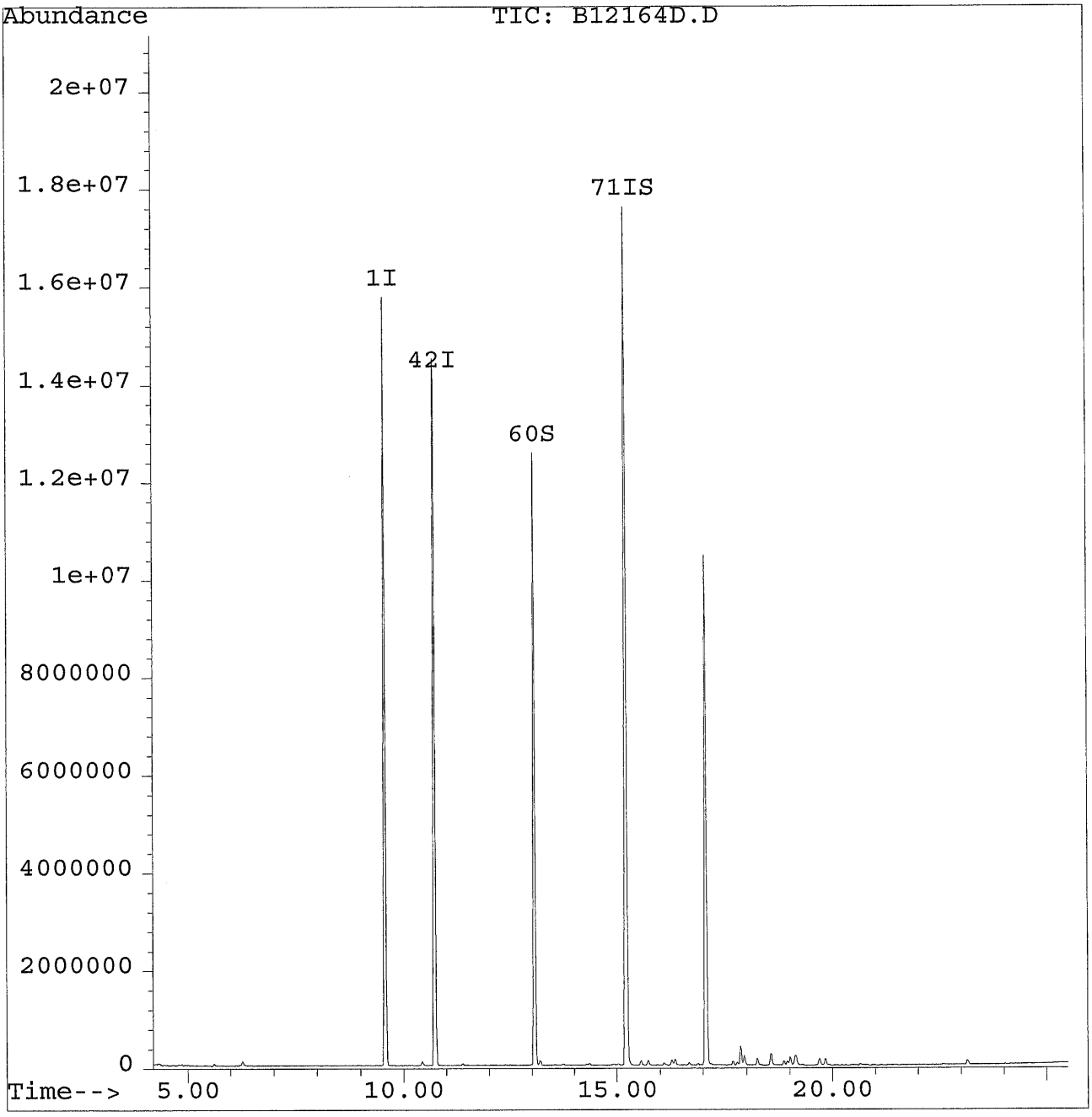
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\B12164D.D
Acq Time : 16 Dec 124 3:07 pm
Sample : METHOD BLANK
Misc : 1000 ML
Quant Time: Jan 2 10:02 19125

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12164A\B12164D.D
Acq Time : 16 Dec 124 3:07 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 1 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
17.06	11.54 ppbV	31875582	Chlorobenzene-d5	15

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-bromo-4-fluoro-	13706	000460-00-4	94
2	Benzene, 1-bromo-3-fluoro-	13704	001073-06-9	93
3	Benzene, 1-bromo-2-fluoro-	13705	001072-85-1	76
4	Pyridine, 1-oxide	962	000694-59-7	14
5	3-Pyridinol	964	000109-00-2	14

****

Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
17.87	0.43 ppbV	1198077	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	3333	000611-14-3	53
2	Ethanone, 1-phenyl-	3320	000098-86-2	53
3	Benzene, 1-ethyl-4-methyl-	3338	000622-96-8	49
4	Benzene, 1,2,4-trimethyl-	3342	000095-63-6	47
5	Spiro[4.4]nona-1,6-diene, (S)-	3335	039746-39-9	38

****

Peak Number 3 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
18.56	0.27 ppbV	757806	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	3333	000611-14-3	81
2	Benzene, 1,2,3-trimethyl-	3340	000526-73-8	74
3	Benzene, 1-ethyl-4-methyl-	3338	000622-96-8	72
4	Benzene, 1-ethyl-3-methyl-	3337	000620-14-4	64
5	Benzene, 1,3,5-trimethyl-	3339	000108-67-8	62

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\12164A\B12164D.D
Acq Time : 16 Dec 124 3:07 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Library : C:\DATABASE\NBS54K.L

****

Peak Number 4 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
19.14	0.31 ppbV	860670	Chlorobenzene-d5	15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,3-dichloro-	7557	000541-73-1	58
2	Benzene, 1,2-dichloro-	7556	000095-50-1	52
3	Benzene, methyl(1-methylethyl)-	5393	025155-15-1	47
4	Benzene, 1-methyl-2-(1-methylethyl)	5411	000527-84-4	47
5	Benzene, 1,4-dichloro-	7558	000106-46-7	38

LCS/LCD Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one LCS/LCD report for each QC Batch (DAB) in this SDG.

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QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121024-MA1
Date: 12/10/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	107		104		70	130	3	25	
75-35-4	1,1-Dichloroethene	108		116		70	130	8	25	
75-09-2	Dichloromethane	109		112		70	130	3	25	
75-34-3	1,1-Dichloroethane	101		101		70	130	0	25	
67-66-3	Chloroform	109		111		70	130	2	25	
71-55-6	1,1,1-Trichloroethane	100		108		70	130	7	25	
107-06-2	1,2-Dichloroethane	95		104		70	130	9	25	
71-43-2	Benzene	92		96		70	130	4	25	
56-23-5	Carbon tetrachloride	111		117		70	130	5	25	
79-01-6	Trichloroethene	94		100		70	130	6	25	
108-88-3	Toluene	104		112		70	130	7	25	
106-93-4	1,2-Dibromoethane	95		100		70	130	5	25	
127-18-4	Tetrachloroethene	82		88		70	130	7	25	
100-41-4	Ethylbenzene	96		103		70	130	8	25	
1330-20-7	m,p-Xylenes	96		105		70	130	9	25	
95-47-6	o-Xylene	97		103		70	130	6	25	
108-67-8	1,3,5-Trimethylbenzene	96		98		70	130	2	25	
95-63-6	1,2,4-Trimethylbenzene	97		93		70	130	5	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A\QC12104B.D
Acq Time : 10 Dec 124 11:04 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 10 11:30 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.56	168	11485567	20.00	ppbV	-0.28
27) 1,4-Difluorobenzene	10.70	114	12105398	20.00	ppbV	-0.31
49) Chlorobenzene-d5	15.19	117	15684658	20.00	ppbV	-0.37
System Monitoring Compounds						%Recovery
41) Toluene-d8	13.06	98	7591888	11.04	ppbV	110.38
67) Bromofluorobenzene	17.06	95	6556156	15.26	ppbV	76.28
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.38	85	1479356	2.80	ppbV	97
3) Chloromethane	4.64	50	869478	4.18	ppbV	91
4) Freon 114	4.65	85	1710593	3.94	ppbV	94
5) Vinyl chloride	4.88	62	574441	2.87	ppbV	97
6) 1,3-Butadiene	4.99	54	726180	5.20	ppbV #	22
7) Bromomethane	5.40	94	446096	2.60	ppbV	95
8) Chloroethane	5.56	64	331087	3.25	ppbV	99
9) Ethanol	5.59	46	70822	1.57	ppbV #	1
10) Trichlorofluoromethane	6.19	101	1677824	4.46	ppbV	98
11) Acetone	6.28	58	42991	0.34	ppbV #	73
12) 2-propanol	6.31	45	53579	0.14	ppbV #	62
13) 1,1-Dichloroethene	6.86	61	1080601	2.68	ppbV	95
14) Freon 113	0.00	151		Not Detected		
15) Dichloromethane	7.13	84	550051	4.22	ppbV	98
16) Carbon disulfide	7.39	76	59037	0.16	ppbV	98
17) trans-1,2-Dichloroethene	7.83	96	27675	0.17	ppbV	94
18) Methyl tert butyl ether	0.00	73		Not Detected		
19) 1,1-Dichloroethane	8.16	63	1160806	3.02	ppbV	98
20) Vinyl acetate	0.00	86		Not Detected		
21) 2-Butanone	0.00	72		Not Detected		
22) Ethyl acetate	8.91	61	922067	2.53	ppbV #	15
23) Bromochloromethane	9.15	49	83397	0.20	ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected		
25) cis-1,2-Dichloroethene	8.91	96	738547	4.02	ppbV	83
26) Chloroform	9.15	83	1192206	3.94	ppbV	94
28) 1,1,1-Trichloroethane	9.95	97	1137582	3.48	ppbV	92
29) 1,2-Dichloroethane	9.98	62	777453	2.30	ppbV	92
30) Cyclohexane	10.70	56	146804	0.44	ppbV #	10
31) Benzene	10.39	78	2069451	2.85	ppbV #	85
32) Carbon tetrachloride	10.43	117	786511	4.39	ppbV	97
33) n-Heptane	0.00	71		Not Detected		
34) 1,2-Dichloropropane	11.32	63	752164	3.03	ppbV	96
35) 1,4 Dioxane	11.49	88	49458	0.35	ppbV #	10
36) Trichloroethene	11.35	130	1086640	3.97	ppbV #	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A\QC12104B.D
Acq Time : 10 Dec 124 11:04 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 10 11:30 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Bromodichloromethane	0.00	83		Not Detected	
38) Methyl methacrylate	0.00	69		Not Detected	
39) 4-Methyl-2-pentanone	0.00	58		Not Detected	
40) cis-1,3-Dichloropropene	12.34	75	599909	2.16 ppbV #	87
42) Toluene	13.16	91	3207165	4.28 ppbV	93
43) trans-1,3-Dichloropropene	12.94	75	292353	1.00 ppbV	92
44) 1,1,2-Trichloroethane	13.18	61	519903	2.73 ppbV #	29
45) 2-Hexanone	13.47	58	51268	0.18 ppbV #	82
46) Dibromochloromethane	13.95	129	26752	0.08 ppbV	96
47) 1,2-Dibromoethane	14.25	107	790205	1.63 ppbV #	98
48) Tetrachloroethene	14.32	166	891782	2.25 ppbV	95
50) Chlorobenzene	15.26	112	2813149	3.96 ppbV #	84
51) Ethylbenzene	15.54	91	4722038	3.84 ppbV	97
52) m,p-Xylenes	15.69	91	3837950	3.55 ppbV	97
53) Styrene	16.24	104	3033052	4.28 ppbV #	89
54) Bromoform	16.29	173	48661	0.10 ppbV	93
55) o-Xylene	16.32	91	3872752	3.48 ppbV	87
56) 1,1,2,2-Tetrachloroethane	16.65	83	1965635	2.11 ppbV #	98
57) 4-Ethyltoluene	17.84	105	5799561	3.71 ppbV #	97
58) 1,3,5-Trimethylbenzene	17.84	105	5799561	4.03 ppbV #	71
59) 1,2,4-Trimethylbenzene	18.56	105	4589392	3.31 ppbV #	92
60) 1,3-Dichlorobenzene	18.98	146	2112144	2.17 ppbV	96
61) Benzyl chloride	19.05	91	153958	0.26 ppbV	93
62) 1,4-Dichlorobenzene	18.98	146	2112144	2.20 ppbV	95
63) 1,2-Dichlorobenzene	19.66	146	2018956	1.55 ppbV	95
64) 1,2,4-Trichlorobenzene	22.55	180	51945	0.16 ppbV #	1
65) Naphthalene	22.84	128	21060	0.26 ppbV #	91
66) Hexachlorobutadiene	23.13	225	566748	0.38 ppbV #	39
68) 1,1-Difluoroethane	0.00	51		Not Detected	

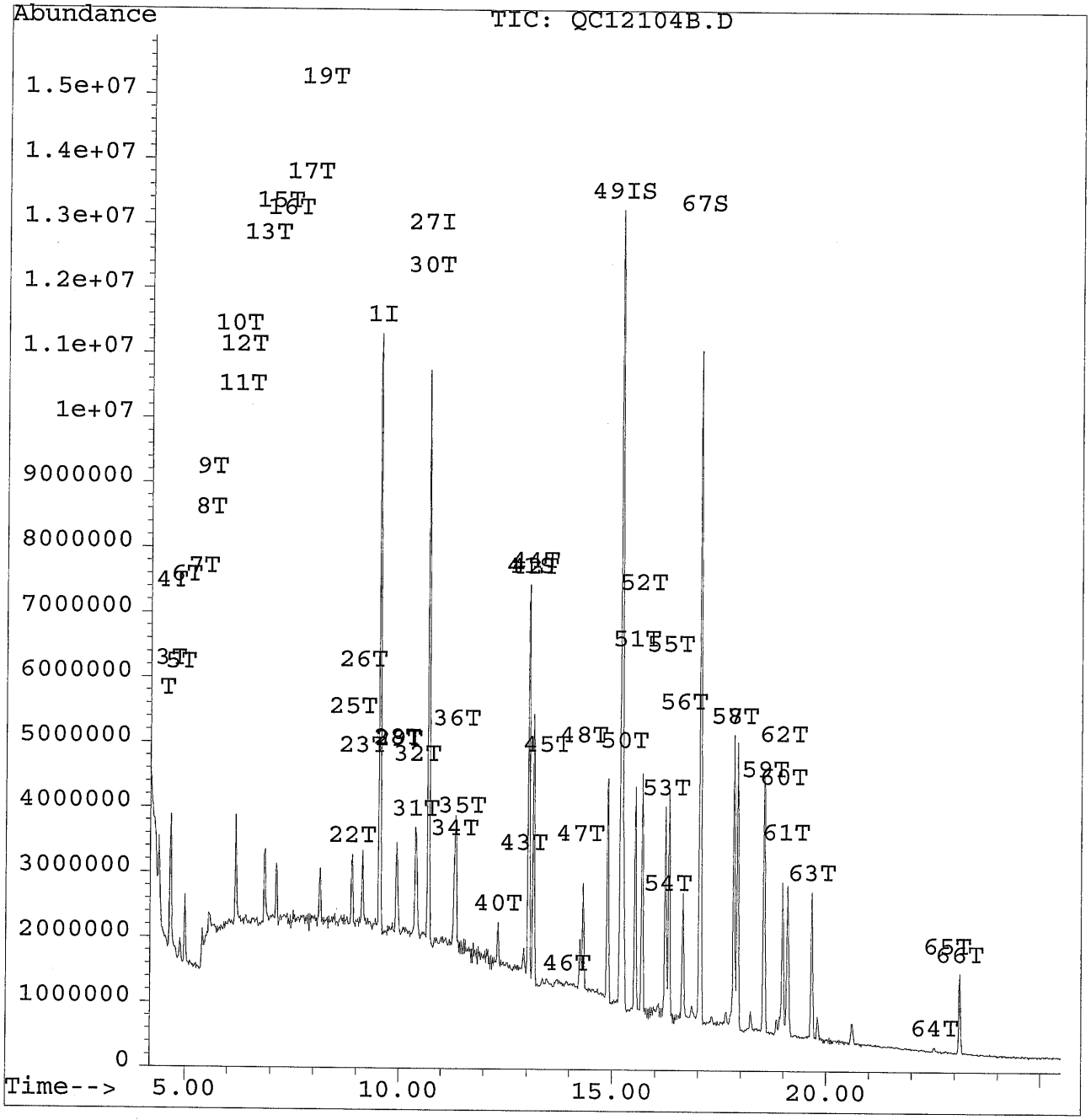
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A\QC12104B.D
Acq Time : 10 Dec 124 11:04 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 10 11:30 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A\QC12104C.D
Acq Time : 10 Dec 124 11:43 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 10 12:09 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.55	168	11461742	20.00 ppbV	-0.28
27) 1,4-Difluorobenzene	10.70	114	11927263	20.00 ppbV	-0.31
49) Chlorobenzene-d5	15.21	117	15665790	20.00 ppbV	-0.35
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.06	98	7563358	11.16 ppbV	111.61
67) Bromofluorobenzene	17.05	95	6533355	15.22 ppbV	76.10
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.40	85	1525740	2.90 ppbV #	96
3) Chloromethane	4.65	50	855355	4.12 ppbV #	88
4) Freon 114	4.65	85	1711909	3.95 ppbV	98
5) Vinyl chloride	4.89	62	589380	2.95 ppbV	98
6) 1,3-Butadiene	4.99	54	747794	5.37 ppbV #	22
7) Bromomethane	5.40	94	413630	2.42 ppbV	100
8) Chloroethane	5.56	64	311244	3.06 ppbV	100
9) Ethanol	5.71	46	51610	1.15 ppbV #	1
10) Trichlorofluoromethane	6.19	101	1546848	4.12 ppbV	99
11) Acetone	6.27	58	35896	0.29 ppbV #	74
12) 2-propanol	0.00	45		Not Detected	
13) 1,1-Dichloroethene	6.87	61	1000216	2.49 ppbV	94
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.15	84	534289	4.10 ppbV	95
16) Carbon disulfide	7.38	76	46221	0.13 ppbV #	92
17) trans-1,2-Dichloroethene	7.85	96	24400	0.15 ppbV #	71
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.15	63	1159541	3.02 ppbV	99
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.91	61	885549	2.44 ppbV #	15
23) Bromochloromethane	9.14	49	75988	0.19 ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected	
25) cis-1,2-Dichloroethene	8.91	96	735015	4.01 ppbV	82
26) Chloroform	9.14	83	1161271	3.85 ppbV	98
28) 1,1,1-Trichloroethane	9.95	97	1040653	3.23 ppbV	94
29) 1,2-Dichloroethane	9.98	62	701210	2.10 ppbV	95
30) Cyclohexane	10.70	56	140113	0.42 ppbV #	10
31) Benzene	10.39	78	1960419	2.74 ppbV #	84
32) Carbon tetrachloride	10.43	117	738975	4.19 ppbV	95
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.31	63	686699	2.81 ppbV	98
35) 1,4 Dioxane	11.52	88	29502	0.21 ppbV #	10
36) Trichloroethene	11.35	130	1010179	3.75 ppbV #	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A\QC12104C.D
Acq Time : 10 Dec 124 11:43 am Operator: TR
Sample : ST63255 Inst : 5970 - M
Misc : 5 ML Multiplr: 1.00
Quant Time: Dec 10 12:09 19124

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Bromodichloromethane	0.00	83		Not Detected	
38)	Methyl methacrylate	0.00	69		Not Detected	
39)	4-Methyl-2-pentanone	0.00	58		Not Detected	
40)	cis-1,3-Dichloropropene	12.34	75	550847	2.01 ppbV	96
42)	Toluene	13.16	91	2939755	3.98 ppbV	94
43)	trans-1,3-Dichloropropene	12.94	75	257616	0.90 ppbV	92
44)	1,1,2-Trichloroethane	13.17	61	490996	2.61 ppbV #	36
45)	2-Hexanone	13.48	58	29618	0.11 ppbV #	90
46)	Dibromochloromethane	0.00	129		Not Detected	
47)	1,2-Dibromoethane	14.25	107	739806	1.55 ppbV #	96
48)	Tetrachloroethene	14.34	166	822924	2.11 ppbV #	91
50)	Chlorobenzene	15.26	112	2650631	3.73 ppbV #	83
51)	Ethylbenzene	15.53	91	4368393	3.55 ppbV	98
52)	m,p-Xylenes	15.70	91	3502023	3.24 ppbV	91
53)	Styrene	16.25	104	2905837	4.11 ppbV #	88
54)	Bromoform	16.30	173	31288	0.07 ppbV #	91
55)	o-Xylene	16.32	91	3658201	3.29 ppbV	99
56)	1,1,2,2-Tetrachloroethane	16.64	83	1905620	2.05 ppbV #	97
57)	4-Ethyltoluene	17.85	105	5654961	3.62 ppbV #	97
58)	1,3,5-Trimethylbenzene	17.85	105	5654961	3.93 ppbV #	71
59)	1,2,4-Trimethylbenzene	18.55	105	4821946	3.48 ppbV #	93
60)	1,3-Dichlorobenzene	18.98	146	2240711	2.31 ppbV	93
61)	Benzyl chloride	19.06	91	92703	0.15 ppbV	96
62)	1,4-Dichlorobenzene	19.10	146	2112943	2.20 ppbV	90
63)	1,2-Dichlorobenzene	19.68	146	2257125	1.73 ppbV	92
64)	1,2,4-Trichlorobenzene	22.55	180	38415	0.12 ppbV #	1
65)	Naphthalene	0.00	128		Not Detected	
66)	Hexachlorobutadiene	23.13	225	605484	0.40 ppbV #	39
68)	1,1-Difluoroethane	0.00	51		Not Detected	

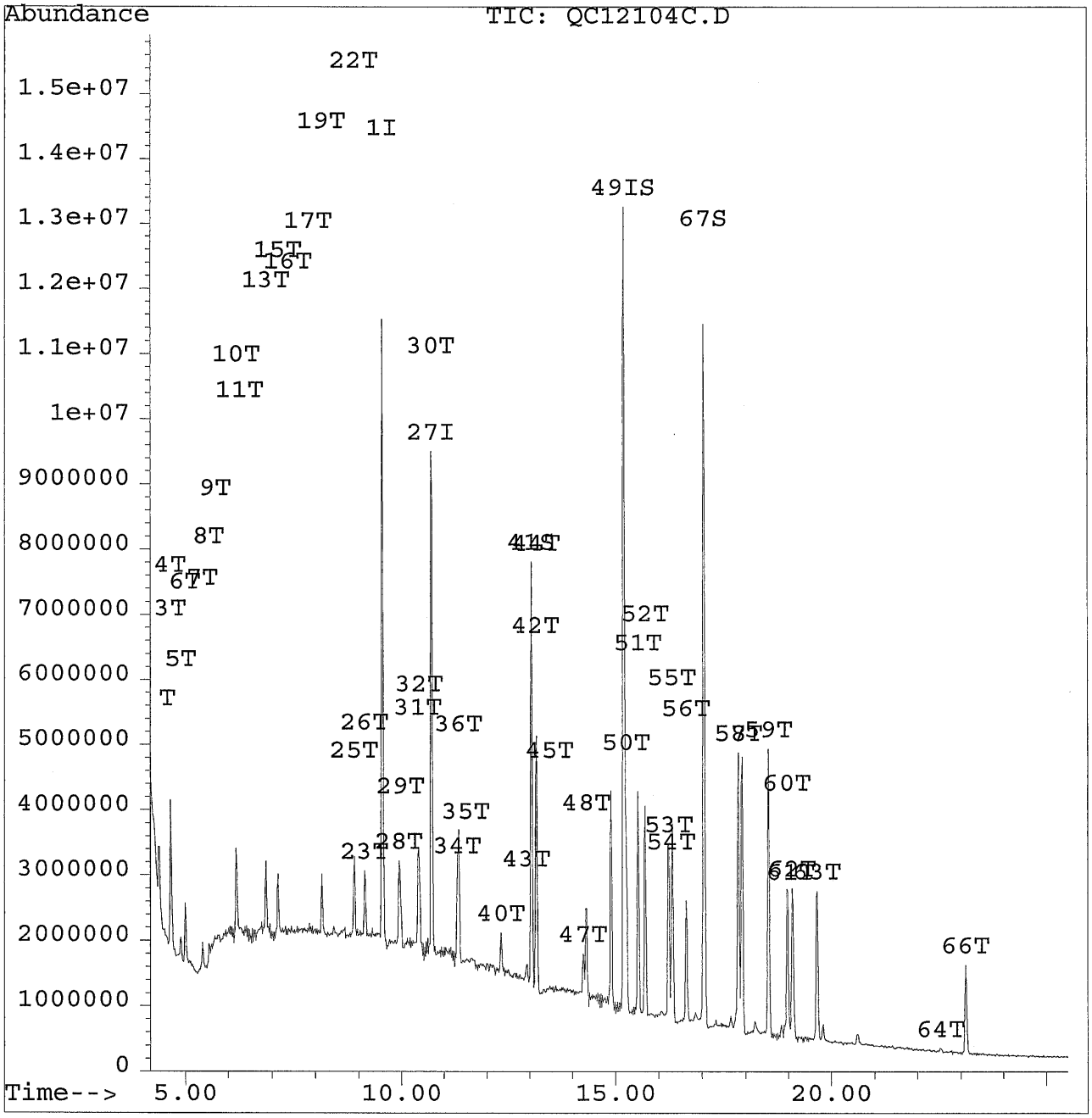
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12104A\QC12104C.D
Acq Time : 10 Dec 124 11:43 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 10 12:09 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121124-MA1
Date: 12/11/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	103		114		70	130	10	25	
75-35-4	1,1-Dichloroethene	102		117		70	130	14	25	
75-09-2	Dichloromethane	115		111		70	130	3	25	
75-34-3	1,1-Dichloroethane	89		104		70	130	16	25	
67-66-3	Chloroform	101		117		70	130	14	25	
71-55-6	1,1,1-Trichloroethane	90		107		70	130	17	25	
107-06-2	1,2-Dichloroethane	103		97		70	130	6	25	
71-43-2	Benzene	89		95		70	130	7	25	
56-23-5	Carbon tetrachloride	93		117		70	130	22	25	
79-01-6	Trichloroethene	97		100		70	130	3	25	
108-88-3	Toluene	102		109		70	130	7	25	
106-93-4	1,2-Dibromoethane	90		104		70	130	14	25	
127-18-4	Tetrachloroethene	83		89		70	130	6	25	
100-41-4	Ethylbenzene	80		92		70	130	14	25	
1330-20-7	m,p-Xylenes	79		90		70	130	13	25	
95-47-6	o-Xylene	77		92		70	130	17	25	
108-67-8	1,3,5-Trimethylbenzene	73		85		70	130	16	25	
95-63-6	1,2,4-Trimethylbenzene	74		78		70	130	5	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A\QC12114A.D
Acq Time : 11 Dec 124 10:55 am Operator: TR
Sample : ST63255 Inst : 5970 - M
Misc : 5 ML Multiplr: 1.00
Quant Time: Dec 11 11:24 19124

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.57	168	9782728	20.00 ppbV	-0.27
27) 1,4-Difluorobenzene	10.72	114	10242682	20.00 ppbV	-0.29
49) Chlorobenzene-d5	15.21	117	14490427	20.00 ppbV	-0.35
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.07	98	6781323	11.65 ppbV	116.52
67) Bromofluorobenzene	17.07	95	5950519	14.99 ppbV	74.94
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.40	85	1523986	3.39 ppbV #	97
3) Chloromethane	4.67	50	802347	4.53 ppbV	90
4) Freon 114	4.67	85	1633266	4.41 ppbV	99
5) Vinyl chloride	4.89	62	537501	3.15 ppbV	98
6) 1,3-Butadiene	5.01	54	668821	5.63 ppbV #	22
7) Bromomethane	5.42	94	381544	2.61 ppbV	94
8) Chloroethane	5.57	64	243585	2.81 ppbV	97
9) Ethanol	5.71	46	86642	2.26 ppbV #	1
10) Trichlorofluoromethane	6.21	101	1433448	4.47 ppbV	100
11) Acetone	6.29	58	59196	0.56 ppbV #	79
12) 2-propanol	6.39	45	131290	0.39 ppbV #	62
13) 1,1-Dichloroethene	6.87	61	926326	2.70 ppbV	98
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.16	84	466008	4.19 ppbV	93
16) Carbon disulfide	7.40	76	75886	0.24 ppbV	96
17) trans-1,2-Dichloroethene	7.85	96	33362	0.23 ppbV	97
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.17	63	1014434	3.10 ppbV	99
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.92	61	809889	2.61 ppbV #	15
23) Bromochloromethane	9.16	49	80404	0.23 ppbV #	34
24) Tetrahydrofuran	9.49	72	21131	0.23 ppbV #	1
25) cis-1,2-Dichloroethene	8.92	96	659328	4.21 ppbV	86
26) Chloroform	9.16	83	1063063	4.13 ppbV	100
28) 1,1,1-Trichloroethane	9.96	97	953061	3.45 ppbV	96
29) 1,2-Dichloroethane	10.00	62	613061	2.14 ppbV	98
30) Cyclohexane	10.72	56	116045	0.41 ppbV #	10
31) Benzene	10.43	78	1733314	2.83 ppbV #	81
32) Carbon tetrachloride	10.46	117	665280	4.39 ppbV	97
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.33	63	601523	2.86 ppbV	99
35) 1,4 Dioxane	11.52	88	87797	0.74 ppbV #	10
36) Trichloroethene	11.37	130	918416	3.97 ppbV #	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A\QC12114A.D
Acq Time : 11 Dec 124 10:55 am Operator: TR
Sample : ST63255 Inst : 5970 - M
Misc : 5 ML Multiplr: 1.00
Quant Time: Dec 11 11:24 19124

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Bromodichloromethane	0.00	83		Not Detected	
38)	Methyl methacrylate	0.00	69		Not Detected	
39)	4-Methyl-2-pentanone	12.25	58	22690	0.15 ppbV #	71
40)	cis-1,3-Dichloropropene	12.36	75	555060	2.36 ppbV #	90
42)	Toluene	13.18	91	2651850	4.19 ppbV	97
43)	trans-1,3-Dichloropropene	12.95	75	268553	1.09 ppbV #	84
44)	1,1,2-Trichloroethane	13.19	61	425917	2.64 ppbV #	3
45)	2-Hexanone	13.48	58	75360	0.32 ppbV #	83
46)	Dibromochloromethane	13.96	129	42605	0.16 ppbV	94
47)	1,2-Dibromoethane	14.27	107	694920	1.69 ppbV #	92
48)	Tetrachloroethene	14.34	166	762706	2.28 ppbV	95
50)	Chlorobenzene	15.28	112	2448560	3.73 ppbV #	83
51)	Ethylbenzene	15.55	91	3868159	3.40 ppbV	95
52)	m,p-Xylenes	15.70	91	3034204	3.04 ppbV #	86
53)	Styrene	16.25	104	2385646	3.64 ppbV #	89
54)	Bromoform	16.32	173	63745	0.15 ppbV #	92
55)	o-Xylene	16.33	91	3182740	3.09 ppbV	92
56)	1,1,2,2-Tetrachloroethane	16.66	83	1584681	1.84 ppbV	96
57)	4-Ethyltoluene	17.85	105	4654495	3.22 ppbV #	96
58)	1,3,5-Trimethylbenzene	17.85	105	4654495	3.50 ppbV #	70
59)	1,2,4-Trimethylbenzene	18.57	105	3590638	2.80 ppbV #	95
60)	1,3-Dichlorobenzene	19.00	146	1747554	1.95 ppbV	96
61)	Benzyl chloride	19.08	91	389284	0.70 ppbV #	97
62)	1,4-Dichlorobenzene	19.00	146	1747554	1.97 ppbV	95
63)	1,2-Dichlorobenzene	19.68	146	1708326	1.42 ppbV	95
64)	1,2,4-Trichlorobenzene	22.55	180	140083	0.47 ppbV #	1
65)	Naphthalene	22.84	128	69963	0.94 ppbV #	94
66)	Hexachlorobutadiene	23.14	225	603139	0.43 ppbV #	39
68)	1,1-Difluoroethane	0.00	51		Not Detected	

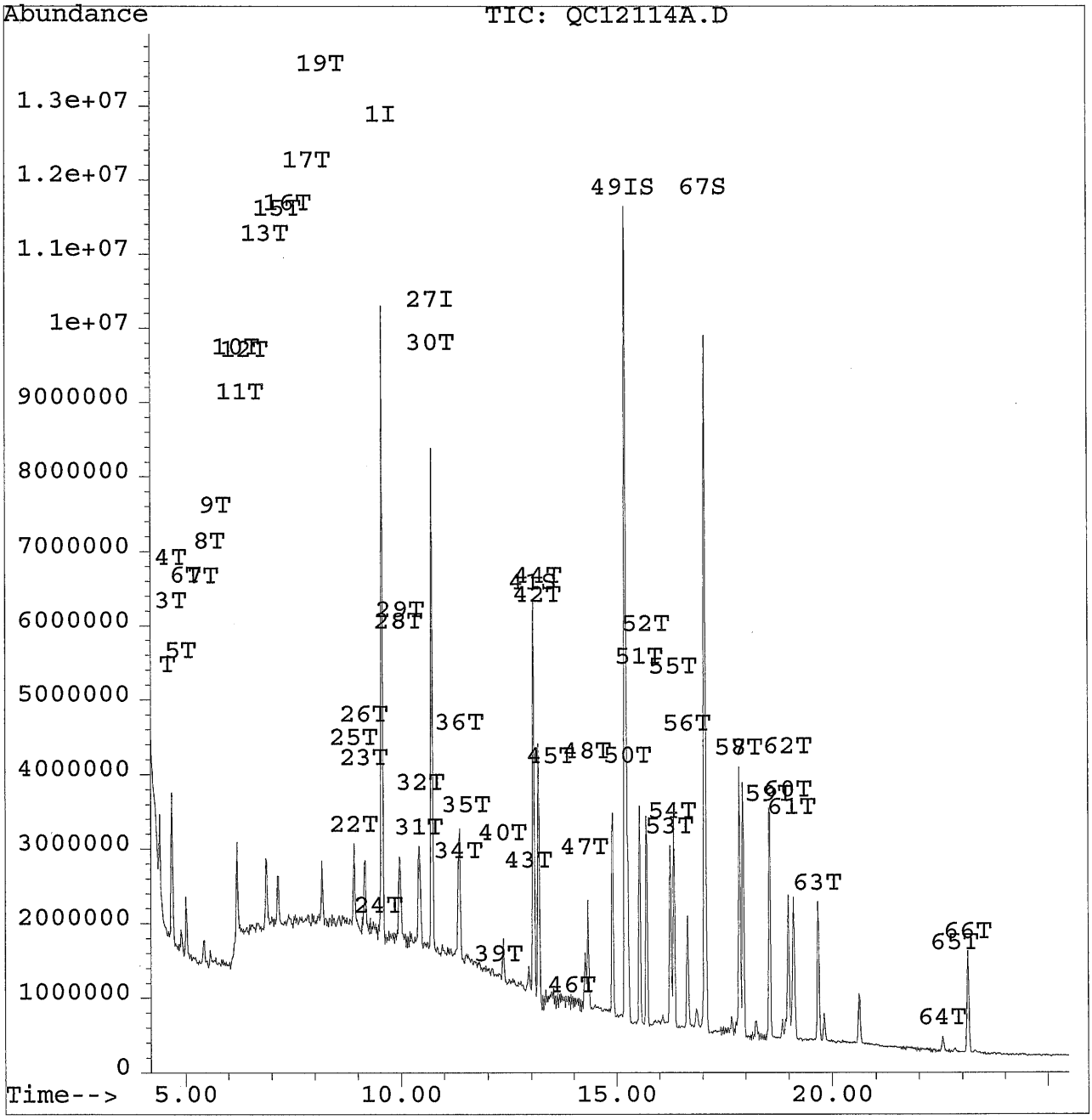
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A\QC12114A.D
Acq Time : 11 Dec 124 10:55 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 11 11:24 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A\QC12114B.D
Acq Time : 11 Dec 124 11:31 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:11 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.56	168	10844661	20.00 ppbV	-0.28
27) 1,4-Difluorobenzene	10.72	114	11003788	20.00 ppbV	-0.29
49) Chlorobenzene-d5	15.23	117	15476429	20.00 ppbV	-0.33
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.07	98	7180916	11.49 ppbV	114.86
67) Bromofluorobenzene	17.07	95	6341456	14.95 ppbV	74.77
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.41	85	1383521	2.78 ppbV #	95
3) Chloromethane	4.67	50	771769	3.93 ppbV	92
4) Freon 114	4.67	85	1598685	3.90 ppbV	97
5) Vinyl chloride	4.91	62	537044	2.84 ppbV	98
6) 1,3-Butadiene	5.03	54	655312	4.97 ppbV #	22
7) Bromomethane	5.42	94	377765	2.33 ppbV	92
8) Chloroethane	5.58	64	238985	2.49 ppbV	99
9) Ethanol	5.69	46	48234	1.13 ppbV #	1
10) Trichlorofluoromethane	6.21	101	1366065	3.85 ppbV	100
11) Acetone	6.28	58	47922	0.41 ppbV #	73
12) 2-propanol	6.40	45	54801	0.15 ppbV #	62
13) 1,1-Dichloroethene	6.87	61	891855	2.34 ppbV	96
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.15	84	534901	4.34 ppbV #	88
16) Carbon disulfide	7.40	76	49925	0.14 ppbV	96
17) trans-1,2-Dichloroethene	7.85	96	21188	0.13 ppbV #	77
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.17	63	961103	2.65 ppbV	98
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.91	61	693811	2.02 ppbV #	15
23) Bromochloromethane	9.16	49	53098	0.14 ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected	
25) cis-1,2-Dichloroethene	8.91	96	700503	4.04 ppbV #	77
26) Chloroform	9.16	83	1020194	3.57 ppbV	100
28) 1,1,1-Trichloroethane	9.97	97	862363	2.90 ppbV #	89
29) 1,2-Dichloroethane	10.00	62	699558	2.28 ppbV m	97
30) Cyclohexane	10.72	56	111256	0.36 ppbV #	10
31) Benzene	10.41	78	1740732	2.64 ppbV #	77
32) Carbon tetrachloride	10.44	117	570812	3.51 ppbV	88
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.32	63	555950	2.46 ppbV	96
35) 1,4 Dioxane	11.50	88	60313	0.47 ppbV #	10
36) Trichloroethene	11.37	130	956125	3.84 ppbV #	84

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A\QC12114B.D
Acq Time : 11 Dec 124 11:31 am Operator: TR
Sample : ST63255 Inst : 5970 - M
Misc : 5 ML Multiplr: 1.00
Quant Time: Dec 12 14:11 19124

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Bromodichloromethane	0.00	83		Not Detected	
38)	Methyl methacrylate	0.00	69		Not Detected	
39)	4-Methyl-2-pentanone	0.00	58		Not Detected	
40)	cis-1,3-Dichloropropene	12.36	75	475770	1.89 ppbV #	81
42)	Toluene	13.18	91	2652276	3.90 ppbV	94
43)	trans-1,3-Dichloropropene	12.95	75	213792	0.81 ppbV #	79
44)	1,1,2-Trichloroethane	13.19	61	360601	2.08 ppbV #	1
45)	2-Hexanone	13.48	58	44170	0.17 ppbV #	73
46)	Dibromochloromethane	13.96	129	29013	0.10 ppbV	97
47)	1,2-Dibromoethane	14.27	107	648498	1.47 ppbV	98
48)	Tetrachloroethene	14.34	166	771740	2.14 ppbV #	93
50)	Chlorobenzene	15.28	112	2298669	3.28 ppbV #	84
51)	Ethylbenzene	15.55	91	3589799	2.96 ppbV	95
52)	m,p-Xylenes	15.70	91	2849235	2.67 ppbV	90
53)	Styrene	16.25	104	2232760	3.19 ppbV #	88
54)	Bromoform	16.32	173	53527	0.12 ppbV #	95
55)	o-Xylene	16.34	91	2873293	2.61 ppbV #	85
56)	1,1,2,2-Tetrachloroethane	16.66	83	1273655	1.39 ppbV #	93
57)	4-Ethyltoluene	17.86	105	4251708	2.76 ppbV #	97
58)	1,3,5-Trimethylbenzene	17.86	105	4251708	2.99 ppbV #	71
59)	1,2,4-Trimethylbenzene	18.57	105	3630896	2.65 ppbV m	95
60)	1,3-Dichlorobenzene	19.00	146	1520530	1.58 ppbV	96
61)	Benzyl chloride	19.08	91	196798	0.33 ppbV #	92
62)	1,4-Dichlorobenzene	19.12	146	1431950	1.51 ppbV	94
63)	1,2-Dichlorobenzene	19.68	146	1393536	1.08 ppbV	94
64)	1,2,4-Trichlorobenzene	22.56	180	76336	0.24 ppbV #	1
65)	Naphthalene	22.85	128	34418	0.43 ppbV #	90
66)	Hexachlorobutadiene	23.14	225	348998	0.23 ppbV #	39
68)	1,1-Difluoroethane	0.00	51		Not Detected	

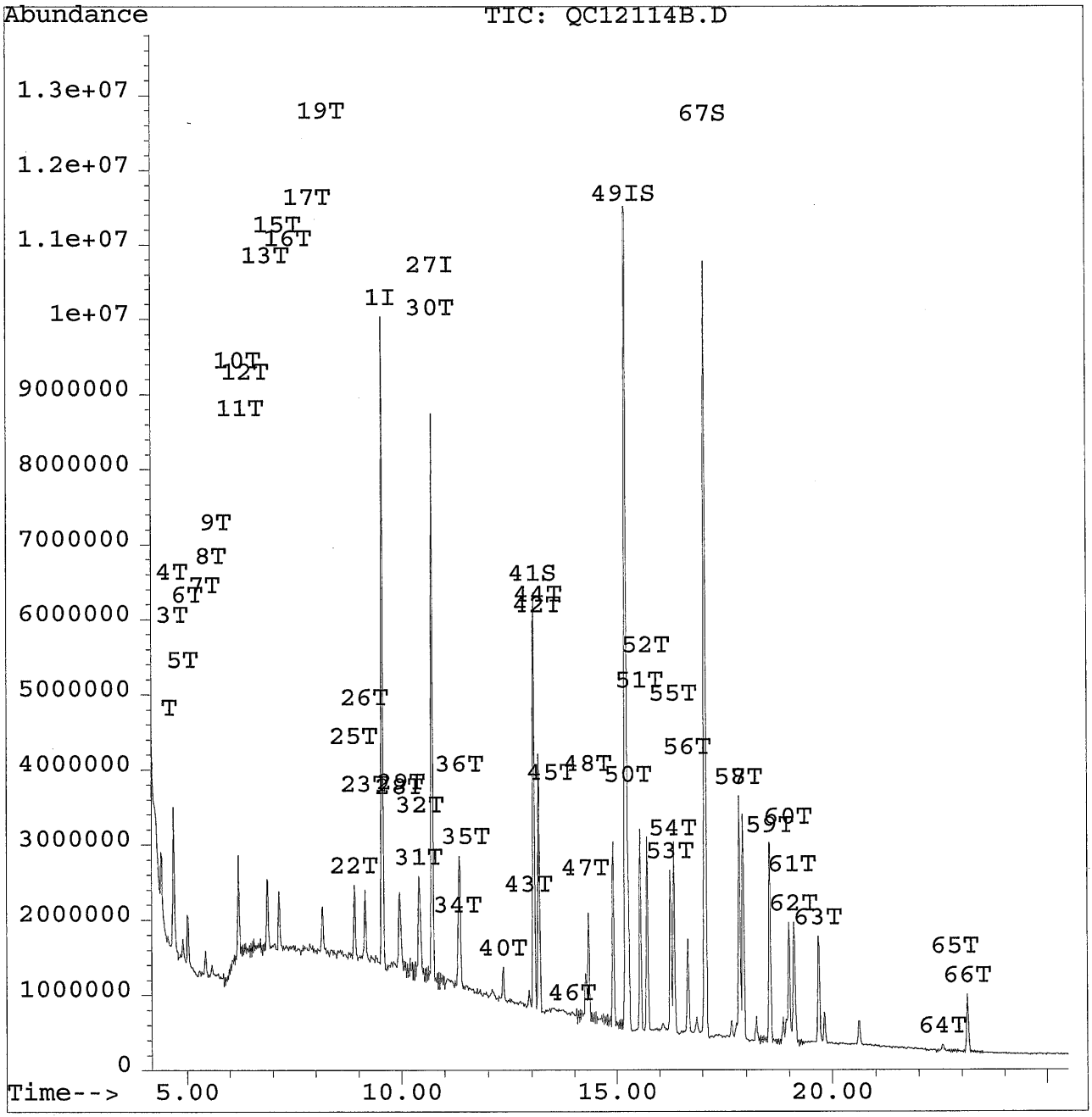
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A\QC12114B.D
Acq Time : 11 Dec 124 11:31 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:11 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121224-MA1
Date: 12/12/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	115		105		70	130	9	25	
75-35-4	1,1-Dichloroethene	84		95		70	130	12	25	
75-09-2	Dichloromethane	125		115		70	130	9	25	
75-34-3	1,1-Dichloroethane	85		86		70	130	1	25	
67-66-3	Chloroform	100		100		70	130	0	25	
71-55-6	1,1,1-Trichloroethane	85		85		70	130	0	25	
107-06-2	1,2-Dichloroethane	81		84		70	130	3	25	
71-43-2	Benzene	85		87		70	130	2	25	
56-23-5	Carbon tetrachloride	87		88		70	130	2	25	
79-01-6	Trichloroethene	104		110		70	130	5	25	
108-88-3	Toluene	110		112		70	130	2	25	
106-93-4	1,2-Dibromoethane	100		108		70	130	7	25	
127-18-4	Tetrachloroethene	93		94		70	130	2	25	
100-41-4	Ethylbenzene	93		97		70	130	5	25	
1330-20-7	m,p-Xylenes	92		96		70	130	4	25	
95-47-6	o-Xylene	91		98		70	130	7	25	
108-67-8	1,3,5-Trimethylbenzene	79		90		70	130	13	25	
95-63-6	1,2,4-Trimethylbenzene	73		85		70	130	14	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\QC12124A.D
Acq Time : 12 Dec 124 10:16 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:17 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.61	168	9615855	20.00 ppbV	-0.23
27) 1,4-Difluorobenzene	10.75	114	10431574	20.00 ppbV	-0.26
49) Chlorobenzene-d5	15.24	117	14561753	20.00 ppbV	-0.32
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.09	98	6663356	11.24 ppbV	112.42
67) Bromofluorobenzene	17.08	95	5432342	13.61 ppbV	68.07
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.41	85	1322282	2.99 ppbV #	95
3) Chloromethane	4.69	50	676639	3.89 ppbV #	86
4) Freon 114	4.69	85	1466054	4.03 ppbV	99
5) Vinyl chloride	4.93	62	489689	2.92 ppbV	99
6) 1,3-Butadiene	5.05	54	548610	4.69 ppbV #	22
7) Bromomethane	5.44	94	353003	2.46 ppbV	98
8) Chloroethane	5.61	64	203011	2.38 ppbV	97
9) Ethanol	5.63	46	46958	1.24 ppbV #	1
10) Trichlorofluoromethane	6.22	101	1081931	3.43 ppbV	98
11) Acetone	6.31	58	32739	0.31 ppbV #	74
12) 2-propanol	6.34	45	43863	0.13 ppbV #	62
13) 1,1-Dichloroethene	6.91	61	745186	2.21 ppbV #	83
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.18	84	481678	4.41 ppbV #	87
16) Carbon disulfide	7.42	76	63182	0.21 ppbV	98
17) trans-1,2-Dichloroethene	7.88	96	33190	0.24 ppbV #	67
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.21	63	823920	2.56 ppbV	97
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.94	61	581012	1.90 ppbV #	15
23) Bromochloromethane	9.20	49	44080	0.13 ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected	
25) cis-1,2-Dichloroethene	8.94	96	689770	4.48 ppbV #	68
26) Chloroform	9.20	83	908941	3.59 ppbV	95
28) 1,1,1-Trichloroethane	10.00	97	769559	2.73 ppbV #	88
29) 1,2-Dichloroethane	10.03	62	539364	1.85 ppbV m	97
30) Cyclohexane	10.75	56	75723	0.26 ppbV #	10
31) Benzene	10.44	78	1601640	2.56 ppbV #	74
32) Carbon tetrachloride	10.48	117	515923	3.34 ppbV	99
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.35	63	476024	2.22 ppbV	97
35) 1,4 Dioxane	11.54	88	67648	0.56 ppbV #	10
36) Trichloroethene	11.40	130	1025744	4.35 ppbV #	82

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\QC12124A.D
Acq Time : 12 Dec 124 10:16 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:17 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Bromodichloromethane	0.00	83		Not Detected	
38) Methyl methacrylate	0.00	69		Not Detected	
39) 4-Methyl-2-pentanone	0.00	58		Not Detected	
40) cis-1,3-Dichloropropene	12.37	75	479305	2.00 ppbV #	87
42) Toluene	13.21	91	2790162	4.32 ppbV	93
43) trans-1,3-Dichloropropene	12.97	75	233098	0.93 ppbV #	81
44) 1,1,2-Trichloroethane	13.21	61	336680	2.05 ppbV #	1
45) 2-Hexanone	13.52	58	44405	0.18 ppbV #	71
46) Dibromochloromethane	13.98	129	36710	0.13 ppbV	86
47) 1,2-Dibromoethane	14.30	107	731611	1.75 ppbV	98
48) Tetrachloroethene	14.37	166	812635	2.38 ppbV #	90
50) Chlorobenzene	15.29	112	2642683	4.00 ppbV #	83
51) Ethylbenzene	15.56	91	4055810	3.55 ppbV	96
52) m,p-Xylenes	15.74	91	3207643	3.20 ppbV #	86
53) Styrene	16.28	104	2633720	4.00 ppbV #	84
54) Bromoform	16.33	173	59542	0.14 ppbV #	90
55) o-Xylene	16.37	91	3335668	3.23 ppbV #	86
56) 1,1,2,2-Tetrachloroethane	16.67	83	1898755	2.20 ppbV #	96
57) 4-Ethyltoluene	17.89	105	4827494	3.33 ppbV #	96
58) 1,3,5-Trimethylbenzene	17.89	105	4827494	3.61 ppbV #	74
59) 1,2,4-Trimethylbenzene	18.59	105	3773844	2.93 ppbV #	93
60) 1,3-Dichlorobenzene	19.03	146	2152439	2.38 ppbV #	92
61) Benzyl chloride	19.10	91	446399	0.80 ppbV #	91
62) 1,4-Dichlorobenzene	19.15	146	2104665	2.36 ppbV #	89
63) 1,2-Dichlorobenzene	19.71	146	2216153	1.83 ppbV	93
64) 1,2,4-Trichlorobenzene	22.58	180	192140	0.64 ppbV #	1
65) Naphthalene	22.87	128	72823	0.98 ppbV #	95
66) Hexachlorobutadiene	23.17	225	750124	0.54 ppbV #	39
68) 1,1-Difluoroethane	0.00	51		Not Detected	

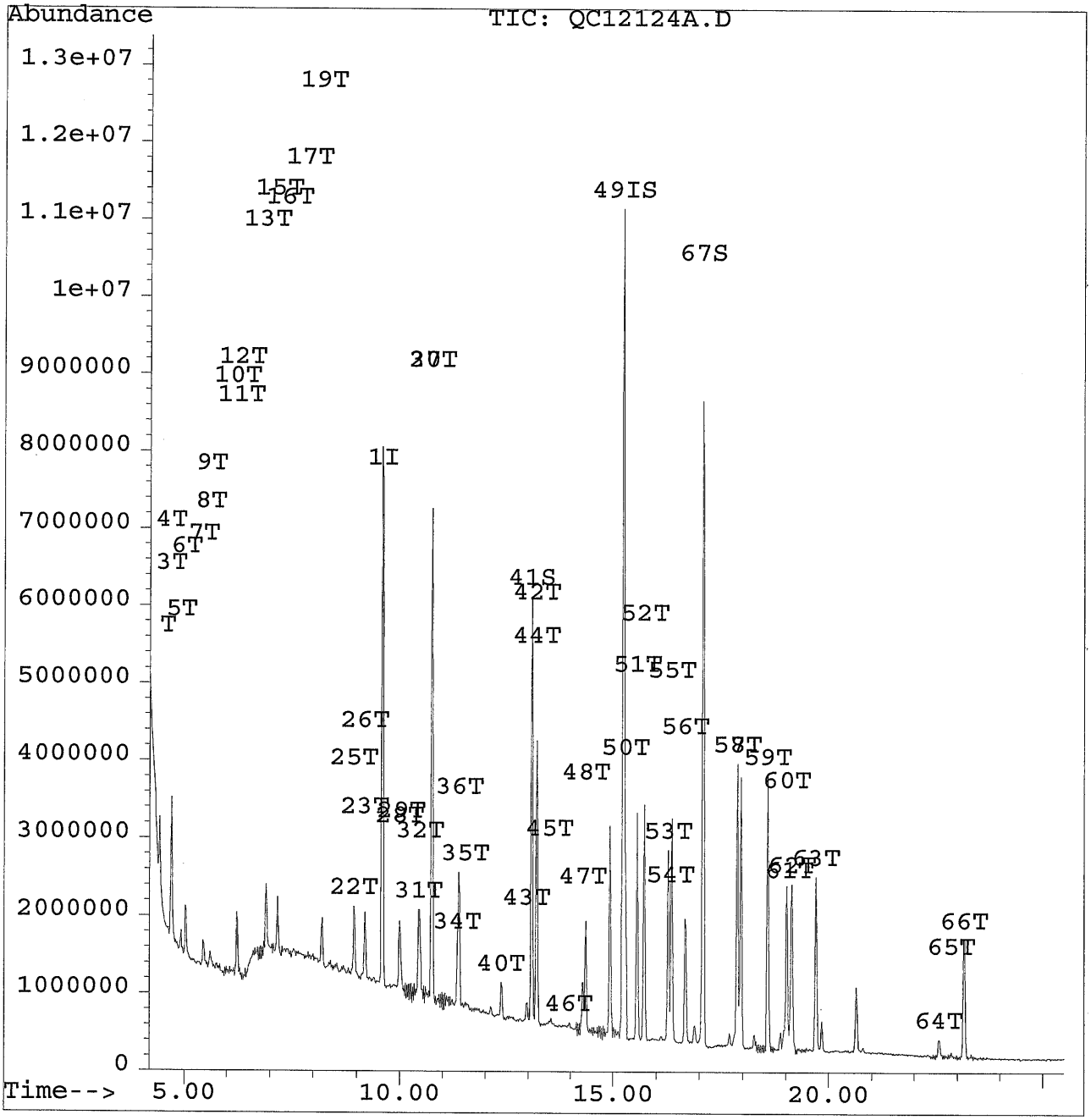
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\QC12124A.D
Acq Time : 12 Dec 124 10:16 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:17 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\QC12124B.D
Acq Time : 12 Dec 124 10:52 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:21 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min
1) Pentafluorobenzene	9.59	168	9808871	20.00 ppbV	-0.25
27) 1,4-Difluorobenzene	10.75	114	10533071	20.00 ppbV	-0.25
49) Chlorobenzene-d5	15.24	117	15124394	20.00 ppbV	-0.32
System Monitoring Compounds					%Recovery
41) Toluene-d8	13.09	98	6666207	11.14 ppbV	111.39
67) Bromofluorobenzene	17.08	95	5941344	14.34 ppbV	71.68
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.41	85	1322358	2.94 ppbV #	96
3) Chloromethane	4.67	50	679440	3.83 ppbV	94
4) Freon 114	4.69	85	1670196	4.50 ppbV	96
5) Vinyl chloride	4.91	62	548681	3.21 ppbV	98
6) 1,3-Butadiene	5.03	54	612332	5.14 ppbV #	22
7) Bromomethane	5.44	94	422756	2.89 ppbV	92
8) Chloroethane	5.59	64	221018	2.54 ppbV	93
9) Ethanol	0.00	46		Not Detected	
10) Trichlorofluoromethane	6.23	101	973250	3.03 ppbV	99
11) Acetone	6.33	58	26648	0.25 ppbV #	85
12) 2-propanol	0.00	45		Not Detected	
13) 1,1-Dichloroethene	6.91	61	676965	1.97 ppbV #	55
14) Freon 113	0.00	151		Not Detected	
15) Dichloromethane	7.18	84	535192	4.80 ppbV #	80
16) Carbon disulfide	7.42	76	36176	0.12 ppbV #	94
17) trans-1,2-Dichloroethene	7.87	96	23616	0.17 ppbV #	58
18) Methyl tert butyl ether	0.00	73		Not Detected	
19) 1,1-Dichloroethane	8.19	63	830198	2.53 ppbV	97
20) Vinyl acetate	0.00	86		Not Detected	
21) 2-Butanone	0.00	72		Not Detected	
22) Ethyl acetate	8.94	61	552176	1.77 ppbV #	15
23) Bromochloromethane	9.18	49	35402	0.10 ppbV #	34
24) Tetrahydrofuran	0.00	72		Not Detected	
25) cis-1,2-Dichloroethene	8.94	96	668046	4.25 ppbV #	63
26) Chloroform	9.20	83	928620	3.60 ppbV	97
28) 1,1,1-Trichloroethane	9.98	97	779951	2.74 ppbV #	87
29) 1,2-Dichloroethane	10.02	62	525912	1.79 ppbV m	97
30) Cyclohexane	10.73	56	67666	0.23 ppbV #	10
31) Benzene	10.45	78	1583452	2.51 ppbV #	71
32) Carbon tetrachloride	10.48	117	512996	3.29 ppbV	99
33) n-Heptane	0.00	71		Not Detected	
34) 1,2-Dichloropropane	11.35	63	490354	2.27 ppbV	99
35) 1,4 Dioxane	11.54	88	29279	0.24 ppbV #	10
36) Trichloroethene	11.38	130	983406	4.13 ppbV #	80

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\QC12124B.D
Acq Time : 12 Dec 124 10:52 am Operator: TR
Sample : ST63255 Inst : 5970 - M
Misc : 5 ML Multiplr: 1.00
Quant Time: Dec 12 14:21 19124

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	Bromodichloromethane	0.00	83		Not Detected	
38)	Methyl methacrylate	0.00	69		Not Detected	
39)	4-Methyl-2-pentanone	0.00	58		Not Detected	
40)	cis-1,3-Dichloropropene	12.37	75	456467	1.89 ppbV #	87
42)	Toluene	13.21	91	2766993	4.25 ppbV	92
43)	trans-1,3-Dichloropropene	12.97	75	192926	0.76 ppbV #	84
44)	1,1,2-Trichloroethane	13.21	61	342953	2.07 ppbV #	1
45)	2-Hexanone	13.52	58	25257	0.10 ppbV #	73
46)	Dibromochloromethane	13.99	129	22446	0.08 ppbV	92
47)	1,2-Dibromoethane	14.28	107	687451	1.63 ppbV #	98
48)	Tetrachloroethene	14.37	166	805085	2.34 ppbV #	90
50)	Chlorobenzene	15.29	112	2562755	3.74 ppbV #	82
51)	Ethylbenzene	15.57	91	4017946	3.39 ppbV	94
52)	m,p-Xylenes	15.74	91	3192525	3.06 ppbV	94
53)	Styrene	16.28	104	2467549	3.61 ppbV #	84
54)	Bromoform	16.33	173	37791	0.08 ppbV #	95
55)	o-Xylene	16.37	91	3241976	3.02 ppbV	87
56)	1,1,2,2-Tetrachloroethane	16.67	83	1553018	1.73 ppbV #	98
57)	4-Ethyltoluene	17.89	105	4398747	2.92 ppbV #	93
58)	1,3,5-Trimethylbenzene	17.89	105	4398747	3.17 ppbV #	76
59)	1,2,4-Trimethylbenzene	18.58	105	3393366	2.54 ppbV #	93
60)	1,3-Dichlorobenzene	19.03	146	1831399	1.95 ppbV	92
61)	Benzyl chloride	19.10	91	179296	0.31 ppbV #	92
62)	1,4-Dichlorobenzene	19.15	146	1713619	1.85 ppbV #	90
63)	1,2-Dichlorobenzene	19.71	146	1681487	1.34 ppbV #	94
64)	1,2,4-Trichlorobenzene	22.59	180	85286	0.27 ppbV #	1
65)	Naphthalene	22.88	128	37669	0.49 ppbV #	94
66)	Hexachlorobutadiene	23.16	225	348969	0.24 ppbV #	39
68)	1,1-Difluoroethane	0.00	51		Not Detected	

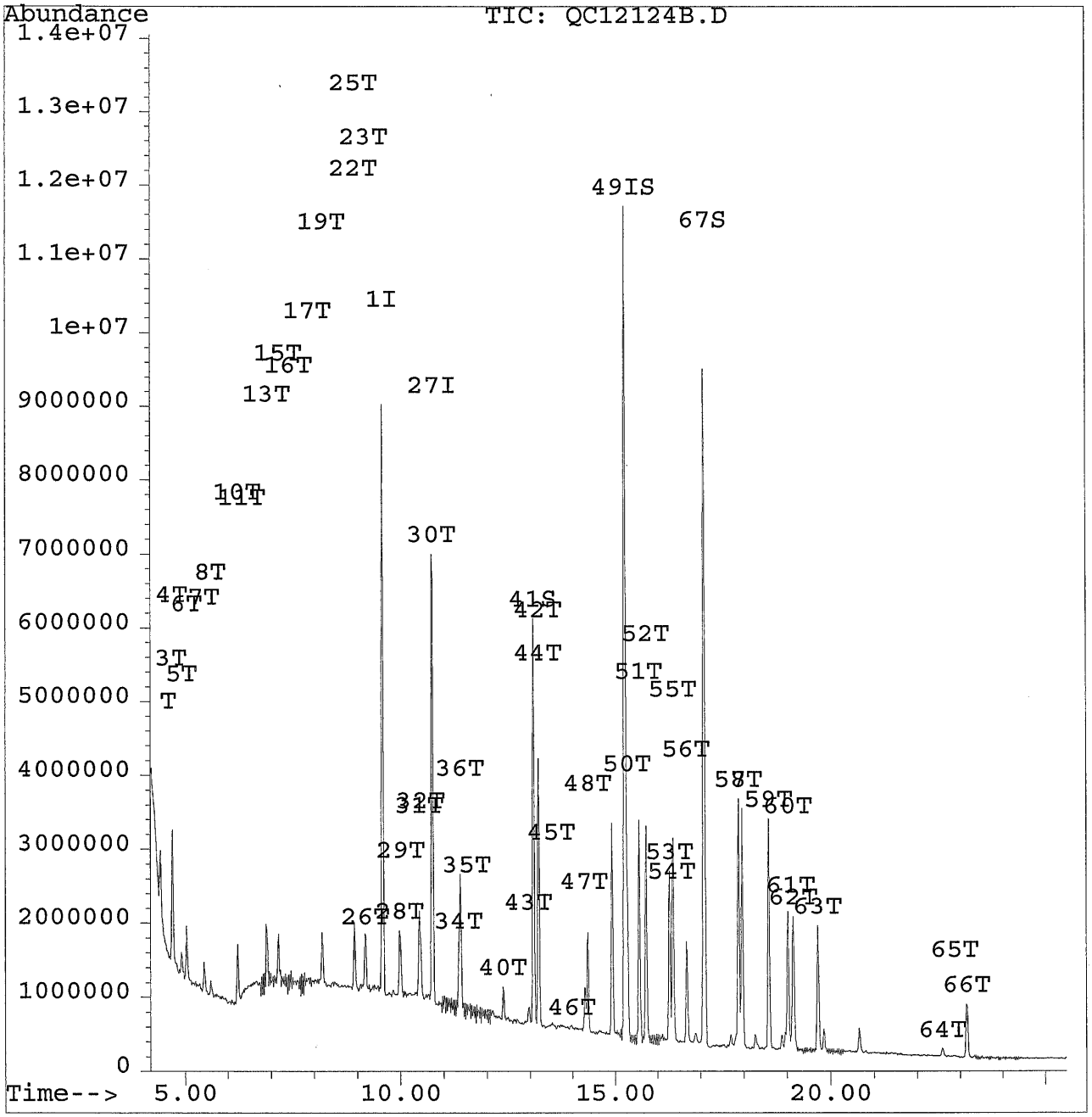
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\QC12124B.D
Acq Time : 12 Dec 124 10:52 am
Sample : ST63255
Misc : 5 ML
Quant Time: Dec 12 14:21 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A1563_L.M
Title : EPA T0-15
Last Update : Mon Oct 21 15:14:35 2024
Response via : Multiple Level Calibration



QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121324-MA1
Date: 12/13/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	111		115		70	130	4	25	
75-35-4	1,1-Dichloroethene	90		110		70	130	21	25	
75-09-2	Dichloromethane	115		113		70	130	3	25	
75-34-3	1,1-Dichloroethane	82		100		70	130	20	25	
67-66-3	Chloroform	87		109		70	130	22	25	
71-55-6	1,1,1-Trichloroethane	75		85		70	130	13	25	
107-06-2	1,2-Dichloroethane	83		100		70	130	18	25	
71-43-2	Benzene	80		86		70	130	6	25	
56-23-5	Carbon tetrachloride	77		90		70	130	16	25	
79-01-6	Trichloroethene	90		97		70	130	7	25	
108-88-3	Toluene	96		112		70	130	15	25	
106-93-4	1,2-Dibromoethane	83		103		70	130	21	25	
127-18-4	Tetrachloroethene	71		83		70	130	15	25	
100-41-4	Ethylbenzene	99		104		70	130	5	25	
1330-20-7	m,p-Xylenes	97		101		70	130	4	25	
95-47-6	o-Xylene	98		105		70	130	7	25	
108-67-8	1,3,5-Trimethylbenzene	102		97		70	130	4	25	
95-63-6	1,2,4-Trimethylbenzene	97		88		70	130	10	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUANTITATION REPORT LCS

EPA Method TO-15 Modified Full Scan GC/MS

							SDG:	**LABQC**	
							EAS ID:	**QC12134C**	
File Name:	QC12134C.D						**Date Sampled:**	**Time:**	
Sample ID:	ST63255						**Date Received:**	**Time:**	
Method:	**TO15**						**Date Analyzed:**	**12/13/24**	**Time:** **11:47**
MiscInfo-Vol:	5 ML	MDL FAC:	**1**				**Can Factor:**	**1.00**	
Date:	13 Dec 124 11:47 am	SF:	**2**				**Volume:**	**5.00**	
Run Method:	A1563_L.M	SamType:	**LCS**				**Can (Vial) No:**	**NA**	
Quant Method:	A1563_L.M	UnitDil:	**1000**	PPBV	UG/M3		**QCbatch:**	**121324-MA1**	
Cal Update:	Mon Oct 21 15:14:35 2024	Temp:	**25.0**				**Matrix:**	**AA**	
Instrument:	5970 - MS	Instrument ID:	**MA1**						
Analyst:	TR	Multiplier:	1.00						
		Type:	**TRG**						

CAS#	Compound	n	Type	Raw Amount	RT	Target RT	Ion	Sample Area
75-01-4	Vinyl chloride	5	TRG	3.124	4.86	4.98	62.00	485001
75-35-4	1,1-Dichloroethene	13	TRG	2.066	6.86	7.06	61.00	645442
75-09-2	Dichloromethane	15	TRG	4.542	7.13	7.35	84.00	459444
75-34-3	1,1-Dichloroethane	19	TRG	2.397	8.16	8.40	63.00	714280
67-66-3	Chloroform	26	TRG	3.132	9.17	9.43	83.00	734258
71-55-6	1,1,1-Trichloroethane	28	TRG	2.361	9.97	10.25	97.00	604373
107-06-2	1,2-Dichloroethane	29	TRG	1.801	9.99	10.28	61.95	477063
71-43-2	Benzene	31	TRG	2.327	10.41	10.70	78.00	1321751
56-23-5	Carbon tetrachloride	32	TRG	2.865	10.45	10.73	116.90	402098
79-01-6	Trichloroethene	36	TRG	3.591	11.35	11.66	130.00	769775
108-88-3	Toluene	42	TRG	3.753	13.18	13.51	91.00	2201528
106-93-4	1,2-Dibromoethane	47	TRG	1.354	14.27	14.61	107.00	515047
127-18-4	Tetrachloroethene	48	TRG	1.782	14.34	14.68	166.00	552565
100-41-4	Ethylbenzene	51	TRG	3.595	15.55	15.89	91.00	3095180
1330-20-7	m,p-Xylenes	52	TRG	3.184	15.70	16.05	91.00	2409090
95-47-6	o-Xylene	55	TRG	3.211	16.34	16.68	91.00	2502541
108-67-8	1,3,5-Trimethylbenzene	58	TRG	3.982	17.86	18.21	105.00	4014361
95-63-6	1,2,4-Trimethylbenzene	59	TRG	3.282	18.57	18.93	105.00	3186885
363-72-4	Pentafluorobenzene	1	IS	20.000	9.56	9.84	168.00	**8906985**
108-88-3	1,4-Difluorobenzene	27	IS	20.000	10.72	11.01	114.00	**9483153**
3114-55-4	Chlorobenzene-d5	49	IS	20.000	15.21	15.56	117.00	**10974978**
2037-26-5	Toluene-d8	41	SURR	10.910	13.06	13.39	98.00	**5878515**

QUANTITATION REPORT LCD

EPA Method TO-15 Modified Full Scan GC/MS

							SDG:	**LABQC**	
							EAS ID:	**QC12134A**	
File Name:	QC12134A.D						**Date Sampled:**		**Time:**
Sample ID:	ST63255						**Date Received:**		**Time:**
Method:	**TO15**						**Date Analyzed:**	**12/13/24**	**Time:** **10:32**
MiscInfo-Vol:	5 ML	MDL FAC:	**1**				**Can Factor:**	**1.00**	
Date:	13 Dec 124 10:32 am	SF:	**2**				**Volume:**	**5.00**	
Run Method:	A1563_L.M	SamType:	**LCS**				**Can (Vial) No:**	**NA**	
Quant Method:	A1563_L.M	UnitDil:	**1000**	PPBV	UG/M3		**QCbatch:**	**121324-MA1**	
Cal Update:	Mon Oct 21 15:14:35 2024	Temp:	**25.0**				**Matrix:**	**AA**	
Instrument:	5970 - MS	Instrument ID:	**MA1**						
Analyst:	TR	Multiplier:	1.00						
		Type:	**TRG**						

CAS#	Compound	n	Type	Raw Amount	RT	Target RT	Ion	Sample Area
75-01-4	Vinyl chloride	5	TRG	3.246	4.89	4.98	62.00	499884
75-35-4	1,1-Dichloroethene	13	TRG	2.547	6.87	7.06	61.00	789217
75-09-2	Dichloromethane	15	TRG	4.427	7.15	7.35	84.00	444071
75-34-3	1,1-Dichloroethane	19	TRG	2.931	8.17	8.40	63.00	866361
67-66-3	Chloroform	26	TRG	3.900	9.16	9.43	83.00	906629
71-55-6	1,1,1-Trichloroethane	28	TRG	2.693	9.97	10.25	97.00	763927
107-06-2	1,2-Dichloroethane	29	TRG	2.152	10.00	10.28	61.95	631567
71-43-2	Benzene	31	TRG	2.483	10.41	10.70	78.00	1562820
56-23-5	Carbon tetrachloride	32	TRG	3.360	10.44	10.73	116.90	522604
79-01-6	Trichloroethene	36	TRG	3.858	11.37	11.66	130.00	916478
108-88-3	Toluene	42	TRG	4.376	13.18	13.51	91.00	2844898
106-93-4	1,2-Dibromoethane	47	TRG	1.672	14.27	14.61	107.00	704597
127-18-4	Tetrachloroethene	48	TRG	2.066	14.34	14.68	166.00	710038
100-41-4	Ethylbenzene	51	TRG	3.778	15.55	15.89	91.00	4222794
1330-20-7	m,p-Xylenes	52	TRG	3.330	15.70	16.05	91.00	3271153
95-47-6	o-Xylene	55	TRG	3.438	16.34	16.68	91.00	3479183
108-67-8	1,3,5-Trimethylbenzene	58	TRG	3.812	17.85	18.21	105.00	4988539
95-63-6	1,2,4-Trimethylbenzene	59	TRG	2.961	18.57	18.93	105.00	3732171
363-72-4	Pentafluorobenzene	1	IS	20.000	9.57	9.84	168.00	**8833571**
108-88-3	1,4-Difluorobenzene	27	IS	20.000	10.72	11.01	114.00	**10508453**
3114-55-4	Chlorobenzene-d5	49	IS	20.000	15.23	15.56	117.00	**14248446**
2037-26-5	Toluene-d8	41	SURR	11.175	13.07	13.39	98.00	**6672001**

QC CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

	LCS	LCD	
EAS ID:	QC12134C	QC12134A	
File Name:	QC12134C.D	QC12134A.D	
Sample ID	ST63255	ST63255	Can Factor: 1.00
QC Batch:	121324-MA1		
Air Volume:	5.0 ml		
Base Volume	1000 ml		
Combined Factor:	200.00		
Gas Constant:	23.8		
Unit Factor (ppbv):	1000 PPBV	UG/M3	
Sig Figs:	2		

Compound	Raw Amount	PPBV	Fixed PPBV	(1) %	FIXED %	Flag	Fixed MDL PPBV	Spike	Spike PPBV	LCL	UCL	RPD %	FIXED RPD %
Vinyl chloride	3.12	3.12	3.12	111	111		0.20	**2.83**	2.83	70	130	4	4
1,1-Dichloroethene	2.07	2.07	2.07	90	90		0.20	**2.31**	2.31	70	130	21	21
Dichloromethane	4.54	4.54	4.54	115	115		0.20	**3.93**	3.93	70	130	3	3
1,1-Dichloroethane	2.40	2.40	2.40	82	82		0.20	**2.92**	2.92	70	130	20	20
Chloroform	3.13	3.13	3.13	87	87		0.20	**3.58**	3.58	70	130	22	22
1,1,1-Trichloroethane	2.36	2.36	2.36	75	75		0.20	**3.16**	3.16	70	130	13	13
1,2-Dichloroethane	1.80	1.80	1.80	83	83		0.20	**2.16**	2.16	70	130	18	18
Benzene	2.33	2.33	2.33	80	80		0.20	**2.89**	2.89	70	130	6	6
Carbon tetrachloride	2.87	2.87	2.87	77	77		0.20	**3.73**	3.73	70	130	16	16
Trichloroethene	3.59	3.59	3.59	90	90		0.20	**3.99**	3.99	70	130	7	7
Toluene	3.75	3.75	3.75	96	96		0.20	**3.91**	3.91	70	130	15	15
1,2-Dibromoethane	1.35	1.35	1.35	83	83		0.20	**1.63**	1.63	70	130	21	21
Tetrachloroethene	1.78	1.78	1.78	71	71		0.20	**2.50**	2.50	70	130	15	15
Ethylbenzene	3.59	3.59	3.59	99	99		0.20	**3.62**	3.62	70	130	5	5
m,p-Xylenes	3.18	3.18	3.18	97	97		0.20	**3.30**	3.30	70	130	4	4
o-Xylene	3.21	3.21	3.21	98	98		0.20	**3.29**	3.29	70	130	7	7
1,3,5-Trimethylbenzene	3.98	3.98	3.98	102	102		0.20	**3.92**	3.92	70	130	4	4
1,2,4-Trimethylbenzene	3.28	3.28	3.28	97	97		0.20	**3.37**	3.37	70	130	10	10
Toluene-d8	10.91	10.91	10.91	109	109				10.00	70	130		
Vinyl chloride	3.25	3.25	3.25	115	115		0.20	**2.83**	2.83	70	130		
1,1-Dichloroethene	2.55	2.55	2.55	110	110		0.20	**2.31**	2.31	70	130		
Dichloromethane	4.43	4.43	4.43	113	113		0.20	**3.93**	3.93	70	130		
1,1-Dichloroethane	2.93	2.93	2.93	100	100		0.20	**2.92**	2.92	70	130		
Chloroform	3.90	3.90	3.90	109	109		0.20	**3.58**	3.58	70	130		
1,1,1-Trichloroethane	2.69	2.69	2.69	85	85		0.20	**3.16**	3.16	70	130		
1,2-Dichloroethane	2.15	2.15	2.15	100	100		0.20	**2.16**	2.16	70	130		
Benzene	2.48	2.48	2.48	86	86		0.20	**2.89**	2.89	70	130		
Carbon tetrachloride	3.36	3.36	3.36	90	90		0.20	**3.73**	3.73	70	130		
Trichloroethene	3.86	3.86	3.86	97	97		0.20	**3.99**	3.99	70	130		
Toluene	4.38	4.38	4.38	112	112		0.20	**3.91**	3.91	70	130		
1,2-Dibromoethane	1.67	1.67	1.67	103	103		0.20	**1.63**	1.63	70	130		
Tetrachloroethene	2.07	2.07	2.07	83	83		0.20	**2.50**	2.50	70	130		
Ethylbenzene	3.78	3.78	3.78	104	104		0.20	**3.62**	3.62	70	130		
m,p-Xylenes	3.33	3.33	3.33	101	101		0.20	**3.30**	3.30	70	130		

Compound	Raw Amount	PPBV	PPBV	%	%	Flag	MDL PPBV	Spike	Spike PPBV	LCL	UCL	RPD %	RPD %
o-Xylene	3.44	3.44	3.44	105	105		0.20	**3.29**	3.29	70	130		
1,3,5-Trimethylbenzene	3.81	3.81	3.81	97	97		0.20	**3.92**	3.92	70	130		
1,2,4-Trimethylbenzene	2.96	2.96	2.96	88	88		0.20	**3.37**	3.37	70	130		
Toluene-d8	11.17	11.17	11.17	112	112				10.00	70	130		

Quality Control Report

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate
EPA Method TO-15 Volatile Organic Compounds by GC/MS

QC Batch: 121324-MA1
Analysis Date: 12/13/24

Compound	Spike PPBV	LCS PPBV	Recovery %	Flag	LCD PPBV	Recovery %	Flag	LCL	UCL	RPD %	Limit	Flag
Vinyl chloride	2.83	3.12	111		3.25	115		70	130	4	25	
1,1-Dichloroethene	2.31	2.07	90		2.55	110		70	130	21	25	
Dichloromethane	3.93	4.54	115		4.43	113		70	130	3	25	
1,1-Dichloroethane	2.92	2.40	82		2.93	100		70	130	20	25	
Chloroform	3.58	3.13	87		3.90	109		70	130	22	25	
1,1,1-Trichloroethane	3.16	2.36	75		2.69	85		70	130	13	25	
1,2-Dichloroethane	2.16	1.80	83		2.15	100		70	130	18	25	
Benzene	2.89	2.33	80		2.48	86		70	130	6	25	
Carbon tetrachloride	3.73	2.87	77		3.36	90		70	130	16	25	
Trichloroethene	3.99	3.59	90		3.86	97		70	130	7	25	
Toluene	3.91	3.75	96		4.38	112		70	130	15	25	
1,2-Dibromoethane	1.63	1.35	83		1.67	103		70	130	21	25	
Tetrachloroethene	2.50	1.78	71		2.07	83		70	130	15	25	
Ethylbenzene	3.62	3.59	99		3.78	104		70	130	5	25	
m,p-Xylenes	3.30	3.18	97		3.33	101		70	130	4	25	
o-Xylene	3.29	3.21	98		3.44	105		70	130	7	25	
1,3,5-Trimethylbenze	3.92	3.98	102		3.81	97		70	130	4	25	
1,2,4-Trimethylbenze	3.37	3.28	97		2.96	88		70	130	10	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate Report

TO15 **Volatile Organic Compounds by GC/MS**

QC_Batch: 121624-MA1
Date: 12/16/24

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
75-01-4	Vinyl chloride	121		115		70	130	5	25	
75-35-4	1,1-Dichloroethene	73		93		70	130	24	25	
75-09-2	Dichloromethane	129		115		70	130	12	25	
75-34-3	1,1-Dichloroethane	87		103		70	130	17	25	
67-66-3	Chloroform	99		114		70	130	14	25	
71-55-6	1,1,1-Trichloroethane	78		95		70	130	19	25	
107-06-2	1,2-Dichloroethane	98		81		70	130	19	25	
71-43-2	Benzene	87		91		70	130	4	25	
56-23-5	Carbon tetrachloride	82		95		70	130	16	25	
79-01-6	Trichloroethene	102		100		70	130	2	25	
108-88-3	Toluene	113		113		70	130	0	25	
106-93-4	1,2-Dibromoethane	108		117		70	130	8	25	
127-18-4	Tetrachloroethene	91		97		70	130	7	25	
100-41-4	Ethylbenzene	97		92		70	130	5	25	
1330-20-7	m,p-Xylenes	96		89		70	130	8	25	
95-47-6	o-Xylene	96		89		70	130	8	25	
108-67-8	1,3,5-Trimethylbenzene	105		86		70	130	20	25	
95-63-6	1,2,4-Trimethylbenzene	102		99		70	130	3	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

QUANTITATION REPORT LCS

EPA Method TO-15 Modified Full Scan GC/MS

File Name:	QC12164B.D					**SDG:**	**LABQC**	
Sample ID:	ST63255					**EAS ID:**	**QC12164B**	
Method:	**TO15**					**Date Sampled:**		**Time:**
MiscInfo-Vol:	5 ML	MDL FAC:	**1**			**Date Received:**		**Time:**
Date:	16 Dec 124 10:40 am	SF:	**2**			**Date Analyzed:**	**12/16/24**	**Time:** **10:40**
Run Method:	A1563_L.M	SamType:	**LCS**			**Can Factor:**	**1.00**	
Quant Method:	A1563_L.M	UnitDil:	**1000**	PPBV	UG/M3	**Volume:**	**5.00**	
Cal Update:	Mon Oct 21 15:14:35 2024	Temp:	**25.0**			**Can (Vial) No:**	**NA**	
Instrument:	5970 - MS	Instrument ID:	**MA1**			**QCbatch:**	**121624-MA1**	
Analyst:	MM	Multiplier:	1.00			**Matrix:**	**AA**	
		Type:	**TRG**					

CAS#	Compound	n	Type	Raw Amount	RT	Target RT	Ion	Sample Area
75-01-4	Vinyl chloride	5	TRG	3.461	4.94	4.98	62.00	543074
75-35-4	1,1-Dichloroethene	13	TRG	1.658	6.91	7.06	61.00	523471
75-09-2	Dichloromethane	15	TRG	5.174	7.18	7.35	84.00	528882
75-34-3	1,1-Dichloroethane	19	TRG	2.528	8.21	8.40	63.00	761523
67-66-3	Chloroform	26	TRG	3.560	9.20	9.43	83.00	843255
71-55-6	1,1,1-Trichloroethane	28	TRG	2.439	9.98	10.25	97.00	682906
107-06-2	1,2-Dichloroethane	29	TRG	2.108	10.02	10.28	61.95	610936
71-43-2	Benzene	31	TRG	2.506	10.43	10.70	78.00	1557072
56-23-5	Carbon tetrachloride	32	TRG	3.019	10.46	10.73	116.90	463432
79-01-6	Trichloroethene	36	TRG	4.078	11.37	11.66	130.00	956446
108-88-3	Toluene	42	TRG	4.453	13.19	13.51	91.00	2857487
106-93-4	1,2-Dibromoethane	47	TRG	1.760	14.27	14.61	107.00	732538
127-18-4	Tetrachloroethene	48	TRG	2.267	14.34	14.68	166.00	769010
100-41-4	Ethylbenzene	51	TRG	3.519	15.55	15.89	91.00	4463051
1330-20-7	m,p-Xylenes	52	TRG	3.173	15.70	16.05	91.00	3536135
95-47-6	o-Xylene	55	TRG	3.161	16.34	16.68	91.00	3629306
108-67-8	1,3,5-Trimethylbenzene	58	TRG	4.143	17.85	18.21	105.00	6152066
95-63-6	1,2,4-Trimethylbenzene	59	TRG	3.462	18.57	18.93	105.00	4951163
363-72-4	Pentafluorobenzene	1	IS	20.000	9.59	9.84	168.00	**9000998**
108-88-3	1,4-Difluorobenzene	27	IS	20.000	10.74	11.01	114.00	**10373819**
3114-55-4	Chlorobenzene-d5	49	IS	20.000	15.23	15.56	117.00	**16167357**
2037-26-5	Toluene-d8	41	SURR	12.404	13.07	13.39	98.00	**7311431**

QUANTITATION REPORT LCD

EPA Method TO-15 Modified Full Scan GC/MS

							SDG:	**LABQC**	
							EAS ID:	**QC12164A**	
File Name:	QC12164A.D						**Date Sampled:**		**Time:**
Sample ID:	ST63255						**Date Received:**		**Time:**
Method:	**TO15**						**Date Analyzed:**	**12/16/24**	**Time:** **10:05**
MiscInfo-Vol:	5 ML	MDL FAC:	**1**				**Can Factor:**	**1.00**	
Date:	16 Dec 124 10:05 am	SF:	**2**				**Volume:**	**5.00**	
Run Method:	A1563_L.M	SamType:	**LCD**				**Can (Vial) No:**	**NA**	
Quant Method:	A1563_L.M	UnitDil:	**1000**	PPBV	UG/M3		**QCbatch:**	**121624-MA1**	
Cal Update:	Mon Oct 21 15:14:35 2024	Temp:	**25.0**				**Matrix:**	**AA**	
Instrument:	5970 - MS	Instrument ID:	**MA1**						
Analyst:	TR	Multiplier:	1.00						
		Type:	**TRG**						

CAS#	Compound	n	Type	Raw Amount	RT	Target RT	Ion	Sample Area
75-01-4	Vinyl chloride	5	TRG	3.298	4.94	4.98	62.00	470669
75-35-4	1,1-Dichloroethene	13	TRG	2.109	6.92	7.06	61.00	605723
75-09-2	Dichloromethane	15	TRG	4.589	7.20	7.35	84.00	426623
75-34-3	1,1-Dichloroethane	19	TRG	2.995	8.21	8.40	63.00	820320
67-66-3	Chloroform	26	TRG	4.090	9.20	9.43	83.00	881226
71-55-6	1,1,1-Trichloroethane	28	TRG	2.961	9.98	10.25	97.00	783010
107-06-2	1,2-Dichloroethane	29	TRG	1.737	10.02	10.28	61.95	475296
71-43-2	Benzene	31	TRG	2.610	10.43	10.70	78.00	1531190
56-23-5	Carbon tetrachloride	32	TRG	3.527	10.46	10.73	116.90	511172
79-01-6	Trichloroethene	36	TRG	4.016	11.38	11.66	130.00	889174
108-88-3	Toluene	42	TRG	4.467	13.19	13.51	91.00	2706738
106-93-4	1,2-Dibromoethane	47	TRG	1.907	14.27	14.61	107.00	749143
127-18-4	Tetrachloroethene	48	TRG	2.426	14.35	14.68	166.00	776881
100-41-4	Ethylbenzene	51	TRG	3.345	15.55	15.89	91.00	3928443
1330-20-7	m,p-Xylenes	52	TRG	2.926	15.72	16.05	91.00	3020222
95-47-6	o-Xylene	55	TRG	2.903	16.35	16.68	91.00	3086833
108-67-8	1,3,5-Trimethylbenzene	58	TRG	3.377	17.87	18.21	105.00	4643174
95-63-6	1,2,4-Trimethylbenzene	59	TRG	3.350	18.57	18.93	105.00	4437160
363-72-4	Pentafluorobenzene	1	IS	20.000	9.59	9.84	168.00	**8186394**
108-88-3	1,4-Difluorobenzene	27	IS	20.000	10.73	11.01	114.00	**9794287**
3114-55-4	Chlorobenzene-d5	49	IS	20.000	15.22	15.56	117.00	**14971262**
2037-26-5	Toluene-d8	41	SURR	12.831	13.07	13.39	98.00	**7140151**

QC CALCULATIONS

EPA Method TO-15 Modified Full Scan GC/MS

	LCS	LCD	
EAS ID:	QC12164B	QC12164A	
File Name:	QC12164B.D	QC12164A.D	
Sample ID	ST63255	ST63255	Can Factor: 1.00
QC Batch:	121624-MA1		
Air Volume:	5.0 ml		
Base Volume	1000 ml		
Combined Factor:	200.00		
Gas Constant:	23.8		
Unit Factor (ppbv):	1000 PPBV	UG/M3	
Sig Figs:	2		

Compound	Raw Amount	PPBV	Fixed PPBV	(1) %	FIXED %	Flag	Fixed MDL PPBV	Spike	Spike PPBV	LCL	UCL	RPD %	FIXED RPD %
Vinyl chloride	3.46	3.46	3.46	121	121		0.20	**2.86**	2.86	70	130	5	5
1,1-Dichloroethene	1.66	1.66	1.66	73	73		0.20	**2.27**	2.27	70	130	24	24
Dichloromethane	5.17	5.17	5.17	129	129		0.20	**4.00**	4.00	70	130	12	12
1,1-Dichloroethane	2.53	2.53	2.53	87	87		0.20	**2.90**	2.90	70	130	17	17
Chloroform	3.56	3.56	3.56	99	99		0.20	**3.58**	3.58	70	130	14	14
1,1,1-Trichloroethane	2.44	2.44	2.44	78	78		0.20	**3.12**	3.12	70	130	19	19
1,2-Dichloroethane	2.11	2.11	2.11	98	98		0.20	**2.16**	2.16	70	130	19	19
Benzene	2.51	2.51	2.51	87	87		0.20	**2.87**	2.87	70	130	4	4
Carbon tetrachloride	3.02	3.02	3.02	82	82		0.20	**3.69**	3.69	70	130	16	16
Trichloroethene	4.08	4.08	4.08	102	102		0.20	**4.00**	4.00	70	130	2	2
Toluene	4.45	4.45	4.45	113	113		0.20	**3.94**	3.94	70	130	0	0
1,2-Dibromoethane	1.76	1.76	1.76	108	108		0.20	**1.64**	1.64	70	130	8	8
Tetrachloroethene	2.27	2.27	2.27	91	91		0.20	**2.49**	2.49	70	130	7	7
Ethylbenzene	3.52	3.52	3.52	97	97		0.20	**3.62**	3.62	70	130	5	5
m,p-Xylenes	3.17	3.17	3.17	96	96		0.20	**3.29**	3.29	70	130	8	8
o-Xylene	3.16	3.16	3.16	96	96		0.20	**3.28**	3.28	70	130	8	8
1,3,5-Trimethylbenzene	4.14	4.14	4.14	105	105		0.20	**3.94**	3.94	70	130	20	20
1,2,4-Trimethylbenzene	3.46	3.46	3.46	102	102		0.20	**3.38**	3.38	70	130	3	3
Toluene-d8	12.40	12.40	12.40	124	124				10.00	70	130		
Vinyl chloride	3.30	3.30	3.30	115	115		0.20	**2.86**	2.86	70	130		
1,1-Dichloroethene	2.11	2.11	2.11	93	93		0.20	**2.27**	2.27	70	130		
Dichloromethane	4.59	4.59	4.59	115	115		0.20	**4.00**	4.00	70	130		
1,1-Dichloroethane	2.99	2.99	2.99	103	103		0.20	**2.90**	2.90	70	130		
Chloroform	4.09	4.09	4.09	114	114		0.20	**3.58**	3.58	70	130		
1,1,1-Trichloroethane	2.96	2.96	2.96	95	95		0.20	**3.12**	3.12	70	130		
1,2-Dichloroethane	1.74	1.74	1.74	81	81		0.20	**2.16**	2.16	70	130		
Benzene	2.61	2.61	2.61	91	91		0.20	**2.87**	2.87	70	130		
Carbon tetrachloride	3.53	3.53	3.53	95	95		0.20	**3.69**	3.69	70	130		
Trichloroethene	4.02	4.02	4.02	100	100		0.20	**4.00**	4.00	70	130		
Toluene	4.47	4.47	4.47	113	113		0.20	**3.94**	3.94	70	130		
1,2-Dibromoethane	1.91	1.91	1.91	117	117		0.20	**1.64**	1.64	70	130		
Tetrachloroethene	2.43	2.43	2.43	97	97		0.20	**2.49**	2.49	70	130		
Ethylbenzene	3.34	3.34	3.34	92	92		0.20	**3.62**	3.62	70	130		
m,p-Xylenes	2.93	2.93	2.93	89	89		0.20	**3.29**	3.29	70	130		

Compound	Raw Amount	PPBV	PPBV	%	%	Flag	MDL PPBV	Spike	Spike PPBV	LCL	UCL	RPD %	RPD %
o-Xylene	2.90	2.90	2.90	89	89		0.20	**3.28**	3.28	70	130		
1,3,5-Trimethylbenzene	3.38	3.38	3.38	86	86		0.20	**3.94**	3.94	70	130		
1,2,4-Trimethylbenzene	3.35	3.35	3.35	99	99		0.20	**3.38**	3.38	70	130		
Toluene-d8	12.83	12.83	12.83	128	128				10.00	70	130		

Quality Control Report

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Spike Duplicate
EPA Method TO-15 Volatile Organic Compounds by GC/MS

QC Batch: 121624-MA1
Analysis Date: 12/16/24

Compound	Spike PPBV	LCS PPBV	Recovery %	Flag	LCD PPBV	Recovery %	Flag	LCL	UCL	RPD %	Limit	Flag
Vinyl chloride	2.86	3.46	121		3.30	115		70	130	5	25	
1,1-Dichloroethene	2.27	1.66	73		2.11	93		70	130	24	25	
Dichloromethane	4.00	5.17	129		4.59	115		70	130	12	25	
1,1-Dichloroethane	2.90	2.53	87		2.99	103		70	130	17	25	
Chloroform	3.58	3.56	99		4.09	114		70	130	14	25	
1,1,1-Trichloroethane	3.12	2.44	78		2.96	95		70	130	19	25	
1,2-Dichloroethane	2.16	2.11	98		1.74	81		70	130	19	25	
Benzene	2.87	2.51	87		2.61	91		70	130	4	25	
Carbon tetrachloride	3.69	3.02	82		3.53	95		70	130	16	25	
Trichloroethene	4.00	4.08	102		4.02	100		70	130	2	25	
Toluene	3.94	4.45	113		4.47	113		70	130	0	25	
1,2-Dibromoethane	1.64	1.76	108		1.91	117		70	130	8	25	
Tetrachloroethene	2.49	2.27	91		2.43	97		70	130	7	25	
Ethylbenzene	3.62	3.52	97		3.34	92		70	130	5	25	
m,p-Xylenes	3.29	3.17	96		2.93	89		70	130	8	25	
o-Xylene	3.28	3.16	96		2.90	89		70	130	8	25	
1,3,5-Trimethylbenze	3.94	4.14	105		3.38	86		70	130	20	25	
1,2,4-Trimethylbenze	3.38	3.46	102		3.35	99		70	130	3	25	

LCS - Laboratory Control Spike
LCD - Laboratory Control Duplicate

Flag - Q indicated out of Limits

Continuing Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

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Chromatogram

CONTINUING CALIBRATION REPORT

SDG:	**LABQC**		**Sample Calculation:**
QC_Batch:	**121624-MA1**		1) $CCRFi = \frac{(Astdi)\ (Cistdi)}{(Cstdi)\ (Aistdi)}$ i
Sample ID:	ST62126		
Sample Analysis Date:	16 Dec 124 8:48 am		
Run Method:	A1563_L.M		CCRFi is the Continuing Calibration RF
Quant/Calibration Method:	A15CS2_M.M		
Calibration Level:	**Level 4**	**10**	PFB - Pentafluorobenzene
			14DFB - 1,4-Difluorobenzene
A passing calibration can have (10%) or 10 compounds out			d5CB - d5-Chlorobenzene

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Propylene	937262	**9.500**	0.214	0.197	-9.0	**30**	IN	**PFB**
Dichlorodifluoromethane	3592794	**9.500**	0.821	0.782	-5.0	**30**	IN	**PFB**
Methanol	2031310	**15.700**	0.281	0.216	-29.8	**50**	IN	**PFB**
Chloromethane	1172836	**9.500**	0.268	0.234	-14.5	**30**	IN	**PFB**
1,2-Dichlorotetrafluoroethane	3447781	**9.500**	0.788	0.630	-25.0	**30**	IN	**PFB**
Vinyl chloride	1526534	**9.500**	0.349	0.287	-21.7	**30**	IN	**PFB**
1,3-Butadiene	1036960	**9.500**	0.237	0.198	-19.5	**30**	IN	**PFB**
Bromomethane	1344473	**9.500**	0.307	0.244	-25.8	**30**	IN	**PFB**
Chloroethane	508702	**9.500**	0.116	0.129	9.7	**30**	IN	**PFB**
Ethanol	1243824	**32.080**	0.084	0.062	-35.9	**50**	IN	**PFB**
Acrolein	442970	**13.780**	0.070	0.086	18.6	**30**	IN	**PFB**
Trichlorofluoromethane	1528166	**9.130**	0.363	0.476	23.6	**30**	IN	**PFB**
Acetone	719819	**12.750**	0.123	0.203	39.7	**40**	IN	**PFB**
2-propanol (isopropylalcohol)	1764964	**12.270**	0.312	0.393	20.6	**50**	IN	**PFB**
t-Butyl alcohol	1034811	**9.120**	0.246	0.444	44.5	**40**	OUT	**PFB**
Methyl iodide	859591	**2.780**	0.671	0.700	4.1	**30**	IN	**PFB**
1,1-Dichloroethene	938952	**8.690**	0.235	0.475	50.7	**30**	OUT	**PFB**
Acrylonitrile	712095	**10.550**	0.147	0.203	27.8	**40**	IN	**PFB**
1,1,2-Trichlorotrifluoroethane	1431805	**8.410**	0.370	0.417	11.5	**30**	IN	**PFB**
Allyl chloride	455864	**9.970**	0.099	0.081	-23.0	**40**	IN	**PFB**
Methylene chloride	846632	**9.160**	0.201	0.223	10.0	**30**	IN	**PFB**
Carbon disulfide	3026757	**9.630**	0.682	0.657	-3.9	**30**	IN	**PFB**
trans-1,2-Dichloroethene	936920	**7.490**	0.272	0.275	1.3	**30**	IN	**PFB**
Methyl tert butyl ether	1416431	**7.640**	0.402	0.637	36.8	**40**	IN	**PFB**
Propionitrile	1026224	**13.020**	0.171	0.180	4.9	**40**	IN	**PFB**
1,1-Dichloroethane	1591985	**8.760**	0.394	0.488	19.2	**30**	IN	**PFB**
Ethyl tert butyl ether	879120	**6.020**	0.317	0.535	40.8	**40**	OUT	**PFB**
Vinyl acetate	472688	**9.110**	0.113	0.103	-9.0	**40**	IN	**PFB**
2-Butanone (MEK)	726809	**10.550**	0.150	0.133	-12.7	**40**	IN	**PFB**
Diisopropyl ether	388228	**5.400**	0.156	0.172	9.3	**40**	IN	**PFB**
Hexane	1000807	**7.660**	0.284	0.382	25.8	**40**	IN	**PFB**
Methacrylonitrile	607404	**9.950**	0.133	0.154	13.8	**40**	IN	**PFB**
Ethyl acetate	1205289	**9.080**	0.288	0.405	28.8	**40**	IN	**PFB**
Bromochloromethane	681263	**5.520**	0.268	0.358	25.2	**30**	IN	**PFB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Methyl acrylate	279618	**4.910**	0.124	0.147	16.2	**40**	IN	**PFB**
Tetrahydrofuran	656899	**10.770**	0.132	0.137	3.7	**40**	IN	**PFB**
Isobutyl alcohol	127924	**7.570**	0.037	0.030	-23.2	**40**	IN	**PFB**
cis-1,2-Dichloroethene	1277134	**9.430**	0.294	0.292	-0.8	**30**	IN	**PFB**
2,2-Dichloropropane	1446411	**9.230**	0.340	0.382	11.0	**30**	IN	**PFB**
Chloroform	1479282	**9.540**	0.337	0.452	25.5	**30**	IN	**PFB**
1,1,1-Trichloroethane	1464924	**8.420**	0.337	0.479	29.7	**30**	IN	**14DFB**
1,2-Dichloroethane	788670	**8.670**	0.176	0.297	40.6	**30**	OUT	**14DFB**
1,1-Dichloropropene	976363	**6.830**	0.277	0.393	29.6	**30**	IN	**14DFB**
Cyclohexane	833642	**7.940**	0.203	0.333	39.0	**30**	OUT	**14DFB**
Benzene	3391832	**8.930**	0.735	0.794	7.4	**30**	IN	**14DFB**
Carbon tetrachloride	1206717	**8.990**	0.260	0.299	13.0	**30**	IN	**14DFB**
t-Amyl methyl ether	1195585	**4.600**	0.503	0.719	30.0	**40**	IN	**14DFB**
2,2,4-Trimethylpentane	2886453	**5.650**	0.989	1.133	12.7	**30**	IN	**14DFB**
n-Heptane	722858	**6.280**	0.223	0.254	12.2	**30**	IN	**14DFB**
1,2-Dichloropropane	1076307	**9.150**	0.228	0.296	23.1	**30**	IN	**14DFB**
1,4 Dioxane	2902455	**17.520**	0.321	0.239	-33.9	**40**	IN	**14DFB**
Dibromomethane	1323318	**3.900**	0.657	0.615	-6.9	**30**	IN	**14DFB**
Trichloroethene (TCE)	2284438	**8.860**	0.499	0.487	-2.4	**30**	IN	**14DFB**
Bromodichloromethane	857300	**4.170**	0.398	0.438	9.1	**40**	IN	**14DFB**
Methyl methacrylate	600671	**7.010**	0.166	0.149	-11.0	**40**	IN	**14DFB**
4-Methyl-2-pentanone (MIBK)	1090409	**7.840**	0.269	0.237	-13.6	**40**	IN	**14DFB**
cis-1,3-Dichloropropene	2148115	**9.100**	0.457	0.360	-27.1	**30**	IN	**14DFB**
Toluene	6475564	**9.160**	1.368	1.116	-22.6	**30**	IN	**14DFB**
trans-1,3-Dichloropropene	1924191	**9.110**	0.409	0.315	-29.9	**30**	IN	**14DFB**
1,1,2-Trichloroethane	722201	**9.030**	0.155	0.192	19.3	**30**	IN	**14DFB**
Ethyl methacrylate	757012	**4.790**	0.306	0.273	-11.9	**40**	IN	**14DFB**
2-Hexanone	1791824	**7.350**	0.472	0.350	-34.8	**40**	IN	**14DFB**
1,3-Dichloropropane	2649464	**6.810**	0.753	0.694	-8.5	**30**	IN	**14DFB**
Octane	1304478	**5.650**	0.447	0.434	-2.9	**30**	IN	**14DFB**
Dibromochloromethane	1708347	**4.140**	0.799	0.672	-18.9	**40**	IN	**14DFB**
1,2-Dibromoethane (EDB)	2510763	**4.610**	1.054	0.818	-28.8	**30**	IN	**14DFB**
Tetrachloroethene (PCE)	1949588	**4.630**	0.815	0.839	2.8	**30**	IN	**14DFB**
Chlorobenzene	6700972	**8.650**	0.967	0.942	-2.6	**30**	IN	**d5CB**
1,1,1,2-Tetrachloroethane	1003712	**4.290**	0.292	0.320	8.9	**30**	IN	**d5CB**
Ethylbenzene	10782402	**9.290**	1.448	1.492	2.9	**30**	IN	**d5CB**
m,p-Xylenes	8248228	**9.310**	1.105	1.216	9.1	**30**	IN	**d5CB**
Nonane	2256311	**4.930**	0.571	0.711	19.7	**30**	IN	**d5CB**
Styrene	8536258	**9.100**	1.170	0.978	-19.7	**30**	IN	**d5CB**
Bromoform	1813063	**2.780**	0.814	0.743	-9.6	**40**	IN	**d5CB**
o-Xylene	8625442	**9.050**	1.189	1.324	10.2	**30**	IN	**d5CB**
1,1,2,2-Tetrachloroethane	5472743	**4.710**	1.450	1.220	-18.8	**30**	IN	**d5CB**
1,2,3-Trichloropropane	1507120	**5.100**	0.369	0.304	-21.4	**30**	IN	**d5CB**
t-1,4-Dichloro-2-butene	406374	**5.770**	0.088	0.072	-22.6	**40**	IN	**d5CB**
n-Propylbenzene	13247151	**6.420**	2.575	2.369	-8.7	**30**	IN	**d5CB**
Isopropylbenzene	21276998	**6.490**	4.091	4.439	7.9	**30**	IN	**d5CB**
4-Ethyltoluene	21276998	**15.540**	1.708	1.859	8.1	**30**	IN	**d5CB**
1,3,5-Trimethylbenzene	10476783	**9.080**	1.440	1.922	25.1	**30**	IN	**d5CB**
Decane	4201993	**5.250**	0.999	1.250	20.1	**30**	IN	**d5CB**
tert-butyl benzene	8159302	**5.730**	1.777	1.914	7.2	**40**	IN	**d5CB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
1,2,4-Trimethylbenzene	12088349	**8.930**	1.689	1.525	-10.8	**30**	IN	**d5CB**
i-Butylbenzene	11400740	**5.690**	2.500	2.188	-14.2	**40**	IN	**d5CB**
sec-butylbenzene	14324365	**6.040**	2.959	2.560	-15.6	**40**	IN	**d5CB**
1,3-Dichlorobenzene	9038793	**7.050**	1.600	1.227	-30.4	**40**	IN	**d5CB**
Isopropyltoluene	10881762	**5.970**	2.274	2.351	3.3	**40**	IN	**d5CB**
Benzyl chloride	4544278	**6.280**	0.903	0.632	-43.0	**40**	OUT	**d5CB**
1,4-Dichlorobenzene	8118840	**6.580**	1.540	1.278	-20.5	**40**	IN	**d5CB**
n-Butylbenzene	12837258	**5.600**	2.860	2.239	-27.7	**40**	IN	**d5CB**
1,2-Dichlorobenzene	9964942	**6.492**	1.915	1.311	-46.1	**40**	OUT	**d5CB**
1,2-Dibromo-3-chloropropane	1161192	**6.280**	0.231	0.200	-15.5	**50**	IN	**d5CB**
1,2,4-Trichlorobenzene	677588	**3.270**	0.259	0.091	-184.6	**50**	OUT	**d5CB**
Naphthalene	103661	**1.530**	0.085	0.064	-32.3	**50**	IN	**d5CB**
1,2,3-Trichlorobenzene	70367	**4.910**	0.018	0.021	14.8	**50**	IN	**d5CB**
Hexachlorobutadiene	2768537	**2.520**	1.371	1.087	-26.1	**50**	IN	**d5CB**
Pentafluorobenzene	9213372	**20.000**		0.000				
1,4-Difluorobenzene	10331952	**20.000**		0.000				
Chlorobenzene-d5	16029281	**20.000**		0.000				
Toluene-d8	7619441	**10.000**		0.000				

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\C12164A.D
Acq Time : 16 Dec 124 8:48 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 16 10:05 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.57	168	9213372	20.00	ppbV	-0.25
42) 1,4-Difluorobenzene	10.72	114	10331952	20.00	ppbV	-0.28
71) Chlorobenzene-d5	15.22	117	16029281	20.00	ppbV	-0.35
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.07	98	7619441	12.42	ppbV	124.21
Target Compounds						Qvalue
2) Propylene	4.31	42	937262	10.35	ppbV m	77
3) Dichlorodifluoromethane	4.40	85	3592794	9.98	ppbV m	93
4) Methanol	4.76	31	2031310	20.37	ppbV m	94
5) Chloromethane	4.65	50	1172836	10.88	ppbV m	95
6) 1,2-Dichlorotetrafluoroeth	4.65	85	3447781	11.87	ppbV m	96
7) Vinyl chloride	4.89	62	1526534	11.56	ppbV m	97
8) 1,3-Butadiene	5.01	54	1036960	11.35	ppbV m	89
9) Bromomethane	5.42	94	1344473	11.95	ppbV m	91
10) Chloroethane	5.58	64	508702	8.58	ppbV m	94
11) Ethanol	5.59	46	1243824	43.59	ppbV m	86
12) Acrolein	6.14	56	442970	11.22	ppbV m	92
13) Trichlorofluoromethane	6.19	101	1528166	6.97	ppbV m	99
14) Acetone	6.24	58	719819	7.69	ppbV m	1
15) 2-propanol (isopropylalcoh	6.29	45	1764964	9.74	ppbV m	89
16) t-Butyl alcohol	6.86	59	1034811	5.06	ppbV m	85
17) Methyl iodide	6.98	142	859591	2.67	ppbV m	82
18) 1,1-Dichloroethene	6.87	61	938952	4.29	ppbV m	5
19) Acrylonitrile	6.87	53	712095	7.61	ppbV m	91
20) 1,1,2-Trichlorotrifluoroet	7.01	151	1431805	7.45	ppbV m	69
21) Allyl chloride	7.16	76	455864	12.26	ppbV m	85
22) Methylene chloride	7.13	84	846632	8.24	ppbV m	80
23) Carbon disulfide	7.40	76	3026757	10.01	ppbV m	79
24) trans-1,2-Dichloroethene	7.83	96	936920	7.39	ppbV m	40
25) Methyl tert butyl ether	7.90	73	1416431	4.83	ppbV m	86
26) Propionitrile	8.07	54	1026224	12.38	ppbV m	94
27) 1,1-Dichloroethane	8.16	63	1591985	7.08	ppbV m	97
28) Ethyl tert butyl ether	9.15	59	879120	3.56	ppbV m	53
29) Vinyl acetate	8.16	43	472688	9.93	ppbV m	83
30) 2-Butanone (MEK)	8.52	72	726809	11.89	ppbV m	91
31) Diisopropyl ether	8.65	87	388228	4.90	ppbV m	67
32) Hexane	8.60	57	1000807	5.68	ppbV m	78
33) Methacrylonitrile	8.63	67	607404	8.58	ppbV m	69
34) Ethyl acetate	8.91	61	1205289	6.47	ppbV m	68
35) Bromochloromethane	9.16	49	681263	4.13	ppbV m	1
36) Methyl acrylate	9.01	55	279618	4.12	ppbV m	67

(#) = qualifier out of range (m) = manual integration

Quantitation Report

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Acq Time : 16 Dec 124 8:48 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 16 10:05 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) Tetrahydrofuran	9.45	72	656899	10.37	ppbV	m	96
38) Isobutyl alcohol	9.27	74	127924	9.33	ppbV	m	59
39) cis-1,2-Dichloroethene	8.91	96	1277134	9.51	ppbV	m	35
40) 2,2-Dichloropropane	9.11	77	1446411	8.21	ppbV	m	88
41) Chloroform	9.16	83	1479282	7.10	ppbV	m	100
43) 1,1,1-Trichloroethane	9.97	97	1464924	5.92	ppbV	m	82
44) 1,2-Dichloroethane	10.00	62	788670	5.15	ppbV	m	95
45) 1,1-Dichloropropene	10.22	75	976363	4.81	ppbV	m	78
46) Cyclohexane	10.45	56	833642	4.85	ppbV	m	30
47) Benzene	10.41	78	3391832	8.27	ppbV	m	70
48) Carbon tetrachloride	10.45	117	1206717	7.82	ppbV	m	95
49) t-Amyl methyl ether	10.67	73	1195585	3.22	ppbV	m	89
50) 2,2,4-Trimethylpentane	10.96	57	2886453	4.93	ppbV	m	90
51) n-Heptane	11.18	71	722858	5.51	ppbV	m	77
52) 1,2-Dichloropropane	11.33	63	1076307	7.04	ppbV	m	94
53) 1,4 Dioxane	11.49	88	2902455	23.47	ppbV	m	39
54) Dibromomethane	11.45	174	1323318	4.17	ppbV	m	77
55) Trichloroethene (TCE)	11.37	130	2284438	9.07	ppbV	m	73
56) Bromodichloromethane	11.54	83	857300	3.79	ppbV	m	99
57) Methyl methacrylate	11.47	69	600671	7.78	ppbV	m	14
58) 4-Methyl-2-pentanone (MIBK	12.24	58	1090409	8.90	ppbV	m	78
59) cis-1,3-Dichloropropene	12.36	75	2148115	11.56	ppbV	m	77
61) Toluene	13.18	91	6475564	11.23	ppbV	m	100
62) trans-1,3-Dichloropropene	12.96	75	1924191	11.83	ppbV	m	74
63) 1,1,2-Trichloroethane	13.19	61	722201	7.29	ppbV	m	1
64) Ethyl methacrylate	13.31	69	757012	5.36	ppbV	m	91
65) 2-Hexanone	13.47	58	1791824	9.91	ppbV	m	85
66) 1,3-Dichloropropane	13.52	76	2649464	7.39	ppbV	m	97
67) Octane	13.72	85	1304478	5.82	ppbV	m	92
68) Dibromochloromethane	13.96	129	1708347	4.92	ppbV	m	94
69) 1,2-Dibromoethane (EDB)	14.27	107	2510763	5.94	ppbV	m	97
70) Tetrachloroethene (PCE)	14.34	166	1949588	4.50	ppbV	m	88
72) Chlorobenzene	15.27	112	6700972	8.88	ppbV	#	79
73) 1,1,1,2-Tetrachloroethane	15.29	131	1003712	3.91	ppbV	#	94
74) Ethylbenzene	15.55	91	10782402	9.02	ppbV		91
75) m,p-Xylenes	15.72	91	8248228	8.46	ppbV	#	73
76) Nonane	16.08	57	2256311	3.96	ppbV	#	79
77) Styrene	16.26	104	8536258	10.89	ppbV	#	80
78) Bromoform	16.30	173	1813063	3.05	ppbV		97
79) o-Xylene	16.35	91	8625442	8.13	ppbV	#	79
80) 1,1,2,2-Tetrachloroethane	16.66	83	5472743	5.60	ppbV	m	100
81) 1,2,3-Trichloropropane	16.86	110	1507120	6.19	ppbV		97
82) t-1,4-Dichloro-2-butene	16.88	53	406374	7.08	ppbV	m	1

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Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\C12164A.D
Acq Time : 16 Dec 124 8:48 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 16 10:05 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	13247151	6.98	ppbV	#	94
84)	Isopropylbenzene	17.87	105	21276998	5.98	ppbV	#	86
85)	4-Ethyltoluene	17.87	105	21276998	14.28	ppbV	#	80
86)	1,3,5-Trimethylbenzene	17.95	105	10476783	6.80	ppbV	m	85
87)	Decane	18.24	57	4201993	4.19	ppbV	#	76
88)	tert-butyl benzene	18.55	119	8159302	5.32	ppbV	#	73
89)	1,2,4-Trimethylbenzene	18.57	105	12088349	9.89	ppbV	#	83
90)	i-Butylbenzene	18.86	91	11400740	6.50	ppbV	#	96
91)	sec-butylbenzene	18.94	105	14324365	6.98	ppbV	#	89
92)	1,3-Dichlorobenzene	19.01	146	9038793	9.19	ppbV	m	88
93)	Isopropyltoluene	19.17	119	10881762	5.78	ppbV	#	83
94)	Benzyl chloride	19.08	91	4544278	8.98	ppbV	m	85
95)	1,4-Dichlorobenzene	19.13	146	8118840	7.93	ppbV	m	88
96)	n-Butylbenzene	19.83	91	12837258	7.15	ppbV	#	95
97)	1,2-Dichlorobenzene	19.69	146	9964942	9.48	ppbV	m	95
98)	1,2-Dibromo-3-chloropropan	20.63	75	1161192	7.25	ppbV	m	1
99)	1,2,4-Trichlorobenzene	22.56	180	677588	9.31	ppbV	m	99
100)	Naphthalene	22.83	128	103661	2.02	ppbV	m	93
101)	1,2,3-Trichlorobenzene	23.31	180	70367	4.18	ppbV		98
102)	Hexachlorobutadiene	23.14	225	2768537	3.18	ppbV		96

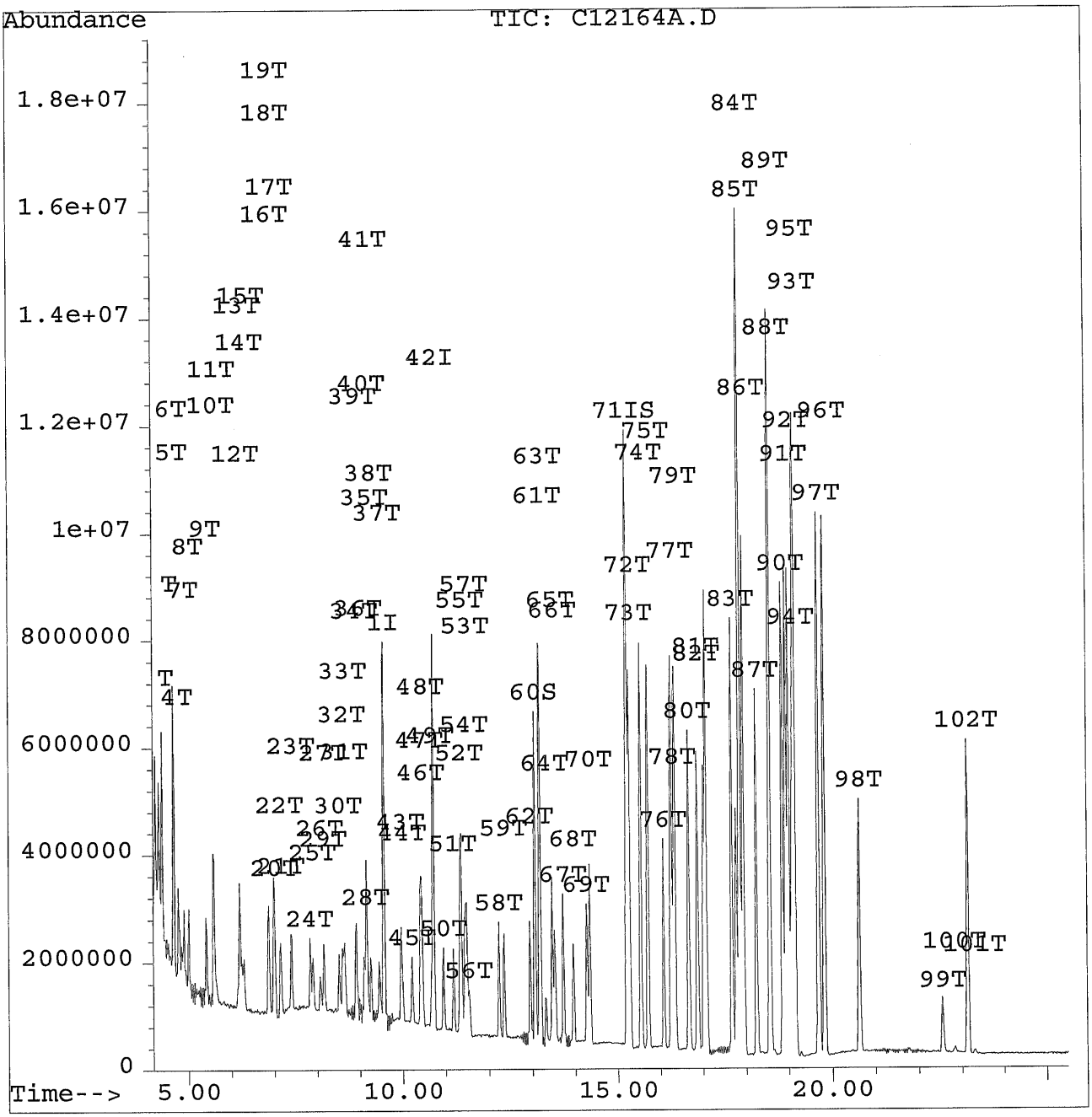
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12164A\C12164A.D
Acq Time : 16 Dec 124 8:48 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 16 10:05 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



CONTINUING CALIBRATION REPORT

SDG:	**LABQC**		**Sample Calculation:**
QC_Batch:	**121324-MA1**		1) $CCRFi = \left\| \frac{(Astdi) \cdot (Cistdi)}{(Cstdi)\ (Aistdi)} \right\|_i$
Sample ID:	ST62126		
Sample Analysis Date:	13 Dec 124 9:43 am		
Run Method:	A1563_L.M		CCRFi is the Continuing Calibration RF
Quant/Calibration Method:	A15CS2_M.M		
Calibration Level:	**Level 4**	**10**	PFB - Pentafluorobenzene
			14DFB - 1,4-Difluorobenzene
A passing calibration can have (10%) or 10 compounds out			d5CB - d5-Chlorobenzene

Compound	Area Astdi	**Cal Level Cstdi ppbv**	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	**Quant IS**
Propylene	766280	**9.500**	0.217	0.197	-10.4	**30**	IN	**PFB**
Dichlorodifluoromethane	2940862	**9.500**	0.833	0.782	-6.6	**30**	IN	**PFB**
Methanol	1714269	**15.700**	0.294	0.216	-35.8	**50**	IN	**PFB**
Chloromethane	917055	**9.500**	0.260	0.234	-11.0	**30**	IN	**PFB**
1,2-Dichlorotetrafluoroethane	2674182	**9.500**	0.758	0.630	-20.2	**30**	IN	**PFB**
Vinyl chloride	1108757	**9.500**	0.314	0.287	-9.6	**30**	IN	**PFB**
1,3-Butadiene	814373	**9.500**	0.231	0.198	-16.4	**30**	IN	**PFB**
Bromomethane	988599	**9.500**	0.280	0.244	-14.7	**30**	IN	**PFB**
Chloroethane	387815	**9.500**	0.110	0.129	14.7	**30**	IN	**PFB**
Ethanol	839245	**32.080**	0.070	0.062	-13.7	**50**	IN	**PFB**
Acrolein	563604	**13.780**	0.110	0.086	-28.4	**30**	IN	**PFB**
Trichlorofluoromethane	1942589	**9.130**	0.573	0.476	-20.4	**30**	IN	**PFB**
Acetone	866741	**12.750**	0.183	0.203	10.0	**40**	IN	**PFB**
2-propanol (isopropylalcohol)	2247305	**12.270**	0.493	0.393	-25.3	**50**	IN	**PFB**
t-Butyl alcohol	1881700	**9.120**	0.555	0.444	-25.1	**40**	IN	**PFB**
Methyl iodide	813947	**2.780**	0.788	0.700	-12.6	**30**	IN	**PFB**
1,1-Dichloroethene	1413146	**8.690**	0.438	0.475	8.0	**30**	IN	**PFB**
Acrylonitrile	966039	**10.550**	0.246	0.203	-21.4	**40**	IN	**PFB**
1,1,2-Trichlorotrifluoroethane	1331484	**8.410**	0.426	0.417	-2.1	**30**	IN	**PFB**
Allyl chloride	345047	**9.970**	0.093	0.081	-15.4	**40**	IN	**PFB**
Methylene chloride	750820	**9.160**	0.221	0.223	1.1	**30**	IN	**PFB**
Carbon disulfide	2675940	**9.630**	0.748	0.657	-13.9	**30**	IN	**PFB**
trans-1,2-Dichloroethene	782406	**7.490**	0.281	0.275	-2.2	**30**	IN	**PFB**
Methyl tert butyl ether	1793969	**7.640**	0.632	0.637	0.8	**40**	IN	**PFB**
Propionitrile	1007279	**13.020**	0.208	0.180	-15.7	**40**	IN	**PFB**
1,1-Dichloroethane	1432916	**8.760**	0.440	0.488	9.8	**30**	IN	**PFB**
Ethyl tert butyl ether	917919	**6.020**	0.410	0.535	23.3	**40**	IN	**PFB**
Vinyl acetate	477943	**9.110**	0.141	0.103	-36.6	**40**	IN	**PFB**
2-Butanone (MEK)	687339	**10.550**	0.175	0.133	-32.1	**40**	IN	**PFB**
Diisopropyl ether	362603	**5.400**	0.181	0.172	-5.0	**40**	IN	**PFB**
Hexane	1047456	**7.660**	0.368	0.382	3.7	**40**	IN	**PFB**
Methacrylonitrile	592546	**9.950**	0.160	0.154	-4.3	**40**	IN	**PFB**
Ethyl acetate	1276499	**9.080**	0.378	0.405	6.5	**40**	IN	**PFB**
Bromochloromethane	568364	**5.520**	0.277	0.358	22.6	**30**	IN	**PFB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Methyl acrylate	323044	**4.910**	0.177	0.147	-20.1	**40**	IN	**PFB**
Tetrahydrofuran	590677	**10.770**	0.148	0.137	-7.4	**40**	IN	**PFB**
Isobutyl alcohol	110449	**7.570**	0.039	0.030	-31.9	**40**	IN	**PFB**
cis-1,2-Dichloroethene	1066576	**9.430**	0.304	0.292	-4.4	**30**	IN	**PFB**
2,2-Dichloropropane	1307100	**9.230**	0.381	0.382	0.3	**30**	IN	**PFB**
Chloroform	1508149	**9.540**	0.425	0.452	5.9	**30**	IN	**PFB**
1,1,1-Trichloroethane	1458883	**8.420**	0.400	0.479	16.4	**30**	IN	**14DFB**
1,2-Dichloroethane	844010	**8.670**	0.225	0.297	24.2	**30**	IN	**14DFB**
1,1-Dichloropropene	892712	**6.830**	0.302	0.393	23.2	**30**	IN	**14DFB**
Cyclohexane	563629	**7.940**	0.164	0.333	50.8	**30**	OUT	**14DFB**
Benzene	2718548	**8.930**	0.703	0.794	11.4	**30**	IN	**14DFB**
Carbon tetrachloride	918650	**8.990**	0.236	0.299	20.9	**30**	IN	**14DFB**
t-Amyl methyl ether	1151512	**4.600**	0.578	0.719	19.6	**40**	IN	**14DFB**
2,2,4-Trimethylpentane	1779993	**5.650**	0.728	1.133	35.7	**30**	OUT	**14DFB**
n-Heptane	584790	**6.280**	0.215	0.254	15.2	**30**	IN	**14DFB**
1,2-Dichloropropane	916717	**9.150**	0.231	0.296	21.8	**30**	IN	**14DFB**
1,4 Dioxane	1988394	**17.520**	0.262	0.239	-9.5	**40**	IN	**14DFB**
Dibromomethane	921800	**3.900**	0.546	0.615	11.2	**30**	IN	**14DFB**
Trichloroethene (TCE)	1603618	**8.860**	0.418	0.487	14.2	**30**	IN	**14DFB**
Bromodichloromethane	742737	**4.170**	0.412	0.438	6.0	**40**	IN	**14DFB**
Methyl methacrylate	474109	**7.010**	0.156	0.149	-4.6	**40**	IN	**14DFB**
4-Methyl-2-pentanone (MIBK)	865942	**7.840**	0.255	0.237	-7.6	**40**	IN	**14DFB**
cis-1,3-Dichloropropene	1753559	**9.100**	0.445	0.360	-23.8	**30**	IN	**14DFB**
Toluene	4990078	**9.160**	1.259	1.116	-12.7	**30**	IN	**14DFB**
trans-1,3-Dichloropropene	1581633	**9.110**	0.401	0.315	-27.4	**30**	IN	**14DFB**
1,1,2-Trichloroethane	656271	**9.030**	0.168	0.192	12.5	**30**	IN	**14DFB**
Ethyl methacrylate	608362	**4.790**	0.293	0.273	-7.4	**40**	IN	**14DFB**
2-Hexanone	1376289	**7.350**	0.433	0.350	-23.6	**40**	IN	**14DFB**
1,3-Dichloropropane	2289651	**6.810**	0.777	0.694	-11.9	**30**	IN	**14DFB**
Octane	1088049	**5.650**	0.445	0.434	-2.5	**30**	IN	**14DFB**
Dibromochloromethane	1518307	**4.140**	0.847	0.672	-26.1	**40**	IN	**14DFB**
1,2-Dibromoethane (EDB)	1983736	**4.610**	0.994	0.818	-21.5	**30**	IN	**14DFB**
Tetrachloroethene (PCE)	1448256	**4.630**	0.723	0.839	13.8	**30**	IN	**14DFB**
Chlorobenzene	5364194	**8.650**	0.927	0.942	1.6	**30**	IN	**d5CB**
1,1,1,2-Tetrachloroethane	904890	**4.290**	0.315	0.320	1.6	**30**	IN	**d5CB**
Ethylbenzene	9192677	**9.290**	1.479	1.492	0.8	**30**	IN	**d5CB**
m,p-Xylenes	7098646	**9.310**	1.140	1.216	6.3	**30**	IN	**d5CB**
Nonane	2109873	**4.930**	0.640	0.711	10.1	**30**	IN	**d5CB**
Styrene	7165537	**9.100**	1.177	0.978	-20.3	**30**	IN	**d5CB**
Bromoform	1674229	**2.780**	0.900	0.743	-21.2	**40**	IN	**d5CB**
o-Xylene	7599334	**9.050**	1.255	1.324	5.2	**30**	IN	**d5CB**
1,1,2,2-Tetrachloroethane	4799414	**4.710**	1.523	1.220	-24.8	**30**	IN	**d5CB**
1,2,3-Trichloropropane	1281987	**5.100**	0.376	0.304	-23.7	**30**	IN	**d5CB**
t-1,4-Dichloro-2-butene	449376	**5.770**	0.116	0.072	-62.5	**40**	OUT	**d5CB**
n-Propylbenzene	11431763	**6.420**	2.662	2.369	-12.3	**30**	IN	**d5CB**
Isopropylbenzene	19148695	**6.490**	4.410	4.439	0.7	**30**	IN	**d5CB**
4-Ethyltoluene	19148695	**15.540**	1.842	1.859	0.9	**30**	IN	**d5CB**
1,3,5-Trimethylbenzene	10033531	**9.080**	1.652	1.922	14.1	**30**	IN	**d5CB**
Decane	4204291	**5.250**	1.197	1.250	4.3	**30**	IN	**d5CB**
tert-butyl benzene	7092802	**5.730**	1.850	1.914	3.3	**40**	IN	**d5CB**

Compound	Area Astdi	**Cal Level Cstdi ppbv**	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	**Quant IS**
1,2,4-Trimethylbenzene	11201200	**8.930**	1.875	1.525	-23.0	**30**	IN	**d5CB**
i-Butylbenzene	10429405	**5.690**	2.740	2.188	-25.2	**40**	IN	**d5CB**
sec-butylbenzene	12977566	**6.040**	3.212	2.560	-25.5	**40**	IN	**d5CB**
1,3-Dichlorobenzene	7559203	**7.050**	1.603	1.227	-30.6	**40**	IN	**d5CB**
Isopropyltoluene	9644384	**5.970**	2.415	2.351	-2.7	**40**	IN	**d5CB**
Benzyl chloride	4479799	**6.280**	1.066	0.632	-68.8	**40**	OUT	**d5CB**
1,4-Dichlorobenzene	6693435	**6.580**	1.521	1.278	-19.0	**40**	IN	**d5CB**
n-Butylbenzene	10732306	**5.600**	2.865	2.239	-27.9	**40**	IN	**d5CB**
1,2-Dichlorobenzene	8237888	**6.492**	1.897	1.311	-44.7	**40**	OUT	**d5CB**
1,2-Dibromo-3-chloropropane	1900865	**6.280**	0.452	0.200	-126.5	**50**	OUT	**d5CB**
1,2,4-Trichlorobenzene	997274	**3.270**	0.456	0.091	-401.9	**50**	OUT	**d5CB**
Naphthalene	403745	**1.530**	0.394	0.064	-517.1	**50**	OUT	**d5CB**
1,2,3-Trichlorobenzene	148499	**4.910**	0.045	0.021	-115.3	**50**	OUT	**d5CB**
Hexachlorobutadiene	2466617	**2.520**	1.463	1.087	-34.6	**50**	IN	**d5CB**
Pentafluorobenzene	7431336	**20.000**		0.000				
1,4-Difluorobenzene	8656754	**20.000**		0.000				
Chlorobenzene-d5	13379920	**20.000**		0.000				
Toluene-d8	5891266	**10.000**		0.000				

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**C12134**		
File Name:	C12134B.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	ST62126	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	10 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/13/24**	**Time:**	**8:55**
Anal Date:	13 Dec 124 9:43 am	**SF:**	**2**	**QCbatch:**	**121324-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**200.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Thu Dec 12 14:36:19 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	10.491	4.41	42.00	766280
75-71-8	Dichlorodifluoromethane	3	TRG	10.126	4.48	85.00	2940862
67-56-1	Methanol	4	TRG	21.314	4.86	31.00	1714269
74-87-3	Chloromethane	5	TRG	10.545	4.77	50.00	917055
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	11.419	4.77	85.00	2674182
75-01-4	Vinyl chloride	7	TRG	10.411	5.02	62.00	1108757
106-99-0	1,3-Butadiene	8	TRG	11.054	5.14	54.00	814373
74-83-9	Bromomethane	9	TRG	10.896	5.56	94.00	988599
75-00-3	Chloroethane	10	TRG	8.105	5.72	64.00	387815
64-17-5	Ethanol	11	TRG	36.462	5.72	46.00	839245
107-02-8	Acrolein	12	TRG	17.700	6.32	56.00	563604
75-69-4	Trichlorofluoromethane	13	TRG	10.990	6.38	101.00	1942589
67-64-1	Acetone	14	TRG	11.480	6.42	58.00	866741
67-63-0	2-propanol (isopropylalcoh	15	TRG	15.372	6.45	45.00	2247305
75-65-0	t-Butyl alcohol	16	TRG	11.406	7.03	59.00	1881700
4227-95-6	Methyl iodide	17	TRG	3.130	7.19	142.00	813947
75-35-4	1,1-Dichloroethene	18	TRG	7.998	7.07	61.00	1413146
107-13-1	Acrylonitrile	19	TRG	12.807	7.07	53.00	966039
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	8.585	7.21	151.00	1331484
107-05-1	Allyl chloride	21	TRG	11.503	7.37	76.00	345047
75-09-2	Methylene chloride	22	TRG	9.062	7.35	84.00	750820
75-15-0	Carbon disulfide	23	TRG	10.967	7.61	76.00	2675940
156-60-5	trans-1,2-Dichloroethene	24	TRG	7.656	8.06	96.00	782406
1634-04-4	Methyl tert butyl ether	25	TRG	7.580	8.11	73.00	1793969
107-12-0	Propionitrile	26	TRG	15.063	8.31	54.00	1007279
75-34-3	1,1-Dichloroethane	27	TRG	7.898	8.41	63.00	1432916
637-92-3	Ethyl tert butyl ether	28	TRG	4.614	9.40	59.00	917919
108-05-4	Vinyl acetate	29	TRG	12.449	8.39	43.00	477943
78-93-3	2-Butanone (MEK)	30	TRG	13.937	8.75	72.00	687339
108-20-3	Diisopropyl ether	31	TRG	5.669	8.90	87.00	362603
110-54-3	Hexane	32	TRG	7.374	8.86	57.00	1047456
126-98-7	Methacrylonitrile	33	TRG	10.373	8.88	67.00	592546
141-78-6	Ethyl acetate	34	TRG	8.493	9.17	61.00	1276499
74-97-5	Bromochloromethane	35	TRG	4.273	9.43	49.00	568364

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	5.896	9.25	55.00	323044
109-99-9	Tetrahydrofuran	37	TRG	11.563	9.72	72.00	590677
78-83-1	Isobutyl alcohol	38	TRG	9.986	9.51	74.00	110449
156-59-2	cis-1,2-Dichloroethene	39	TRG	9.846	9.16	96.00	1066576
594-20-7	2,2-Dichloropropane	40	TRG	9.201	9.37	77.00	1307100
67-66-3	Chloroform	41	TRG	8.978	9.42	83.00	**1508149**
71-55-6	1,1,1-Trichloroethane	43	TRG	7.041	10.24	97.00	1458883
107-06-2	1,2-Dichloroethane	44	TRG	6.574	10.27	61.95	844010
563-58-6	1,1-Dichloropropene	45	TRG	5.245	10.50	75.00	892712
110-82-7	Cyclohexane	46	TRG	3.910	10.74	56.00	563629
71-43-2	Benzene	47	TRG	7.909	10.70	78.00	2718548
56-23-5	Carbon tetrachloride	48	TRG	7.109	10.73	116.90	918650
994-05-8	t-Amyl methyl ether	49	TRG	3.699	10.95	73.00	1151512
540-84-1	2,2,4-Trimethylpentane	50	TRG	3.630	11.25	57.00	1779993
142-82-5	n-Heptane	51	TRG	5.324	11.48	71.00	584790
78-87-5	1,2-Dichloropropane	52	TRG	7.157	11.64	63.00	916717
123-91-1	1,4 Dioxane	53	TRG	19.187	11.79	88.00	1988394
74-95-3	Dibromomethane	54	TRG	3.465	11.75	174.00	921800
79-01-6	Trichloroethene (TCE)	55	TRG	7.601	10.70	130.00	1603618
75-27-4	Bromodichloromethane	56	TRG	3.919	11.85	83.00	742737
80-62-6	Methyl methacrylate	57	TRG	7.329	11.76	69.00	474109
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	8.438	12.55	58.00	865942
10061-01-5	cis-1,3-Dichloropropene	59	TRG	11.266	12.67	75.00	**1753559**
108-88-3	Toluene	61	TRG	10.327	13.50	91.00	4990078
10061-02-6	trans-1,3-Dichloropropene	62	TRG	11.610	13.28	75.00	1581633
79-00-5	1,1,2-Trichloroethane	63	TRG	7.902	13.52	61.00	656271
97-63-2	Ethyl methacrylate	64	TRG	5.143	13.63	69.00	608362
591-78-6	2-Hexanone	65	TRG	9.084	13.79	58.00	1376289
142-28-9	1,3-Dichloropropane	66	TRG	7.620	13.86	76.00	2289651
111-65-9	Octane	67	TRG	5.789	14.04	85.00	1088049
124-48-1	Dibromochloromethane	68	TRG	5.222	14.30	129.00	1518307
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	5.601	14.62	107.00	1983736
127-18-4	Tetrachloroethene (PCE)	70	TRG	3.989	14.69	166.00	1448256
108-90-7	Chlorobenzene	72	TRG	8.514	15.62	112.00	5364194
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	4.223	15.64	131.00	904890
100-41-4	Ethylbenzene	74	TRG	9.212	15.90	106	9192677
1330-20-7	m,p-Xylenes	75	TRG	8.725	16.06	91.00	7098646
111-84-2	Nonane	76	TRG	4.433	16.43	57.00	2109873
100-42-5	Styrene	77	TRG	10.950	16.61	104.00	7165537
75-25-2	Bromoform	78	TRG	3.370	16.67	173.00	1674229
95-47-6	o-Xylene	79	TRG	8.580	16.35	91.00	7599334
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	5.879	17.02	83.00	4799414
96-18-4	1,2,3-Trichloropropane	81	TRG	6.311	17.22	110.00	1281987
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	9.374	17.24	53.00	449376
103-65-1	n-Propylbenzene	83	TRG	7.212	18.04	91.00	11431763
98-82-8	Isopropylbenzene	84	TRG	6.448	18.23	105.00	19148695
622-96-8	4-Ethyltoluene	85	TRG	15.399	18.23	105.00	19148695
108-67-8	1,3,5-Trimethylbenzene	86	TRG	7.803	18.31	105.00	10033531
124-18-5	Decane	87	TRG	5.026	18.60	57.00	4204291
98-06-6	tert-butyl benzene	88	TRG	5.540	18.93	119.00	7092802

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	10.981	18.95	105.00	11201200
538-93-2	i-Butylbenzene	90	TRG	7.124	19.24	91.00	10429405
135-98-8	sec-butylbenzene	91	TRG	7.578	19.32	105.00	12977566
541-73-1	1,3-Dichlorobenzene	92	TRG	9.210	19.39	146.00	7559203
99-87-6	Isopropyltoluene	93	TRG	6.132	19.53	119.00	9644384
100-44-7	Benzyl chloride	94	TRG	10.603	19.46	91.00	4479799
106-46-7	1,4-Dichlorobenzene	95	TRG	7.830	19.39	146.00	6693435
104-51-8	n-Butylbenzene	96	TRG	7.164	20.20	91.00	10732306
95-50-1	1,2-Dichlorobenzene	97	TRG	9.393	20.07	146.00	8237888
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	14.222	21.02	75.00	1900865
120-82-1	1,2,4-Trichlorobenzene	99	TRG	16.412	22.95	180.00	997274
91-20-3	Naphthalene	100	TRG	9.442	23.23	128.00	403745
87-61-6	1,2,3-Trichlorobenzene	101	TRG	10.571	23.71	180.00	148499
87-68-3	Hexachlorobutadiene	102	TRG	3.392	23.14	225.00	2466617
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**7431336**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**8656754**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**13379920**
2037-26-5	Toluene-d8	60	SURR	11.463	13.40	98.00	**5891266**

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A_S\C12134B.D
Acq Time : 13 Dec 124 9:43 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : 10 ML Multiplr: 1.00
Quant Time: Dec 13 10:52 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	7431336	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	8656754	20.00	ppbV		-0.29
71) Chlorobenzene-d5	15.22	117	13379920	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	5891266	11.46	ppbV		114.63
Target Compounds							Qvalue
2) Propylene	4.31	42	766280	10.49	ppbV	#	82
3) Dichlorodifluoromethane	4.40	85	2940862	10.13	ppbV	#	94
4) Methanol	4.76	31	1714269	21.31	ppbV	m	97
5) Chloromethane	4.65	50	917055	10.54	ppbV		99
6) 1,2-Dichlorotetrafluoroeth	4.65	85	2674182	11.42	ppbV		95
7) Vinyl chloride	4.88	62	1108757	10.41	ppbV		98
8) 1,3-Butadiene	4.99	54	814373	11.05	ppbV	#	94
9) Bromomethane	5.40	94	988599	10.90	ppbV		99
10) Chloroethane	5.56	64	387815	8.11	ppbV		93
11) Ethanol	5.58	46	839245	36.46	ppbV	m	86
12) Acrolein	6.14	56	563604	17.70	ppbV	#	97
13) Trichlorofluoromethane	6.19	101	1942589	10.99	ppbV		98
14) Acetone	6.24	58	866741	11.48	ppbV	#	7
15) 2-propanol (isopropylalcoh	6.28	45	2247305	15.37	ppbV	m	95
16) t-Butyl alcohol	6.84	59	1881700	11.41	ppbV	#	93
17) Methyl iodide	6.97	142	813947	3.13	ppbV		88
18) 1,1-Dichloroethene	6.87	61	1413146	8.00	ppbV	#	59
19) Acrylonitrile	6.87	53	966039	12.81	ppbV	#	96
20) 1,1,2-Trichlorotrifluoroet	7.01	151	1331484	8.59	ppbV	#	77
21) Allyl chloride	7.16	76	345047	11.50	ppbV	m	71
22) Methylene chloride	7.13	84	750820	9.06	ppbV	#	90
23) Carbon disulfide	7.40	76	2675940	10.97	ppbV	#	83
24) trans-1,2-Dichloroethene	7.83	96	782406	7.66	ppbV	#	61
25) Methyl tert butyl ether	7.90	73	1793969	7.58	ppbV	#	90
26) Propionitrile	8.07	54	1007279	15.06	ppbV	m	97
27) 1,1-Dichloroethane	8.15	63	1432916	7.90	ppbV		97
28) Ethyl tert butyl ether	9.14	59	917919	4.61	ppbV	#	74
29) Vinyl acetate	8.15	43	477943	12.45	ppbV	m	78
30) 2-Butanone (MEK)	8.51	72	687339	13.94	ppbV	#	82
31) Diisopropyl ether	8.65	87	362603	5.67	ppbV	#	74
32) Hexane	8.60	57	1047456	7.37	ppbV	#	92
33) Methacrylonitrile	8.63	67	592546	10.37	ppbV	#	75
34) Ethyl acetate	8.90	61	1276499	8.49	ppbV	#	68
35) Bromochloromethane	9.16	49	568364	4.27	ppbV	#	10
36) Methyl acrylate	8.99	55	323044	5.90	ppbV	#	76

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12134A_S\C12134B.D
Acq Time : 13 Dec 124 9:43 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 13 10:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) Tetrahydrofuran	9.45	72	590677	11.56	ppbV		96
38) Isobutyl alcohol	9.26	74	110449	9.99	ppbV	m	72
39) cis-1,2-Dichloroethene	8.90	96	1066576	9.85	ppbV	#	49
40) 2,2-Dichloropropane	9.09	77	1307100	9.20	ppbV		96
41) Chloroform	9.16	83	1508149	8.98	ppbV		99
43) 1,1,1-Trichloroethane	9.96	97	1458883	7.04	ppbV	#	84
44) 1,2-Dichloroethane	10.00	62	844010	6.57	ppbV		95
45) 1,1-Dichloropropene	10.22	75	892712	5.25	ppbV	#	84
46) Cyclohexane	10.44	56	563629	3.91	ppbV	m	59
47) Benzene	10.41	78	2718548	7.91	ppbV	#	77
48) Carbon tetrachloride	10.44	117	918650	7.11	ppbV		96
49) t-Amyl methyl ether	10.66	73	1151512	3.70	ppbV	#	92
50) 2,2,4-Trimethylpentane	10.96	57	1779993	3.63	ppbV	m	94
51) n-Heptane	11.18	71	584790	5.32	ppbV	#	81
52) 1,2-Dichloropropane	11.33	63	916717	7.16	ppbV		97
53) 1,4 Dioxane	11.48	88	1988394	19.19	ppbV	#	47
54) Dibromomethane	11.45	174	921800	3.46	ppbV	#	83
55) Trichloroethene (TCE)	11.36	130	1603618	7.60	ppbV	#	77
56) Bromodichloromethane	11.54	83	742737	3.92	ppbV		97
57) Methyl methacrylate	11.47	69	474109	7.33	ppbV	#	27
58) 4-Methyl-2-pentanone (MIBK	12.24	58	865942	8.44	ppbV	#	79
59) cis-1,3-Dichloropropene	12.36	75	1753559	11.27	ppbV	#	77
61) Toluene	13.18	91	4990078	10.33	ppbV		94
62) trans-1,3-Dichloropropene	12.95	75	1581633	11.61	ppbV	m	77
63) 1,1,2-Trichloroethane	13.19	61	656271	7.90	ppbV	#	1
64) Ethyl methacrylate	13.31	69	608362	5.14	ppbV	m	93
65) 2-Hexanone	13.47	58	1376289	9.08	ppbV	m	84
66) 1,3-Dichloropropane	13.53	76	2289651	7.62	ppbV	#	94
67) Octane	13.72	85	1088049	5.79	ppbV		93
68) Dibromochloromethane	13.96	129	1518307	5.22	ppbV		96
69) 1,2-Dibromoethane (EDB)	14.27	107	1983736	5.60	ppbV	m	96
70) Tetrachloroethene (PCE)	14.34	166	1448256	3.99	ppbV		96
72) Chlorobenzene	15.28	112	5364194	8.51	ppbV	#	80
73) 1,1,1,2-Tetrachloroethane	15.29	131	904890	4.22	ppbV	#	90
74) Ethylbenzene	15.55	91	9192677	9.21	ppbV	#	87
75) m,p-Xylenes	15.72	91	7098646	8.73	ppbV	#	78
76) Nonane	16.08	57	2109873	4.43	ppbV	#	83
77) Styrene	16.27	104	7165537	10.95	ppbV	#	83
78) Bromoform	16.30	173	1674229	3.37	ppbV		98
79) o-Xylene	16.35	91	7599334	8.58	ppbV	#	80
80) 1,1,2,2-Tetrachloroethane	16.66	83	4799414	5.88	ppbV	m	96
81) 1,2,3-Trichloropropane	16.86	110	1281987	6.31	ppbV	m	98
82) t-1,4-Dichloro-2-butene	16.88	53	449376	9.37	ppbV	m	25

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Quantitation Report

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Acq Time : 13 Dec 124 9:43 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 13 10:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	11431763	7.21	ppbV		96
84)	Isopropylbenzene	17.87	105	19148695	6.45	ppbV	#	88
85)	4-Ethyltoluene	17.87	105	19148695	15.40	ppbV	#	86
86)	1,3,5-Trimethylbenzene	17.96	105	10033531	7.80	ppbV	m	81
87)	Decane	18.25	57	4204291	5.03	ppbV	#	82
88)	tert-butyl benzene	18.55	119	7092802	5.54	ppbV	#	76
89)	1,2,4-Trimethylbenzene	18.57	105	11201200	10.98	ppbV	#	88
90)	i-Butylbenzene	18.86	91	10429405	7.12	ppbV		96
91)	sec-butylbenzene	18.95	105	12977566	7.58	ppbV	#	91
92)	1,3-Dichlorobenzene	19.01	146	7559203	9.21	ppbV	m	88
93)	Isopropyltoluene	19.17	119	9644384	6.13	ppbV	#	85
94)	Benzyl chloride	19.08	91	4479799	10.60	ppbV	m	90
95)	1,4-Dichlorobenzene	19.13	146	6693435	7.83	ppbV	m	88
96)	n-Butylbenzene	19.82	91	10732306	7.16	ppbV	m	97
97)	1,2-Dichlorobenzene	19.70	146	8237888	9.39	ppbV	m	92
98)	1,2-Dibromo-3-chloropropan	20.63	75	1900865	14.22	ppbV	m	26
99)	1,2,4-Trichlorobenzene	22.55	180	997274	16.41	ppbV	m	99
100)	Naphthalene	22.82	128	403745	9.44	ppbV	m	93
101)	1,2,3-Trichlorobenzene	23.30	180	148499	10.57	ppbV	m	95
102)	Hexachlorobutadiene	23.14	225	2466617	3.39	ppbV	m	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

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Operator: TR
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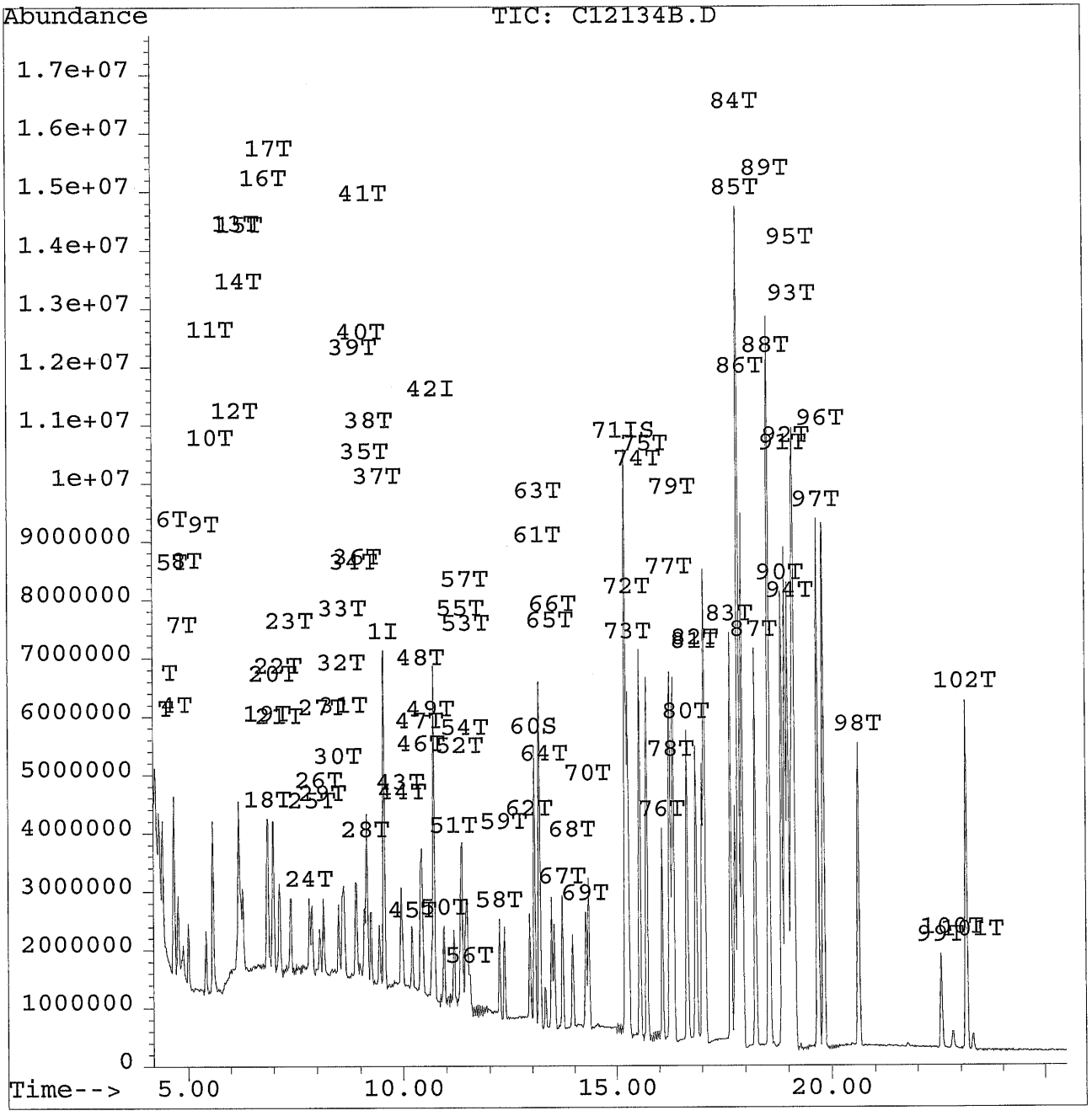
Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Thu Dec 12 14:36:19 2024
Response via : Multiple Level Calibration



CONTINUING CALIBRATION REPORT

SDG:	**LABQC**		**Sample Calculation:**
QC_Batch:	**121224-MA1**		1) $CCRFi = \frac{(Astdi)\ (Cistdi)}{(Cstdi)\ (Aistdi)}$ i
Sample ID:	ST62126		
Sample Analysis Date:	12 Dec 124 8:55 am		
Run Method:	A1563_L.M		CCRFi is the Continuing Calibration RF
Quant/Calibration Method:	A15CS2_M.M		
Calibration Level:	**Level 4**	**10**	PFB - Pentafluorobenzene
			14DFB - 1,4-Difluorobenzene
A passing calibration can have (10%) or 10 compounds out			d5CB - d5-Chlorobenzene

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Propylene	745160	**9.500**	0.168	0.197	14.5	**30**	IN	**PFB**
Dichlorodifluoromethane	3279199	**9.500**	0.739	0.782	5.4	**30**	IN	**PFB**
Methanol	1435505	**15.700**	0.196	0.216	9.5	**50**	IN	**PFB**
Chloromethane	927851	**9.500**	0.209	0.234	10.6	**30**	IN	**PFB**
1,2-Dichlorotetrafluoroethane	3173903	**9.500**	0.715	0.630	-13.5	**30**	IN	**PFB**
Vinyl chloride	1201518	**9.500**	0.271	0.287	5.5	**30**	IN	**PFB**
1,3-Butadiene	824835	**9.500**	0.186	0.198	6.2	**30**	IN	**PFB**
Bromomethane	1181505	**9.500**	0.266	0.244	-9.1	**30**	IN	**PFB**
Chloroethane	437437	**9.500**	0.099	0.129	23.4	**30**	IN	**PFB**
Ethanol	1041921	**32.080**	0.070	0.062	-12.3	**50**	IN	**PFB**
Acrolein	415003	**13.780**	0.064	0.086	24.7	**30**	IN	**PFB**
Trichlorofluoromethane	1689523	**9.130**	0.396	0.476	16.7	**30**	IN	**PFB**
Acetone	739616	**12.750**	0.124	0.203	38.9	**40**	IN	**PFB**
2-propanol (isopropylalcohol)	1902639	**12.270**	0.332	0.393	15.6	**50**	IN	**PFB**
t-Butyl alcohol	1545171	**9.120**	0.363	0.444	18.3	**40**	IN	**PFB**
Methyl iodide	1037997	**2.780**	0.800	0.700	-14.3	**30**	IN	**PFB**
1,1-Dichloroethene	1366288	**8.690**	0.337	0.475	29.2	**30**	IN	**PFB**
Acrylonitrile	913974	**10.550**	0.186	0.203	8.6	**40**	IN	**PFB**
1,1,2-Trichlorotrifluoroethane	1695411	**8.410**	0.432	0.417	-3.4	**30**	IN	**PFB**
Allyl chloride	439527	**9.970**	0.094	0.081	-17.0	**40**	IN	**PFB**
Methylene chloride	936984	**9.160**	0.219	0.223	1.8	**30**	IN	**PFB**
Carbon disulfide	3251436	**9.630**	0.723	0.657	-10.1	**30**	IN	**PFB**
trans-1,2-Dichloroethene	972269	**7.490**	0.278	0.275	-1.1	**30**	IN	**PFB**
Methyl tert butyl ether	1739893	**7.640**	0.488	0.637	23.4	**40**	IN	**PFB**
Propionitrile	1163957	**13.020**	0.191	0.180	-6.4	**40**	IN	**PFB**
1,1-Dichloroethane	1499967	**8.760**	0.367	0.488	24.9	**30**	IN	**PFB**
Ethyl tert butyl ether	924618	**6.020**	0.329	0.535	38.6	**40**	IN	**PFB**
Vinyl acetate	409071	**9.110**	0.096	0.103	6.9	**40**	IN	**PFB**
2-Butanone (MEK)	798041	**10.550**	0.162	0.133	-22.0	**40**	IN	**PFB**
Diisopropyl ether	422009	**5.400**	0.167	0.172	2.8	**40**	IN	**PFB**
Hexane	983661	**7.660**	0.275	0.382	28.1	**40**	IN	**PFB**
Methacrylonitrile	680734	**9.950**	0.147	0.154	4.7	**40**	IN	**PFB**
Ethyl acetate	1336211	**9.080**	0.315	0.405	22.1	**40**	IN	**PFB**
Bromochloromethane	581009	**5.520**	0.225	0.358	37.0	**30**	OUT	**PFB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Methyl acrylate	352962	**4.910**	0.154	0.147	-4.4	**40**	IN	**PFB**
Tetrahydrofuran	722262	**10.770**	0.144	0.137	-4.5	**40**	IN	**PFB**
Isobutyl alcohol	145304	**7.570**	0.041	0.030	-38.1	**40**	IN	**PFB**
cis-1,2-Dichloroethene	1380638	**9.430**	0.314	0.292	-7.5	**30**	IN	**PFB**
2,2-Dichloropropane	1304799	**9.230**	0.303	0.382	20.8	**30**	IN	**PFB**
Chloroform	1649123	**9.540**	0.370	0.452	18.1	**30**	IN	**PFB**
1,1,1-Trichloroethane	1698021	**8.420**	0.347	0.479	27.5	**30**	IN	**14DFB**
1,2-Dichloroethane	831626	**8.670**	0.165	0.297	44.4	**30**	OUT	**14DFB**
1,1-Dichloropropene	1103295	**6.830**	0.278	0.393	29.3	**30**	IN	**14DFB**
Cyclohexane	988132	**7.940**	0.214	0.333	35.7	**30**	OUT	**14DFB**
Benzene	3667222	**8.930**	0.706	0.794	11.1	**30**	IN	**14DFB**
Carbon tetrachloride	1086724	**8.990**	0.208	0.299	30.4	**30**	OUT	**14DFB**
t-Amyl methyl ether	1377815	**4.600**	0.515	0.719	28.4	**40**	IN	**14DFB**
2,2,4-Trimethylpentane	2928809	**5.650**	0.892	1.133	21.3	**30**	IN	**14DFB**
n-Heptane	758084	**6.280**	0.208	0.254	18.2	**30**	IN	**14DFB**
1,2-Dichloropropane	1179985	**9.150**	0.222	0.296	25.0	**30**	IN	**14DFB**
1,4 Dioxane	2788121	**17.520**	0.274	0.239	-14.3	**40**	IN	**14DFB**
Dibromomethane	1346805	**3.900**	0.594	0.615	3.4	**30**	IN	**14DFB**
Trichloroethene (TCE)	2283164	**8.860**	0.443	0.487	9.1	**30**	IN	**14DFB**
Bromodichloromethane	954958	**4.170**	0.394	0.438	10.1	**40**	IN	**14DFB**
Methyl methacrylate	633116	**7.010**	0.155	0.149	-3.9	**40**	IN	**14DFB**
4-Methyl-2-pentanone (MIBK)	1107142	**7.840**	0.243	0.237	-2.4	**40**	IN	**14DFB**
cis-1,3-Dichloropropene	2177166	**9.100**	0.412	0.360	-14.4	**30**	IN	**14DFB**
Toluene	6182130	**9.160**	1.161	1.116	-4.0	**30**	IN	**14DFB**
trans-1,3-Dichloropropene	2089104	**9.110**	0.394	0.315	-25.3	**30**	IN	**14DFB**
1,1,2-Trichloroethane	765991	**9.030**	0.146	0.192	24.0	**30**	IN	**14DFB**
Ethyl methacrylate	986570	**4.790**	0.354	0.273	-29.6	**40**	IN	**14DFB**
2-Hexanone	2043055	**7.350**	0.478	0.350	-36.6	**40**	IN	**14DFB**
1,3-Dichloropropane	2620712	**6.810**	0.662	0.694	4.7	**30**	IN	**14DFB**
Octane	1335767	**5.650**	0.407	0.434	6.4	**30**	IN	**14DFB**
Dibromochloromethane	1842988	**4.140**	0.766	0.672	-14.0	**40**	IN	**14DFB**
1,2-Dibromoethane (EDB)	2718643	**4.610**	1.014	0.818	-24.0	**30**	IN	**14DFB**
Tetrachloroethene (PCE)	1973608	**4.630**	0.733	0.839	12.6	**30**	IN	**14DFB**
Chlorobenzene	6596891	**8.650**	0.964	0.942	-2.4	**30**	IN	**d5CB**
1,1,1,2-Tetrachloroethane	1039961	**4.290**	0.306	0.320	4.3	**30**	IN	**d5CB**
Ethylbenzene	10661854	**9.290**	1.451	1.492	2.7	**30**	IN	**d5CB**
m,p-Xylenes	8343858	**9.310**	1.133	1.216	6.8	**30**	IN	**d5CB**
Nonane	2214810	**4.930**	0.568	0.711	20.2	**30**	IN	**d5CB**
Styrene	8507837	**9.100**	1.182	0.978	-20.8	**30**	IN	**d5CB**
Bromoform	1938575	**2.780**	0.882	0.743	-18.7	**40**	IN	**d5CB**
o-Xylene	8838070	**9.050**	1.235	1.324	6.7	**30**	IN	**d5CB**
1,1,2,2-Tetrachloroethane	5909865	**4.710**	1.586	1.220	-30.0	**30**	IN	**d5CB**
1,2,3-Trichloropropane	1578823	**5.100**	0.391	0.304	-28.9	**30**	IN	**d5CB**
t-1,4-Dichloro-2-butene	410416	**5.770**	0.090	0.072	-25.5	**40**	IN	**d5CB**
n-Propylbenzene	13623528	**6.420**	2.683	2.369	-13.2	**30**	IN	**d5CB**
Isopropylbenzene	20231009	**6.490**	3.941	4.439	11.2	**30**	IN	**d5CB**
4-Ethyltoluene	20231009	**15.540**	1.646	1.859	11.5	**30**	IN	**d5CB**
1,3,5-Trimethylbenzene	11980587	**9.080**	1.668	1.922	13.2	**30**	IN	**d5CB**
Decane	4240925	**5.250**	1.021	1.250	18.3	**30**	IN	**d5CB**
tert-butyl benzene	8484441	**5.730**	1.872	1.914	2.2	**40**	IN	**d5CB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
1,2,4-Trimethylbenzene	12461290	**8.930**	1.764	1.525	-15.7	**30**	IN	**d5CB**
i-Butylbenzene	13154091	**5.690**	2.923	2.188	-33.6	**40**	IN	**d5CB**
sec-butylbenzene	15244008	**6.040**	3.191	2.560	-24.6	**40**	IN	**d5CB**
1,3-Dichlorobenzene	9053996	**7.050**	1.624	1.227	-32.3	**40**	IN	**d5CB**
Isopropyltoluene	11190361	**5.970**	2.370	2.351	-0.8	**40**	IN	**d5CB**
Benzyl chloride	4767512	**6.280**	0.960	0.632	-52.0	**40**	OUT	**d5CB**
1,4-Dichlorobenzene	7980358	**6.580**	1.533	1.278	-20.0	**40**	IN	**d5CB**
n-Butylbenzene	13207768	**5.600**	2.982	2.239	-33.2	**40**	IN	**d5CB**
1,2-Dichlorobenzene	11390839	**6.492**	2.218	1.311	-69.2	**40**	OUT	**d5CB**
1,2-Dibromo-3-chloropropane	1862017	**6.280**	0.375	0.200	-87.6	**50**	OUT	**d5CB**
1,2,4-Trichlorobenzene	688783	**3.270**	0.266	0.091	-193.2	**50**	OUT	**d5CB**
Naphthalene	106929	**1.530**	0.088	0.064	-38.2	**50**	IN	**d5CB**
1,2,3-Trichlorobenzene	66855	**4.910**	0.017	0.021	18.0	**50**	IN	**d5CB**
Hexachlorobutadiene	3114086	**2.520**	1.562	1.087	-43.7	**50**	IN	**d5CB**
Pentafluorobenzene	9338946	**20.000**		0.000				
1,4-Difluorobenzene	11628105	**20.000**		0.000				
Chlorobenzene-d5	15820507	**20.000**		0.000				
Toluene-d8	7157503	**10.000**		0.000				

Quantitation Report

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Misc : 10 ML
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Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.59	168	9338946	20.00	ppbV	-0.23
42) 1,4-Difluorobenzene	10.73	114	11628105	20.00	ppbV	-0.27
71) Chlorobenzene-d5	15.24	117	15820507	20.00	ppbV	-0.33
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.09	98	7157503	10.37	ppbV	103.68
Target Compounds						Qvalue
2) Propylene	4.33	42	745160	8.12	ppbV m	85
3) Dichlorodifluoromethane	4.41	85	3279199	8.98	ppbV m	92
4) Methanol	4.77	31	1435505	14.20	ppbV m	98
5) Chloromethane	4.67	50	927851	8.49	ppbV m	98
6) 1,2-Dichlorotetrafluoroeth	4.67	85	3173903	10.78	ppbV m	94
7) Vinyl chloride	4.91	62	1201518	8.98	ppbV m	99
8) 1,3-Butadiene	5.03	54	824835	8.91	ppbV m	92
9) Bromomethane	5.44	94	1181505	10.36	ppbV m	98
10) Chloroethane	5.59	64	437437	7.27	ppbV m	94
11) Ethanol	5.59	46	1041921	36.02	ppbV m	80
12) Acrolein	6.17	56	415003	10.37	ppbV m	90
13) Trichlorofluoromethane	6.23	101	1689523	7.61	ppbV m	98
14) Acetone	6.26	58	739616	7.80	ppbV m	1
15) 2-propanol (isopropylalcoh	6.29	45	1902639	10.36	ppbV m	92
16) t-Butyl alcohol	6.86	59	1545171	7.45	ppbV m	88
17) Methyl iodide	7.01	142	1037997	3.18	ppbV m	84
18) 1,1-Dichloroethene	6.89	61	1366288	6.15	ppbV m	31
19) Acrylonitrile	6.91	53	913974	9.64	ppbV m	97
20) 1,1,2-Trichlorotrifluoroet	7.03	151	1695411	8.70	ppbV m	82
21) Allyl chloride	7.18	76	439527	11.66	ppbV m	73
22) Methylene chloride	7.16	84	936984	9.00	ppbV m	82
23) Carbon disulfide	7.42	76	3251436	10.60	ppbV m	80
24) trans-1,2-Dichloroethene	7.86	96	972269	7.57	ppbV m	45
25) Methyl tert butyl ether	7.91	73	1739893	5.85	ppbV m	88
26) Propionitrile	8.09	54	1163957	13.85	ppbV m	97
27) 1,1-Dichloroethane	8.19	63	1499967	6.58	ppbV m	95
28) Ethyl tert butyl ether	9.18	59	924618	3.70	ppbV m	59
29) Vinyl acetate	8.17	43	409071	8.48	ppbV m	81
30) 2-Butanone (MEK)	8.53	72	798041	12.88	ppbV m	85
31) Diisopropyl ether	8.68	87	422009	5.25	ppbV m	70
32) Hexane	8.63	57	983661	5.51	ppbV m	84
33) Methacrylonitrile	8.65	67	680734	9.48	ppbV m	72
34) Ethyl acetate	8.94	61	1336211	7.07	ppbV m	95
35) Bromochloromethane	9.18	49	581009	3.48	ppbV m	1
36) Methyl acrylate	9.02	55	352962	5.13	ppbV m	69

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\C12124A.D
Acq Time : 12 Dec 124 8:55 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 12 9:54 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) Tetrahydrofuran	9.49	72	722262	11.25	ppbV	m	96
38) Isobutyl alcohol	9.28	74	145304	10.45	ppbV	m	63
39) cis-1,2-Dichloroethene	8.94	96	1380638	10.14	ppbV	m	43
40) 2,2-Dichloropropane	9.13	77	1304799	7.31	ppbV	m	86
41) Chloroform	9.18	83	1649123	7.81	ppbV	m	94
43) 1,1,1-Trichloroethane	9.98	97	1698021	6.10	ppbV	#	83
44) 1,2-Dichloroethane	10.02	62	831626	4.82	ppbV	m	95
45) 1,1-Dichloropropene	10.24	75	1103295	4.83	ppbV	#	82
46) Cyclohexane	10.48	56	988132	5.10	ppbV	m	44
47) Benzene	10.44	78	3667222	7.94	ppbV	#	71
48) Carbon tetrachloride	10.48	117	1086724	6.26	ppbV	m	97
49) t-Amyl methyl ether	10.68	73	1377815	3.30	ppbV	#	90
50) 2,2,4-Trimethylpentane	10.97	57	2928809	4.45	ppbV	m	92
51) n-Heptane	11.21	71	758084	5.14	ppbV	#	81
52) 1,2-Dichloropropane	11.34	63	1179985	6.86	ppbV		95
53) 1,4 Dioxane	11.51	88	2788121	20.03	ppbV	#	45
54) Dibromomethane	11.46	174	1346805	3.77	ppbV	#	83
55) Trichloroethene (TCE)	11.38	130	2283164	8.06	ppbV	#	80
56) Bromodichloromethane	11.57	83	954958	3.75	ppbV		96
57) Methyl methacrylate	11.50	69	633116	7.29	ppbV	#	19
58) 4-Methyl-2-pentanone (MIBK	12.27	58	1107142	8.03	ppbV	#	79
59) cis-1,3-Dichloropropene	12.37	75	2177166	10.41	ppbV	#	83
61) Toluene	13.21	91	6182130	9.52	ppbV		98
62) trans-1,3-Dichloropropene	12.98	75	2089104	11.42	ppbV	m	77
63) 1,1,2-Trichloroethane	13.21	61	765991	6.87	ppbV	#	1
64) Ethyl methacrylate	13.34	69	986570	6.21	ppbV	#	93
65) 2-Hexanone	13.50	58	2043055	10.04	ppbV	m	82
66) 1,3-Dichloropropane	13.55	76	2620712	6.49	ppbV		94
67) Octane	13.75	85	1335767	5.29	ppbV		99
68) Dibromochloromethane	13.99	129	1842988	4.72	ppbV		92
69) 1,2-Dibromoethane (EDB)	14.30	107	2718643	5.71	ppbV	m	99
70) Tetrachloroethene (PCE)	14.37	166	1973608	4.05	ppbV	#	84
72) Chlorobenzene	15.31	112	6596891	8.85	ppbV	#	79
73) 1,1,1,2-Tetrachloroethane	15.31	131	1039961	4.10	ppbV	#	90
74) Ethylbenzene	15.58	91	10661854	9.04	ppbV	#	89
75) m,p-Xylenes	15.73	91	8343858	8.67	ppbV	#	78
76) Nonane	16.11	57	2214810	3.94	ppbV	#	78
77) Styrene	16.28	104	8507837	11.00	ppbV	#	81
78) Bromoform	16.33	173	1938575	3.30	ppbV	#	92
79) o-Xylene	16.36	91	8838070	8.44	ppbV	#	82
80) 1,1,2,2-Tetrachloroethane	16.69	83	5909865	6.12	ppbV	m	100
81) 1,2,3-Trichloropropane	16.89	110	1578823	6.57	ppbV		97
82) t-1,4-Dichloro-2-butene	16.91	53	410416	7.24	ppbV	m	1

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Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\C12124A.D
Acq Time : 12 Dec 124 8:55 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : 10 ML Multiplr: 1.00
Quant Time: Dec 12 9:54 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.70	91	13623528	7.27	ppbV	#	94
84)	Isopropylbenzene	17.88	105	20231009	5.76	ppbV	#	84
85)	4-Ethyltoluene	17.88	105	20231009	13.76	ppbV	#	85
86)	1,3,5-Trimethylbenzene	17.97	105	11980587	7.88	ppbV	m	82
87)	Decane	18.27	57	4240925	4.29	ppbV	#	74
88)	tert-butyl benzene	18.58	119	8484441	5.60	ppbV	#	73
89)	1,2,4-Trimethylbenzene	18.60	105	12461290	10.33	ppbV	#	83
90)	i-Butylbenzene	18.89	91	13154091	7.60	ppbV	#	92
91)	sec-butylbenzene	18.97	105	15244008	7.53	ppbV	#	84
92)	1,3-Dichlorobenzene	19.04	146	9053996	9.33	ppbV	m	89
93)	Isopropyltoluene	19.18	119	11190361	6.02	ppbV	#	81
94)	Benzyl chloride	19.11	91	4767512	9.54	ppbV	m	83
95)	1,4-Dichlorobenzene	19.16	146	7980358	7.90	ppbV	m	89
96)	n-Butylbenzene	19.84	91	13207768	7.46	ppbV	m	95
97)	1,2-Dichlorobenzene	19.73	146	11390839	10.98	ppbV		93
98)	1,2-Dibromo-3-chloropropan	20.65	75	1862017	11.78	ppbV	m	28
99)	1,2,4-Trichlorobenzene	22.58	180	688783	9.59	ppbV	m	100
100)	Naphthalene	22.87	128	106929	2.11	ppbV	m	96
101)	1,2,3-Trichlorobenzene	23.33	180	66855	4.02	ppbV		97
102)	Hexachlorobutadiene	23.17	225	3114086	3.62	ppbV		93

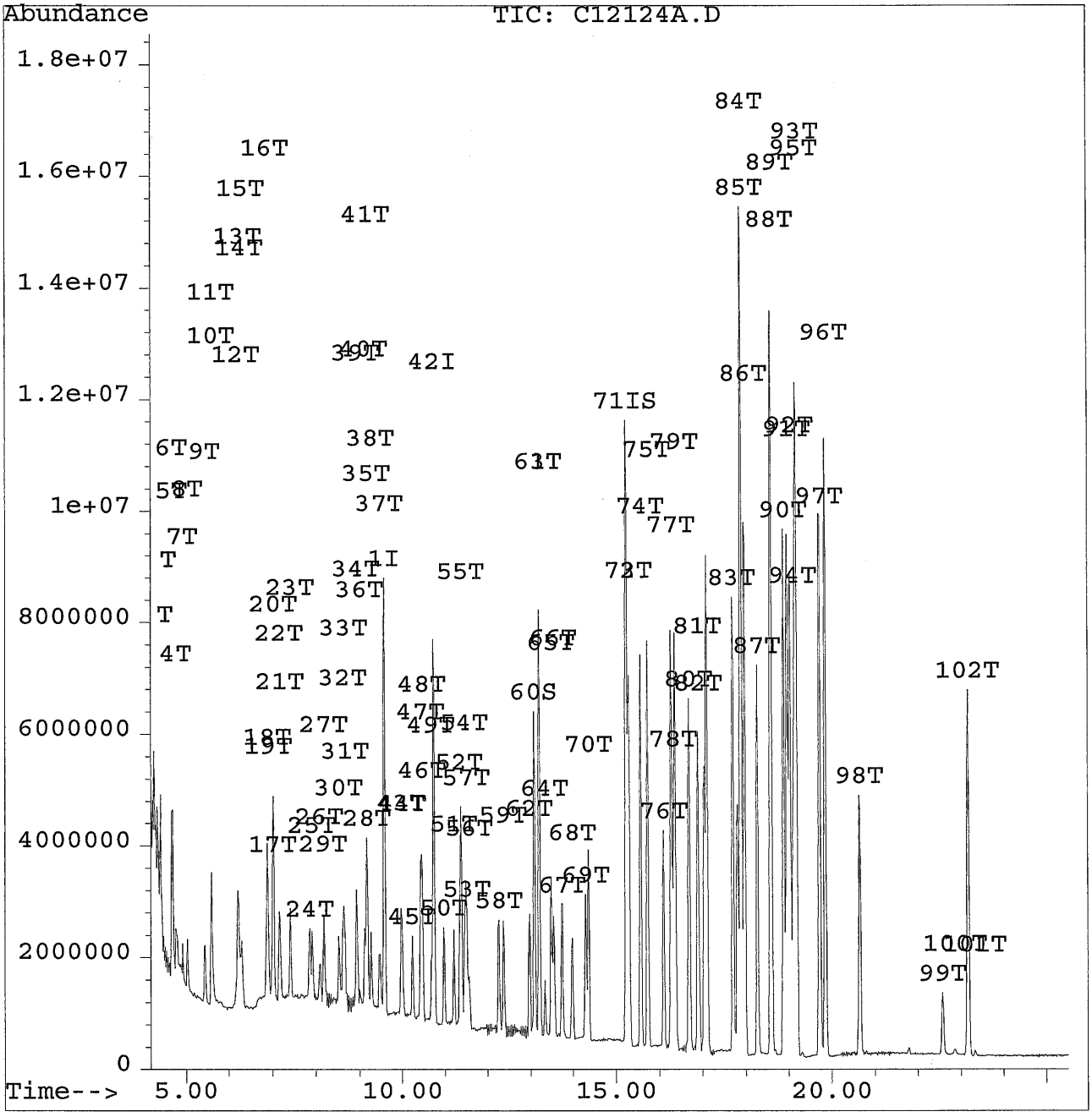
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12124A\C12124A.D
Acq Time : 12 Dec 124 8:55 am
Sample : ST62126
Misc : 10 ML
Quant Time: Dec 12 9:54 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



CONTINUING CALIBRATION REPORT

SDG:	**LABQC**		**Sample Calculation:**
QC_Batch:	**121124-MA1**		1) $CCRFi = \frac{(Astdi)\ (Cistdi)}{(Cstdi)\ (Aistdi)}$ i
Sample ID:	ST62126		
Sample Analysis Date:	11 Dec 124 9:26 am		
Run Method:	A1563_L.M		CCRFi is the Continuing Calibration RF
Quant/Calibration Method:	A15CS2_M.M		
Calibration Level:	**Level 4**	**10**	PFB - Pentafluorobenzene
			14DFB - 1,4-Difluorobenzene
A passing calibration can have (10%) or 10 compounds out			d5CB - d5-Chlorobenzene

Compound	Area Astdi	**Cal Level Cstdi ppbv**	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Propylene	787321	**9.500**	0.189	0.197	3.9	**30**	IN	**PFB**
Dichlorodifluoromethane	3264882	**9.500**	0.783	0.782	-0.2	**30**	IN	**PFB**
Methanol	1880895	**15.700**	0.273	0.216	-26.1	**50**	IN	**PFB**
Chloromethane	1039604	**9.500**	0.249	0.234	-6.5	**30**	IN	**PFB**
1,2-Dichlorotetrafluoroethane	2820250	**9.500**	0.676	0.630	-7.3	**30**	IN	**PFB**
Vinyl chloride	1206227	**9.500**	0.289	0.287	-0.9	**30**	IN	**PFB**
1,3-Butadiene	928540	**9.500**	0.223	0.198	-12.3	**30**	IN	**PFB**
Bromomethane	1061170	**9.500**	0.255	0.244	-4.2	**30**	IN	**PFB**
Chloroethane	457304	**9.500**	0.110	0.129	14.8	**30**	IN	**PFB**
Ethanol	889085	**32.080**	0.063	0.062	-1.9	**50**	IN	**PFB**
Acrolein	665319	**13.780**	0.110	0.086	-28.4	**30**	IN	**PFB**
Trichlorofluoromethane	2152614	**9.130**	0.537	0.476	-12.9	**30**	IN	**PFB**
Acetone	1035016	**12.750**	0.185	0.203	9.0	**40**	IN	**PFB**
2-propanol (isopropylalcohol)	2649049	**12.270**	0.492	0.393	-25.0	**50**	IN	**PFB**
t-Butyl alcohol	2397217	**9.120**	0.599	0.444	-34.9	**40**	IN	**PFB**
Methyl iodide	938053	**2.780**	0.769	0.700	-9.8	**30**	IN	**PFB**
1,1-Dichloroethene	1733910	**8.690**	0.455	0.475	4.4	**30**	IN	**PFB**
Acrylonitrile	1187236	**10.550**	0.256	0.203	-26.3	**40**	IN	**PFB**
1,1,2-Trichlorotrifluoroethane	1517142	**8.410**	0.411	0.417	1.5	**30**	IN	**PFB**
Allyl chloride	390725	**9.970**	0.089	0.081	-10.6	**40**	IN	**PFB**
Methylene chloride	809564	**9.160**	0.201	0.223	9.7	**30**	IN	**PFB**
Carbon disulfide	2929418	**9.630**	0.693	0.657	-5.5	**30**	IN	**PFB**
trans-1,2-Dichloroethene	866834	**7.490**	0.264	0.275	4.1	**30**	IN	**PFB**
Methyl tert butyl ether	2179497	**7.640**	0.650	0.637	-2.0	**40**	IN	**PFB**
Propionitrile	1130857	**13.020**	0.198	0.180	-10.0	**40**	IN	**PFB**
1,1-Dichloroethane	1763354	**8.760**	0.459	0.488	6.1	**30**	IN	**PFB**
Ethyl tert butyl ether	1321078	**6.020**	0.500	0.535	6.6	**40**	IN	**PFB**
Vinyl acetate	337607	**9.110**	0.084	0.103	18.3	**40**	IN	**PFB**
2-Butanone (MEK)	780542	**10.550**	0.169	0.133	-27.0	**40**	IN	**PFB**
Diisopropyl ether	416365	**5.400**	0.176	0.172	-2.0	**40**	IN	**PFB**
Hexane	1321814	**7.660**	0.393	0.382	-2.8	**40**	IN	**PFB**
Methacrylonitrile	721431	**9.950**	0.165	0.154	-7.5	**40**	IN	**PFB**
Ethyl acetate	1614913	**9.080**	0.405	0.405	-0.2	**40**	IN	**PFB**
Bromochloromethane	872638	**5.520**	0.360	0.358	-0.6	**30**	IN	**PFB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Methyl acrylate	338152	**4.910**	0.157	0.147	-6.4	**40**	IN	**PFB**
Tetrahydrofuran	684573	**10.770**	0.145	0.137	-5.3	**40**	IN	**PFB**
Isobutyl alcohol	143924	**7.570**	0.043	0.030	-45.5	**40**	OUT	**PFB**
cis-1,2-Dichloroethene	1134785	**9.430**	0.274	0.292	6.0	**30**	IN	**PFB**
2,2-Dichloropropane	1622821	**9.230**	0.401	0.382	-4.8	**30**	IN	**PFB**
Chloroform	1811589	**9.540**	0.433	0.452	4.3	**30**	IN	**PFB**
1,1,1-Trichloroethane	1783725	**8.420**	0.450	0.479	6.0	**30**	IN	**14DFB**
1,2-Dichloroethane	1211811	**8.670**	0.297	0.297	-0.1	**30**	IN	**14DFB**
1,1-Dichloropropene	1134790	**6.830**	0.353	0.393	10.2	**30**	IN	**14DFB**
Cyclohexane	1091703	**7.940**	0.292	0.333	12.3	**30**	IN	**14DFB**
Benzene	3180844	**8.930**	0.757	0.794	4.7	**30**	IN	**14DFB**
Carbon tetrachloride	1194269	**8.990**	0.282	0.299	5.5	**30**	IN	**14DFB**
t-Amyl methyl ether	1450749	**4.600**	0.670	0.719	6.8	**40**	IN	**14DFB**
2,2,4-Trimethylpentane	2737869	**5.650**	1.030	1.133	9.1	**30**	IN	**14DFB**
n-Heptane	695114	**6.280**	0.235	0.254	7.3	**30**	IN	**14DFB**
1,2-Dichloropropane	1175795	**9.150**	0.273	0.296	7.7	**30**	IN	**14DFB**
1,4 Dioxane	2159791	**17.520**	0.262	0.239	-9.4	**40**	IN	**14DFB**
Dibromomethane	1072573	**3.900**	0.584	0.615	4.9	**30**	IN	**14DFB**
Trichloroethene (TCE)	1721005	**8.860**	0.413	0.487	15.3	**30**	IN	**14DFB**
Bromodichloromethane	950197	**4.170**	0.484	0.438	-10.6	**40**	IN	**14DFB**
Methyl methacrylate	580139	**7.010**	0.176	0.149	-17.7	**40**	IN	**14DFB**
4-Methyl-2-pentanone (MIBK)	1179778	**7.840**	0.320	0.237	-34.9	**40**	IN	**14DFB**
cis-1,3-Dichloropropene	1914921	**9.100**	0.447	0.360	-24.3	**30**	IN	**14DFB**
Toluene	5158608	**9.160**	1.197	1.116	-7.2	**30**	IN	**14DFB**
trans-1,3-Dichloropropene	2151233	**9.110**	0.502	0.315	-59.4	**30**	OUT	**14DFB**
1,1,2-Trichloroethane	805213	**9.030**	0.189	0.192	1.3	**30**	IN	**14DFB**
Ethyl methacrylate	635796	**4.790**	0.282	0.273	-3.2	**40**	IN	**14DFB**
2-Hexanone	2121289	**7.350**	0.613	0.350	-75.2	**40**	OUT	**14DFB**
1,3-Dichloropropane	2382928	**6.810**	0.743	0.694	-7.1	**30**	IN	**14DFB**
Octane	1141315	**5.650**	0.429	0.434	1.2	**30**	IN	**14DFB**
Dibromochloromethane	1635180	**4.140**	0.839	0.672	-24.9	**40**	IN	**14DFB**
1,2-Dibromoethane (EDB)	2208338	**4.610**	1.018	0.818	-24.4	**30**	IN	**14DFB**
Tetrachloroethene (PCE)	1620438	**4.630**	0.744	0.839	11.3	**30**	IN	**14DFB**
Chlorobenzene	5508578	**8.650**	0.926	0.942	1.7	**30**	IN	**d5CB**
1,1,1,2-Tetrachloroethane	940658	**4.290**	0.319	0.320	0.5	**30**	IN	**d5CB**
Ethylbenzene	9333430	**9.290**	1.461	1.492	2.1	**30**	IN	**d5CB**
m,p-Xylenes	7754217	**9.310**	1.211	1.216	0.4	**30**	IN	**d5CB**
Nonane	2312746	**4.930**	0.682	0.711	4.1	**30**	IN	**d5CB**
Styrene	7423238	**9.100**	1.186	0.978	-21.2	**30**	IN	**d5CB**
Bromoform	1716779	**2.780**	0.898	0.743	-20.9	**40**	IN	**d5CB**
o-Xylene	7986703	**9.050**	1.283	1.324	3.1	**30**	IN	**d5CB**
1,1,2,2-Tetrachloroethane	4970844	**4.710**	1.534	1.220	-25.7	**30**	IN	**d5CB**
1,2,3-Trichloropropane	1356303	**5.100**	0.387	0.304	-27.3	**30**	IN	**d5CB**
t-1,4-Dichloro-2-butene	620269	**5.770**	0.156	0.072	-118.1	**40**	OUT	**d5CB**
n-Propylbenzene	11834815	**6.420**	2.680	2.369	-13.1	**30**	IN	**d5CB**
Isopropylbenzene	20100455	**6.490**	4.502	4.439	-1.4	**30**	IN	**d5CB**
4-Ethyltoluene	20100455	**15.540**	1.880	1.859	-1.2	**30**	IN	**d5CB**
1,3,5-Trimethylbenzene	10741971	**9.080**	1.720	1.922	10.5	**30**	IN	**d5CB**
Decane	4850912	**5.250**	1.343	1.250	-7.4	**30**	IN	**d5CB**
tert-butyl benzene	7542345	**5.730**	1.914	1.914	0.0	**40**	IN	**d5CB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
1,2,4-Trimethylbenzene	11914265	**8.930**	1.940	1.525	-27.2	**30**	IN	**d5CB**
i-Butylbenzene	10834989	**5.690**	2.768	2.188	-26.5	**40**	IN	**d5CB**
sec-butylbenzene	13914396	**6.040**	3.349	2.560	-30.8	**40**	IN	**d5CB**
1,3-Dichlorobenzene	8247826	**7.050**	1.701	1.227	-38.6	**40**	IN	**d5CB**
Isopropyltoluene	10537840	**5.970**	2.566	2.351	-9.1	**40**	IN	**d5CB**
Benzyl chloride	4749976	**6.280**	1.100	0.632	-74.1	**40**	OUT	**d5CB**
1,4-Dichlorobenzene	7502125	**6.580**	1.657	1.278	-29.7	**40**	IN	**d5CB**
n-Butylbenzene	11854218	**5.600**	3.077	2.239	-37.4	**40**	IN	**d5CB**
1,2-Dichlorobenzene	10294580	**6.492**	2.305	1.311	-75.8	**40**	OUT	**d5CB**
1,2-Dibromo-3-chloropropane	2018047	**6.280**	0.467	0.200	-133.8	**50**	OUT	**d5CB**
1,2,4-Trichlorobenzene	1063068	**3.270**	0.473	0.091	-420.3	**50**	OUT	**d5CB**
Naphthalene	207897	**1.530**	0.198	0.064	-209.0	**50**	OUT	**d5CB**
1,2,3-Trichlorobenzene	85909	**4.910**	0.025	0.021	-21.1	**50**	IN	**d5CB**
Hexachlorobutadiene	3253392	**2.520**	1.877	1.087	-72.6	**50**	OUT	**d5CB**
Pentafluorobenzene	8778002	**20.000**		0.000				
1,4-Difluorobenzene	9413267	**20.000**		0.000				
Chlorobenzene-d5	13757598	**20.000**		0.000				
Toluene-d8	6214359	**10.000**		0.000				

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**C12104**		
File Name:	C12104A.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	ST62126	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	10 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**12:11**
Anal Date:	10 Dec 124 9:00 am	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**200.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	12.203	4.41	42.00	1456334
75-71-8	Dichlorodifluoromethane	3	TRG	9.730	4.48	85.00	4617445
67-56-1	Methanol	4	TRG	57.851	4.86	31.00	7602583
74-87-3	Chloromethane	5	TRG	10.496	4.77	50.00	1491524
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	9.258	4.77	85.00	3542383
75-01-4	Vinyl chloride	7	TRG	9.081	5.02	62.00	1580151
106-99-0	1,3-Butadiene	8	TRG	10.808	5.14	54.00	1301010
74-83-9	Bromomethane	9	TRG	8.393	5.56	94.00	1244209
75-00-3	Chloroethane	10	TRG	7.678	5.72	64.00	600301
64-17-5	Ethanol	11	TRG	54.878	5.72	46.00	2063850
107-02-8	Acrolein	12	TRG	16.972	6.32	56.00	883012
75-69-4	Trichlorofluoromethane	13	TRG	9.409	6.38	101.00	2717497
67-64-1	Acetone	14	TRG	11.402	6.42	58.00	1406517
67-63-0	2-propanol (isopropylalcoh	15	TRG	25.082	6.45	45.00	5991272
75-65-0	t-Butyl alcohol	16	TRG	11.231	7.03	59.00	3027364
4227-95-6	Methyl iodide	17	TRG	2.699	7.19	142.00	1146658
75-35-4	1,1-Dichloroethene	18	TRG	7.354	7.07	61.00	2122848
107-13-1	Acrylonitrile	19	TRG	14.011	7.07	53.00	1726834
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	7.552	7.21	151.00	1913804
107-05-1	Allyl chloride	21	TRG	10.942	7.37	76.00	536271
75-09-2	Methylene chloride	22	TRG	7.364	7.35	84.00	996992
75-15-0	Carbon disulfide	23	TRG	9.344	7.61	76.00	3725564
156-60-5	trans-1,2-Dichloroethene	24	TRG	5.952	8.06	96.00	993904
1634-04-4	Methyl tert butyl ether	25	TRG	6.513	8.11	73.00	2518402
107-12-0	Propionitrile	26	TRG	16.262	8.31	54.00	1776799
75-34-3	1,1-Dichloroethane	27	TRG	7.106	8.41	63.00	2106599
637-92-3	Ethyl tert butyl ether	28	TRG	5.148	9.40	59.00	1673138
108-05-4	Vinyl acetate	29	TRG	15.853	8.39	43.00	994500
78-93-3	2-Butanone (MEK)	30	TRG	12.035	8.75	72.00	969815
108-20-3	Diisopropyl ether	31	TRG	4.724	8.90	87.00	493705
110-54-3	Hexane	32	TRG	9.232	8.86	57.00	2142837
126-98-7	Methacrylonitrile	33	TRG	9.145	8.88	67.00	853510
141-78-6	Ethyl acetate	34	TRG	8.612	9.17	61.00	2114921
74-97-5	Bromochloromethane	35	TRG	5.374	9.43	49.00	1168126

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	5.697	9.25	55.00	510066
109-99-9	Tetrahydrofuran	37	TRG	9.995	9.72	72.00	834299
78-83-1	Isobutyl alcohol	38	TRG	8.984	9.51	74.00	162348
156-59-2	cis-1,2-Dichloroethene	39	TRG	7.986	9.16	96.00	1413616
594-20-7	2,2-Dichloropropane	40	TRG	8.925	9.37	77.00	2071786
67-66-3	Chloroform	41	TRG	8.087	9.42	83.00	**2219667**
71-55-6	1,1,1-Trichloroethane	43	TRG	7.414	10.24	97.00	2229286
107-06-2	1,2-Dichloroethane	44	TRG	8.946	10.27	61.95	1666768
563-58-6	1,1-Dichloropropene	45	TRG	5.813	10.50	75.00	1435788
110-82-7	Cyclohexane	46	TRG	8.454	10.74	56.00	1768581
71-43-2	Benzene	47	TRG	8.061	10.70	78.00	4020813
56-23-5	Carbon tetrachloride	48	TRG	8.543	10.73	116.90	1601963
994-05-8	t-Amyl methyl ether	49	TRG	4.072	10.95	73.00	1839733
540-84-1	2,2,4-Trimethylpentane	50	TRG	5.218	11.25	57.00	3713076
142-82-5	n-Heptane	51	TRG	6.374	11.48	71.00	1015939
78-87-5	1,2-Dichloropropane	52	TRG	7.667	11.64	63.00	1425135
123-91-1	1,4 Dioxane	53	TRG	17.944	11.79	88.00	2698636
74-95-3	Dibromomethane	54	TRG	3.385	11.75	174.00	1306895
79-01-6	Trichloroethene (TCE)	55	TRG	6.757	10.70	130.00	2068688
75-27-4	Bromodichloromethane	56	TRG	4.468	11.85	83.00	1229090
80-62-6	Methyl methacrylate	57	TRG	8.155	11.76	69.00	765577
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	10.477	12.55	58.00	1560206
10061-01-5	cis-1,3-Dichloropropene	59	TRG	11.036	12.67	75.00	**2492735**
108-88-3	Toluene	61	TRG	10.271	13.50	91.00	7202191
10061-02-6	trans-1,3-Dichloropropene	62	TRG	11.247	13.28	75.00	2223440
79-00-5	1,1,2-Trichloroethane	63	TRG	8.898	13.52	61.00	1072381
97-63-2	Ethyl methacrylate	64	TRG	6.584	13.63	69.00	1130351
591-78-6	2-Hexanone	65	TRG	10.664	13.79	58.00	2344729
142-28-9	1,3-Dichloropropane	66	TRG	6.344	13.86	76.00	2766530
111-65-9	Octane	67	TRG	5.209	14.04	85.00	1420737
124-48-1	Dibromochloromethane	68	TRG	4.924	14.30	129.00	2077718
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	5.252	14.62	107.00	2699786
127-18-4	Tetrachloroethene (PCE)	70	TRG	3.528	14.69	166.00	1858777
108-90-7	Chlorobenzene	72	TRG	7.380	15.62	112.00	5921079
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	4.148	15.64	131.00	1131857
100-41-4	Ethylbenzene	74	TRG	8.462	15.90	106	10753242
1330-20-7	m,p-Xylenes	75	TRG	8.437	16.06	91.00	8741066
111-84-2	Nonane	76	TRG	4.752	16.43	57.00	2879602
100-42-5	Styrene	77	TRG	9.555	16.61	104.00	7962661
75-25-2	Bromoform	78	TRG	3.298	16.67	173.00	2086500
95-47-6	o-Xylene	79	TRG	8.084	16.33	91.00	9117846
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	5.131	17.02	83.00	5333699
96-18-4	1,2,3-Trichloropropane	81	TRG	6.278	17.22	110.00	1623962
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	11.461	17.24	53.00	699651
103-65-1	n-Propylbenzene	83	TRG	6.940	18.04	91.00	14008773
98-82-8	Isopropylbenzene	84	TRG	6.020	18.23	105.00	22766957
622-96-8	4-Ethyltoluene	85	TRG	14.378	18.23	105.00	22766957
108-67-8	1,3,5-Trimethylbenzene	86	TRG	8.097	18.31	105.00	13258339
124-18-5	Decane	87	TRG	5.933	18.60	57.00	6319726
98-06-6	tert-butyl benzene	88	TRG	5.508	18.93	119.00	8980309

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	10.590	18.95	105.00	13755658
538-93-2	i-Butylbenzene	90	TRG	6.845	19.24	91.00	12760397
135-98-8	sec-butylbenzene	91	TRG	7.465	19.32	105.00	16278061
541-73-1	1,3-Dichlorobenzene	92	TRG	9.163	19.39	146.00	9576095
99-87-6	Isopropyltoluene	93	TRG	6.261	19.53	119.00	12540570
100-44-7	Benzyl chloride	94	TRG	10.047	19.46	91.00	5405144
106-46-7	1,4-Dichlorobenzene	95	TRG	7.695	19.39	146.00	8376014
104-51-8	n-Butylbenzene	96	TRG	7.479	20.20	91.00	14266722
95-50-1	1,2-Dichlorobenzene	97	TRG	8.110	20.07	146.00	9057775
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	14.642	21.02	75.00	2491954
120-82-1	1,2,4-Trichlorobenzene	99	TRG	7.934	22.95	180.00	613895
91-20-3	Naphthalene	100	TRG	2.214	23.23	128.00	120547
87-61-6	1,2,3-Trichlorobenzene	101	TRG	3.009	23.71	180.00	53831
87-68-3	Hexachlorobutadiene	102	TRG	3.636	23.13	225.00	3367577
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**12142332**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12562618**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17037941**
2037-26-5	Toluene-d8	60	SURR	10.390	13.40	98.00	**7749749**

Evaluate Continuing Calibration Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114B.D
Acq Time : 11 Dec 124 9:26 am Operator: TR
Sample : ST62126 Inst : 5970 - MS
Misc : 10 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	74	-0.27
2	T	Propylene	0.197	0.189	3.9	73	-0.10
3	T	Dichlorodifluoromethane	0.782	0.783	-0.2	83	-0.10
4	T	Methanol	0.216	0.273	-26.1	98	-0.12
5	T	Chloromethane	0.234	0.249	-6.5	85	-0.12
6	T	1,2-Dichlorotetrafluoroetha	0.630	0.676	-7.3	88	-0.12
7	T	Vinyl chloride	0.287	0.289	-0.9	91	-0.14
8	T	1,3-Butadiene	0.198	0.223	-12.3	103	-0.14
9	T	Bromomethane	0.244	0.255	-4.2	75	-0.15
10	T	Chloroethane	0.129	0.110	14.8	64	-0.16
11	T	Ethanol	0.062	0.063	-1.9	83	-0.15
12	T	Acrolein	0.086	0.110	-28.4	115	-0.19
13	T	Trichlorofluoromethane	0.476	0.537	-12.9	89	-0.19
14	T	Acetone	0.203	0.185	9.0	92	-0.19
15	T	2-propanol (isopropylalcoho	0.393	0.492	-25.0	105	-0.17
16	T	t-Butyl alcohol	0.444	0.599	-34.9#	129	-0.19
17	T	Methyl iodide	0.700	0.769	-9.8	86	-0.21
18	T	1,1-Dichloroethene	0.475	0.455	4.4	86	-0.22
19	T	Acrylonitrile	0.203	0.256	-26.3	118	-0.20
20	T	1,1,2-Trichlorotrifluoroeth	0.417	0.411	1.5	81	-0.21
21	T	Allyl chloride	0.081	0.089	-10.6	92	-0.22
22	T	Methylene chloride	0.223	0.201	9.7	85	-0.22
23	T	Carbon disulfide	0.657	0.693	-5.5	84	-0.23
24	T	trans-1,2-Dichloroethene	0.275	0.264	4.1	88	-0.23
25	T	Methyl tert butyl ether	0.637	0.650	-2.0	89	-0.23
26	T	Propionitrile	0.180	0.198	-10.0	96	-0.24
27	T	1,1-Dichloroethane	0.488	0.459	6.1	82	-0.26
28	T	Ethyl tert butyl ether	0.535	0.500	6.6	88	-0.26
29	T	Vinyl acetate	0.103	0.084	18.3	59	-0.51#
30	T	2-Butanone (MEK)	0.133	0.169	-27.0	109	-0.24
31	T	Diisopropyl ether	0.172	0.176	-2.0	79	-0.25
32	T	Hexane	0.382	0.393	-2.8	86	-0.26
33	T	Methacrylonitrile	0.154	0.165	-7.5	96	-0.24
34	T	Ethyl acetate	0.405	0.405	-0.2	93	-0.26
35	T	Bromochloromethane	0.358	0.360	-0.6	94	-0.27
36	T	Methyl acrylate	0.147	0.157	-6.4	82	-0.25
37	T	Tetrahydrofuran	0.137	0.145	-5.3	93	-0.27
38	T	Isobutyl alcohol	0.030	0.043	-45.5#	155	-0.27
39	T	cis-1,2-Dichloroethene	0.292	0.274	6.0	84	-0.26
40	T	2,2-Dichloropropane	0.382	0.401	-4.8	89	-0.28
41	T	Chloroform	0.452	0.433	4.3	87	-0.28

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114B.D
Acq Time : 11 Dec 124 9:26 am Operator: TR
Sample : ST62126 Inst : 5970 - MS
Misc : 10 ML Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
42	I	1,4-Difluorobenzene	1.000	1.000	0.0	76	-0.29
43	T	1,1,1-Trichloroethane	0.479	0.450	6.0	87	-0.29
44	T	1,2-Dichloroethane	0.297	0.297	-0.1	94	-0.29
45	T	1,1-Dichloropropene	0.393	0.353	10.2	83	-0.30
46	T	Cyclohexane	0.333	0.292	12.3	84	-0.30
47	T	Benzene	0.794	0.757	4.7	85	-0.30
48	T	Carbon tetrachloride	0.299	0.282	5.5	90	-0.29
49	T	t-Amyl methyl ether	0.719	0.670	6.8	86	-0.29
50	T	2,2,4-Trimethylpentane	1.133	1.030	9.1	85	-0.29
51	T	n-Heptane	0.254	0.235	7.3	85	-0.31
52	T	1,2-Dichloropropane	0.296	0.273	7.7	85	-0.32
53	T	1,4 Dioxane	0.239	0.262	-9.4	113	-0.31
54	T	Dibromomethane	0.615	0.584	4.9	94	-0.32
55	T	Trichloroethene (TCE)	0.487	0.413	15.3	84	-0.32
56	T	Bromodichloromethane	0.438	0.484	-10.6	101	-0.32
57	T	Methyl methacrylate	0.149	0.176	-17.7	103	-0.29
58	T	4-Methyl-2-pentanone (MIBK)	0.237	0.320	-34.9#	126	-0.31
59	T	cis-1,3-Dichloropropene	0.360	0.447	-24.3	102	-0.32
60	S	Toluene-d8	1.187	1.320	-11.2	84	-0.33
61	T	Toluene	1.116	1.197	-7.2	96	-0.33
62	T	trans-1,3-Dichloropropene	0.315	0.502	-59.4#	127	-0.33
63	T	1,1,2-Trichloroethane	0.192	0.189	1.3	100	-0.34
64	T	Ethyl methacrylate	0.273	0.282	-3.2	86	-0.33
65	T	2-Hexanone	0.350	0.613	-75.2#	167	-0.33
66	T	1,3-Dichloropropane	0.694	0.743	-7.1	104	-0.33
67	T	Octane	0.434	0.429	1.2	96	-0.33
68	T	Dibromochloromethane	0.672	0.839	-24.9	106	-0.35
69	T	1,2-Dibromoethane (EDB)	0.818	1.018	-24.4	104	-0.35
70	T	Tetrachloroethene (PCE)	0.839	0.744	11.3	87	-0.34
71	IS	Chlorobenzene-d5	1.000	1.000	0.0	85	-0.35
72	T	Chlorobenzene	0.942	0.926	1.7	102	-0.35
73	T	1,1,1,2-Tetrachloroethane	0.320	0.319	0.5	104	-0.36
74	T	Ethylbenzene	1.492	1.461	2.1	103	-0.36
75	T	m,p-Xylenes	1.216	1.211	0.4	105	-0.35
76	T	Nonane	0.711	0.682	4.1	104	-0.35
77	T	Styrene	0.978	1.186	-21.2	116	-0.35
78	T	Bromoform	0.743	0.898	-20.9	122	-0.36
79	T	o-Xylene	1.324	1.283	3.1	103	-0.36
80	T	1,1,2,2-Tetrachloroethane	1.220	1.534	-25.7	130	-0.37
81	T	1,2,3-Trichloropropane	0.304	0.387	-27.3	135	-0.36

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114B.D
Acq Time : 11 Dec 124 9:26 am
Sample : ST62126
Misc : 10 ML

Operator: TR
Inst : 5970 - MS
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
82	T	t-1,4-Dichloro-2-butene	0.072	0.156	-118.1#	189	-0.36
83	T	n-Propylbenzene	2.369	2.680	-13.1	113	-0.37
84	T	Isopropylbenzene	4.439	4.502	-1.4	110	-0.37
85	T	4-Ethyltoluene	1.859	1.880	-1.2	110	-0.37
86	T	1,3,5-Trimethylbenzene	1.922	1.720	10.5	59	-0.36
87	T	Decane	1.250	1.343	-7.4	118	-0.36
88	T	tert-butyl benzene	1.914	1.914	0.0	111	-0.38
89	T	1,2,4-Trimethylbenzene	1.525	1.940	-27.2	117	-0.39
90	T	i-Butylbenzene	2.188	2.768	-26.5	126	-0.39
91	T	sec-butylbenzene	2.560	3.349	-30.8#	118	-0.38
92	T	1,3-Dichlorobenzene	1.227	1.701	-38.6#	133	-0.38
93	T	Isopropyltoluene	2.351	2.566	-9.1	120	-0.37
94	T	Benzyl chloride	0.632	1.100	-74.1#	141	-0.39
95	T	1,4-Dichlorobenzene	1.278	1.657	-29.7	121	-0.26
96	T	n-Butylbenzene	2.239	3.077	-37.4#	139	-0.37
97	T	1,2-Dichlorobenzene	1.311	2.305	-75.8#	169	-0.38
98	T	1,2-Dibromo-3-chloropropane	0.200	0.467	-133.8#	198	-0.39
99	T	1,2,4-Trichlorobenzene	0.091	0.473	-420.3#	303#	-0.39
100	T	Naphthalene	0.064	0.198	-209.0#	314#	-0.40
101	T	1,2,3-Trichlorobenzene	0.021	0.025	-21.1	194	-0.40
102	T	Hexachlorobutadiene	1.087	1.877	-72.6#	167	-0.41

(#) = Out of Range SPCC's out = 0 CCC's out = 0

CONTINUING CALIBRATION REPORT

SDG:	**LABQC**		**Sample Calculation:**
QC_Batch:	**121024-MA1**		1) CCRFi = $\frac{(Astdi)\ (Cistdi)}{(Cstdi)\ (Aistdi)}$ i
Sample ID:	ST62126		
Sample Analysis Date:	10 Dec 124 9:00 am		
Run Method:	A1563_L.M		CCRFi is the Continuing Calibration RF
Quant/Calibration Method:	A15CS2_M.M		
Calibration Level:	**Level 4**	**10**	PFB - Pentafluorobenzene
			14DFB - 1,4-Difluorobenzene
A passing calibration can have (10%) or 10 compounds out			d5CB - d5-Chlorobenzene

Compound	Area Astdi	**Cal Level Cstdi ppbv**	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant **IS**
Propylene	1456334	**9.500**	0.253	0.197	-28.5	**30**	IN	**PFB**
Dichlorodifluoromethane	4617445	**9.500**	0.801	0.782	-2.4	**30**	IN	**PFB**
Methanol	7602583	**15.700**	0.798	0.216	-268.5	**50**	OUT	**PFB**
Chloromethane	1491524	**9.500**	0.259	0.234	-10.5	**30**	IN	**PFB**
1,2-Dichlorotetrafluoroethane	3542383	**9.500**	0.614	0.630	2.6	**30**	IN	**PFB**
Vinyl chloride	1580151	**9.500**	0.274	0.287	4.4	**30**	IN	**PFB**
1,3-Butadiene	1301010	**9.500**	0.226	0.198	-13.8	**30**	IN	**PFB**
Bromomethane	1244209	**9.500**	0.216	0.244	11.7	**30**	IN	**PFB**
Chloroethane	600301	**9.500**	0.104	0.129	19.2	**30**	IN	**PFB**
Ethanol	2063850	**32.080**	0.106	0.062	-71.1	**50**	OUT	**PFB**
Acrolein	883012	**13.780**	0.106	0.086	-23.2	**30**	IN	**PFB**
Trichlorofluoromethane	2717497	**9.130**	0.490	0.476	-3.1	**30**	IN	**PFB**
Acetone	1406517	**12.750**	0.182	0.203	10.6	**40**	IN	**PFB**
2-propanol (isopropylalcohol)	5991272	**12.270**	0.804	0.393	-104.4	**50**	OUT	**PFB**
t-Butyl alcohol	3027364	**9.120**	0.547	0.444	-23.1	**40**	IN	**PFB**
Methyl iodide	1146658	**2.780**	0.679	0.700	2.9	**30**	IN	**PFB**
1,1-Dichloroethene	2122848	**8.690**	0.402	0.475	15.4	**30**	IN	**PFB**
Acrylonitrile	1726834	**10.550**	0.270	0.203	-32.8	**40**	IN	**PFB**
1,1,2-Trichlorotrifluoroethane	1913804	**8.410**	0.375	0.417	10.2	**30**	IN	**PFB**
Allyl chloride	536271	**9.970**	0.089	0.081	-9.7	**40**	IN	**PFB**
Methylene chloride	996992	**9.160**	0.179	0.223	19.6	**30**	IN	**PFB**
Carbon disulfide	3725564	**9.630**	0.637	0.657	3.0	**30**	IN	**PFB**
trans-1,2-Dichloroethene	993904	**7.490**	0.219	0.275	20.5	**30**	IN	**PFB**
Methyl tert butyl ether	2518402	**7.640**	0.543	0.637	14.8	**40**	IN	**PFB**
Propionitrile	1776799	**13.020**	0.225	0.180	-24.9	**40**	IN	**PFB**
1,1-Dichloroethane	2106599	**8.760**	0.396	0.488	18.9	**30**	IN	**PFB**
Ethyl tert butyl ether	1673138	**6.020**	0.458	0.535	14.5	**40**	IN	**PFB**
Vinyl acetate	994500	**9.110**	0.180	0.103	-74.0	**40**	OUT	**PFB**
2-Butanone (MEK)	969815	**10.550**	0.151	0.133	-14.1	**40**	IN	**PFB**
Diisopropyl ether	493705	**5.400**	0.151	0.172	12.5	**40**	IN	**PFB**
Hexane	2142837	**7.660**	0.461	0.382	-20.5	**40**	IN	**PFB**
Methacrylonitrile	853510	**9.950**	0.141	0.154	8.1	**40**	IN	**PFB**
Ethyl acetate	2114921	**9.080**	0.384	0.405	5.2	**40**	IN	**PFB**
Bromochloromethane	1168126	**5.520**	0.349	0.358	2.6	**30**	IN	**PFB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Methyl acrylate	510066	**4.910**	0.171	0.147	-16.0	**40**	IN	**PFB**
Tetrahydrofuran	834299	**10.770**	0.128	0.137	7.2	**40**	IN	**PFB**
Isobutyl alcohol	162348	**7.570**	0.035	0.030	-18.7	**40**	IN	**PFB**
cis-1,2-Dichloroethene	1413616	**9.430**	0.247	0.292	15.3	**30**	IN	**PFB**
2,2-Dichloropropane	2071786	**9.230**	0.370	0.382	3.3	**30**	IN	**PFB**
Chloroform	2219667	**9.540**	0.383	0.452	15.2	**30**	IN	**PFB**
1,1,1-Trichloroethane	2229286	**8.420**	0.422	0.479	12.0	**30**	IN	**14DFB**
1,2-Dichloroethane	1666768	**8.670**	0.306	0.297	-3.2	**30**	IN	**14DFB**
1,1-Dichloropropene	1435788	**6.830**	0.335	0.393	14.9	**30**	IN	**14DFB**
Cyclohexane	1768581	**7.940**	0.355	0.333	-6.5	**30**	IN	**14DFB**
Benzene	4020813	**8.930**	0.717	0.794	9.7	**30**	IN	**14DFB**
Carbon tetrachloride	1601963	**8.990**	0.284	0.299	5.0	**30**	IN	**14DFB**
t-Amyl methyl ether	1839733	**4.600**	0.637	0.719	11.5	**40**	IN	**14DFB**
2,2,4-Trimethylpentane	3713076	**5.650**	1.046	1.133	7.6	**30**	IN	**14DFB**
n-Heptane	1015939	**6.280**	0.258	0.254	-1.5	**30**	IN	**14DFB**
1,2-Dichloropropane	1425135	**9.150**	0.248	0.296	16.2	**30**	IN	**14DFB**
1,4 Dioxane	2698636	**17.520**	0.245	0.239	-2.4	**40**	IN	**14DFB**
Dibromomethane	1306895	**3.900**	0.533	0.615	13.2	**30**	IN	**14DFB**
Trichloroethene (TCE)	2068688	**8.860**	0.372	0.487	23.7	**30**	IN	**14DFB**
Bromodichloromethane	1229090	**4.170**	0.469	0.438	-7.2	**40**	IN	**14DFB**
Methyl methacrylate	765577	**7.010**	0.174	0.149	-16.3	**40**	IN	**14DFB**
4-Methyl-2-pentanone (MIBK)	1560206	**7.840**	0.317	0.237	-33.6	**40**	IN	**14DFB**
cis-1,3-Dichloropropene	2492735	**9.100**	0.436	0.360	-21.3	**30**	IN	**14DFB**
Toluene	7202191	**9.160**	1.252	1.116	-12.1	**30**	IN	**14DFB**
trans-1,3-Dichloropropene	2223440	**9.110**	0.389	0.315	-23.5	**30**	IN	**14DFB**
1,1,2-Trichloroethane	1072381	**9.030**	0.189	0.192	1.5	**30**	IN	**14DFB**
Ethyl methacrylate	1130351	**4.790**	0.376	0.273	-37.5	**40**	IN	**14DFB**
2-Hexanone	2344729	**7.350**	0.508	0.350	-45.1	**40**	OUT	**14DFB**
1,3-Dichloropropane	2766530	**6.810**	0.647	0.694	6.8	**30**	IN	**14DFB**
Octane	1420737	**5.650**	0.400	0.434	7.8	**30**	IN	**14DFB**
Dibromochloromethane	2077718	**4.140**	0.799	0.672	-18.9	**40**	IN	**14DFB**
1,2-Dibromoethane (EDB)	2699786	**4.610**	0.932	0.818	-13.9	**30**	IN	**14DFB**
Tetrachloroethene (PCE)	1858777	**4.630**	0.639	0.839	23.8	**30**	IN	**14DFB**
Chlorobenzene	5921079	**8.650**	0.804	0.942	14.7	**30**	IN	**d5CB**
1,1,1,2-Tetrachloroethane	1131857	**4.290**	0.310	0.320	3.3	**30**	IN	**d5CB**
Ethylbenzene	10753242	**9.290**	1.359	1.492	8.9	**30**	IN	**d5CB**
m,p-Xylenes	8741066	**9.310**	1.102	1.216	9.4	**30**	IN	**d5CB**
Nonane	2879602	**4.930**	0.686	0.711	3.6	**30**	IN	**d5CB**
Styrene	7962661	**9.100**	1.027	0.978	-5.0	**30**	IN	**d5CB**
Bromoform	2086500	**2.780**	0.881	0.743	-18.6	**40**	IN	**d5CB**
o-Xylene	9117846	**9.050**	1.183	1.324	10.7	**30**	IN	**d5CB**
1,1,2,2-Tetrachloroethane	5333699	**4.710**	1.329	1.220	-8.9	**30**	IN	**d5CB**
1,2,3-Trichloropropane	1623962	**5.100**	0.374	0.304	-23.1	**30**	IN	**d5CB**
t-1,4-Dichloro-2-butene	699651	**5.770**	0.142	0.072	-98.6	**40**	OUT	**d5CB**
n-Propylbenzene	14008773	**6.420**	2.561	2.369	-8.1	**30**	IN	**d5CB**
Isopropylbenzene	22766957	**6.490**	4.118	4.439	7.2	**30**	IN	**d5CB**
4-Ethyltoluene	22766957	**15.540**	1.720	1.859	7.5	**30**	IN	**d5CB**
1,3,5-Trimethylbenzene	13258339	**9.080**	1.714	1.922	10.8	**30**	IN	**d5CB**
Decane	6319726	**5.250**	1.413	1.250	-13.0	**30**	IN	**d5CB**
tert-butyl benzene	8980309	**5.730**	1.840	1.914	3.9	**40**	IN	**d5CB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
1,2,4-Trimethylbenzene	13755658	**8.930**	1.808	1.525	-18.6	**30**	IN	**d5CB**
i-Butylbenzene	12760397	**5.690**	2.632	2.188	-20.3	**40**	IN	**d5CB**
sec-butylbenzene	16278061	**6.040**	3.164	2.560	-23.6	**40**	IN	**d5CB**
1,3-Dichlorobenzene	9576095	**7.050**	1.594	1.227	-30.0	**40**	IN	**d5CB**
Isopropyltoluene	12540570	**5.970**	2.466	2.351	-4.9	**40**	IN	**d5CB**
Benzyl chloride	5405144	**6.280**	1.010	0.632	-60.0	**40**	OUT	**d5CB**
1,4-Dichlorobenzene	8376014	**6.580**	1.494	1.278	-16.9	**40**	IN	**d5CB**
n-Butylbenzene	14266722	**5.600**	2.991	2.239	-33.6	**40**	IN	**d5CB**
1,2-Dichlorobenzene	9057775	**6.492**	1.638	1.311	-24.9	**40**	IN	**d5CB**
1,2-Dibromo-3-chloropropane	2491954	**6.280**	0.466	0.200	-133.1	**50**	OUT	**d5CB**
1,2,4-Trichlorobenzene	613895	**3.270**	0.220	0.091	-142.6	**50**	OUT	**d5CB**
Naphthalene	120547	**1.530**	0.092	0.064	-44.7	**50**	IN	**d5CB**
1,2,3-Trichlorobenzene	53831	**4.910**	0.013	0.021	38.7	**50**	IN	**d5CB**
Hexachlorobutadiene	3367577	**2.520**	1.569	1.087	-44.3	**50**	IN	**d5CB**
Pentafluorobenzene	12142332	**20.000**		0.000				
1,4-Difluorobenzene	12562618	**20.000**		0.000				
Chlorobenzene-d5	17037941	**20.000**		0.000				
Toluene-d8	7749749	**10.000**		0.000				

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**C12104**		
File Name:	C12104A.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	ST62126	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	10 ML	**Detect:**	**ND**	**Date Analyzed:**	**12/10/24**	**Time:**	**12:11**
Anal Date:	10 Dec 124 9:00 am	**SF:**	**2**	**QCbatch:**	**121024-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**200.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	12.203	4.41	42.00	1456334
75-71-8	Dichlorodifluoromethane	3	TRG	9.730	4.48	85.00	4617445
67-56-1	Methanol	4	TRG	57.851	4.86	31.00	7602583
74-87-3	Chloromethane	5	TRG	10.496	4.77	50.00	1491524
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	9.258	4.77	85.00	3542383
75-01-4	Vinyl chloride	7	TRG	9.081	5.02	62.00	1580151
106-99-0	1,3-Butadiene	8	TRG	10.808	5.14	54.00	1301010
74-83-9	Bromomethane	9	TRG	8.393	5.56	94.00	1244209
75-00-3	Chloroethane	10	TRG	7.678	5.72	64.00	600301
64-17-5	Ethanol	11	TRG	54.878	5.72	46.00	2063850
107-02-8	Acrolein	12	TRG	16.972	6.32	56.00	883012
75-69-4	Trichlorofluoromethane	13	TRG	9.409	6.38	101.00	2717497
67-64-1	Acetone	14	TRG	11.402	6.42	58.00	1406517
67-63-0	2-propanol (isopropylalcoh	15	TRG	25.082	6.45	45.00	5991272
75-65-0	t-Butyl alcohol	16	TRG	11.231	7.03	59.00	3027364
4227-95-6	Methyl iodide	17	TRG	2.699	7.19	142.00	1146658
75-35-4	1,1-Dichloroethene	18	TRG	7.354	7.07	61.00	2122848
107-13-1	Acrylonitrile	19	TRG	14.011	7.07	53.00	1726834
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	7.552	7.21	151.00	1913804
107-05-1	Allyl chloride	21	TRG	10.942	7.37	76.00	536271
75-09-2	Methylene chloride	22	TRG	7.364	7.35	84.00	996992
75-15-0	Carbon disulfide	23	TRG	9.344	7.61	76.00	3725564
156-60-5	trans-1,2-Dichloroethene	24	TRG	5.952	8.06	96.00	993904
1634-04-4	Methyl tert butyl ether	25	TRG	6.513	8.11	73.00	2518402
107-12-0	Propionitrile	26	TRG	16.262	8.31	54.00	1776799
75-34-3	1,1-Dichloroethane	27	TRG	7.106	8.41	63.00	2106599
637-92-3	Ethyl tert butyl ether	28	TRG	5.148	9.40	59.00	1673138
108-05-4	Vinyl acetate	29	TRG	15.853	8.39	43.00	994500
78-93-3	2-Butanone (MEK)	30	TRG	12.035	8.75	72.00	969815
108-20-3	Diisopropyl ether	31	TRG	4.724	8.90	87.00	493705
110-54-3	Hexane	32	TRG	9.232	8.86	57.00	2142837
126-98-7	Methacrylonitrile	33	TRG	9.145	8.88	67.00	853510
141-78-6	Ethyl acetate	34	TRG	8.612	9.17	61.00	2114921
74-97-5	Bromochloromethane	35	TRG	5.374	9.43	49.00	1168126

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	5.697	9.25	55.00	510066
109-99-9	Tetrahydrofuran	37	TRG	9.995	9.72	72.00	834299
78-83-1	Isobutyl alcohol	38	TRG	8.984	9.51	74.00	162348
156-59-2	cis-1,2-Dichloroethene	39	TRG	7.986	9.16	96.00	1413616
594-20-7	2,2-Dichloropropane	40	TRG	8.925	9.37	77.00	2071786
67-66-3	Chloroform	41	TRG	8.087	9.42	83.00	**2219667**
71-55-6	1,1,1-Trichloroethane	43	TRG	7.414	10.24	97.00	2229286
107-06-2	1,2-Dichloroethane	44	TRG	8.946	10.27	61.95	1666768
563-58-6	1,1-Dichloropropene	45	TRG	5.813	10.50	75.00	1435788
110-82-7	Cyclohexane	46	TRG	8.454	10.74	56.00	1768581
71-43-2	Benzene	47	TRG	8.061	10.70	78.00	4020813
56-23-5	Carbon tetrachloride	48	TRG	8.543	10.73	116.90	1601963
994-05-8	t-Amyl methyl ether	49	TRG	4.072	10.95	73.00	1839733
540-84-1	2,2,4-Trimethylpentane	50	TRG	5.218	11.25	57.00	3713076
142-82-5	n-Heptane	51	TRG	6.374	11.48	71.00	1015939
78-87-5	1,2-Dichloropropane	52	TRG	7.667	11.64	63.00	1425135
123-91-1	1,4 Dioxane	53	TRG	17.944	11.79	88.00	2698636
74-95-3	Dibromomethane	54	TRG	3.385	11.75	174.00	1306895
79-01-6	Trichloroethene (TCE)	55	TRG	6.757	10.70	130.00	2068688
75-27-4	Bromodichloromethane	56	TRG	4.468	11.85	83.00	1229090
80-62-6	Methyl methacrylate	57	TRG	8.155	11.76	69.00	765577
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	10.477	12.55	58.00	1560206
10061-01-5	cis-1,3-Dichloropropene	59	TRG	11.036	12.67	75.00	**2492735**
108-88-3	Toluene	61	TRG	10.271	13.50	91.00	7202191
10061-02-6	trans-1,3-Dichloropropene	62	TRG	11.247	13.28	75.00	2223440
79-00-5	1,1,2-Trichloroethane	63	TRG	8.898	13.52	61.00	1072381
97-63-2	Ethyl methacrylate	64	TRG	6.584	13.63	69.00	1130351
591-78-6	2-Hexanone	65	TRG	10.664	13.79	58.00	2344729
142-28-9	1,3-Dichloropropane	66	TRG	6.344	13.86	76.00	2766530
111-65-9	Octane	67	TRG	5.209	14.04	85.00	1420737
124-48-1	Dibromochloromethane	68	TRG	4.924	14.30	129.00	2077718
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	5.252	14.62	107.00	2699786
127-18-4	Tetrachloroethene (PCE)	70	TRG	3.528	14.69	166.00	1858777
108-90-7	Chlorobenzene	72	TRG	7.380	15.62	112.00	5921079
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	4.148	15.64	131.00	1131857
100-41-4	Ethylbenzene	74	TRG	8.462	15.90	106	10753242
1330-20-7	m,p-Xylenes	75	TRG	8.437	16.06	91.00	8741066
111-84-2	Nonane	76	TRG	4.752	16.43	57.00	2879602
100-42-5	Styrene	77	TRG	9.555	16.61	104.00	7962661
75-25-2	Bromoform	78	TRG	3.298	16.67	173.00	2086500
95-47-6	o-Xylene	79	TRG	8.084	16.33	91.00	9117846
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	5.131	17.02	83.00	5333699
96-18-4	1,2,3-Trichloropropane	81	TRG	6.278	17.22	110.00	1623962
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	11.461	17.24	53.00	699651
103-65-1	n-Propylbenzene	83	TRG	6.940	18.04	91.00	14008773
98-82-8	Isopropylbenzene	84	TRG	6.020	18.23	105.00	22766957
622-96-8	4-Ethyltoluene	85	TRG	14.378	18.23	105.00	22766957
108-67-8	1,3,5-Trimethylbenzene	86	TRG	8.097	18.31	105.00	13258339
124-18-5	Decane	87	TRG	5.933	18.60	57.00	6319726
98-06-6	tert-butyl benzene	88	TRG	5.508	18.93	119.00	8980309

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	10.590	18.95	105.00	13755658
538-93-2	i-Butylbenzene	90	TRG	6.845	19.24	91.00	12760397
135-98-8	sec-butylbenzene	91	TRG	7.465	19.32	105.00	16278061
541-73-1	1,3-Dichlorobenzene	92	TRG	9.163	19.39	146.00	9576095
99-87-6	Isopropyltoluene	93	TRG	6.261	19.53	119.00	12540570
100-44-7	Benzyl chloride	94	TRG	10.047	19.46	91.00	5405144
106-46-7	1,4-Dichlorobenzene	95	TRG	7.695	19.39	146.00	8376014
104-51-8	n-Butylbenzene	96	TRG	7.479	20.20	91.00	14266722
95-50-1	1,2-Dichlorobenzene	97	TRG	8.110	20.07	146.00	9057775
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	14.642	21.02	75.00	2491954
120-82-1	1,2,4-Trichlorobenzene	99	TRG	7.934	22.95	180.00	613895
91-20-3	Naphthalene	100	TRG	2.214	23.23	128.00	120547
87-61-6	1,2,3-Trichlorobenzene	101	TRG	3.009	23.71	180.00	53831
87-68-3	Hexachlorobutadiene	102	TRG	3.636	23.13	225.00	3367577
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**12142332**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**12562618**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**17037941**
2037-26-5	Toluene-d8	60	SURR	10.390	13.40	98.00	**7749749**

Initial Calibration Data Packages

Samples were analyzed using the methods listed in Section 3. For each of the methods there is an Initial Calibration Curve that meets the criteria defined in Section 2 on Quality Control for the modified method.

Index

Response Factors
Instrument Quant Report
Chromatogram

Response Factor Report 5970 - MS

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Initial Calibration

Calibration Files
0.25 =C10184B.D 1.0 =C10184E.D 2.0 =C10184F.D
5.0 =C10184H.D 10.0 =C10184J.D 20.0 =C10184M.D

		Compound	0.25	1.0	2.0	5.0	10.0	20.0	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Propylene	0.339	0.214	0.181	0.192	0.200	0.231	0.226	25.79
3)	T	Dichlorodifluoromet	0.888	0.910	0.860	0.726	0.907	1.055	0.891	11.84
4)	T	Methanol	0.814	0.526	0.583	0.446	0.782	0.577	0.621	23.46
5)	T	Chloromethane	0.433	0.355	0.327	0.341	0.327	0.389	0.362	11.53
6)	T	1,2-Dichlorotetrafl	0.752	0.741	0.743	0.728	0.721	0.854	0.757	6.45
7)	T	Vinyl chloride	0.360	0.364	0.310	0.322	0.327	0.430	0.352	12.41
8)	T	1,3-Butadiene	0.229	0.252	0.211	0.223	0.235	0.309	0.243	14.31
9)	T	Bromomethane	0.327	0.277	0.271	0.277	0.302	0.338	0.299	9.52
10)	T	Chloroethane	0.164	0.174	0.165	0.174	0.177	0.198	0.175	7.09
11)	T	Ethanol	0.119	0.066	0.083	0.063	0.072	0.059	0.077	28.88
12)	T	Acrolein	0.123	0.078	0.080	0.091	0.097	0.118	0.098	19.25
13)	T	Trichlorofluorometh	0.630	0.637	0.600	0.645	0.672	0.750	0.656	7.91
14)	T	Acetone	0.440	0.221	0.207	0.220	0.213	0.229	0.255	35.68
15)	T	2-propanol (isoprop		0.609	0.635	0.809	0.646	0.752	0.690	12.43
16)	T	t-Butyl alcohol	1.060	0.572	0.506	0.750	0.581	0.756	0.704	28.64
17)	T	Methyl iodide	0.681	0.688	0.701	0.720	0.766	0.849	0.734	8.73
18)	T	1,1-Dichloroethene	0.701	0.756	0.651	0.675	0.680	0.751	0.702	6.08
19)	T	Acrylonitrile	0.247	0.231	0.245	0.246	0.271	0.302	0.257	9.88
20)	T	1,1,2-Trichlorotrif	0.438	0.441	0.399	0.410	0.415	0.447	0.425	4.66
21)	T	Allyl chloride	0.067	0.079	0.104	0.098	0.108	0.134	0.098	23.99
22)	T	Methylene chloride	0.245	0.223	0.213	0.210	0.225	0.247	0.227	6.91
23)	T	Carbon disulfide	0.541	0.523	0.617	0.661	0.718	0.852	0.652	18.69
24)	T	trans-1,2-Dichloroe	0.294	0.295	0.262	0.272	0.296	0.322	0.290	7.27
25)	T	Methyl tert butyl e	0.618	0.850	0.842	0.931	0.990	1.148	0.897	19.69
26)	T	Propionitrile	0.180	0.202	0.228	0.264	0.272	0.305	0.242	19.34
27)	T	1,1-Dichloroethane	0.649	0.651	0.631	0.639	0.678	0.790	0.673	8.81
28)	T	Ethyl tert butyl et	0.638	0.898	0.948	1.035	1.022	1.144	0.948	18.27
29)	T	Vinyl acetate	0.309	0.484	0.468	0.514	0.550	0.665	0.498	23.34
30)	T	2-Butanone (MEK)	0.130	0.127	0.124	0.141	0.142	0.191	0.143	17.54
31)	T	Diisopropyl ether		0.214	0.211	0.219	0.228	0.253	0.225	7.50
32)	T	Hexane	0.598	0.683	0.669	0.713	0.658	0.728	0.675	6.80
33)	T	Methacrylonitrile	0.166	0.170	0.164	0.187	0.180	0.203	0.178	8.40
34)	T	Ethyl acetate	0.548	0.625	0.610	0.623	0.647	0.753	0.635	10.59
35)	T	Bromochloromethane	0.691	0.725	0.697	0.698	0.698	0.804	0.719	6.01
36)	T	Methyl acrylate	0.341	0.215	0.230	0.274	0.285	0.355	0.283	19.99
37)	T	Tetrahydrofuran	0.161	0.198	0.176	0.200	0.183	0.197	0.186	8.18
38)	T	Isobutyl alcohol	0.077		0.043	0.051	0.038	0.035	0.049	34.37
39)	T	cis-1,2-Dichloroeth	0.293	0.325	0.314	0.315	0.318	0.356	0.320	6.48
40)	T	2,2-Dichloropropane	0.430	0.433	0.512	0.584	0.586	0.715	0.543	19.97
41)	T	Chloroform	0.438	0.446	0.518	0.541	0.571	0.646	0.527	14.93
42)	I	1,4-Difluorobenzene	----------ISTD----------							

(#) = Out of Range

Response Factor Report 5970 - MS

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Initial Calibration

Calibration Files
0.25 =C10184B.D 1.0 =C10184E.D 2.0 =C10184F.D
5.0 =C10184H.D 10.0 =C10184J.D 20.0 =C10184M.D

		Compound	0.25	1.0	2.0	5.0	10.0	20.0	Avg	%RSD
43)	T	1,1,1-Trichloroetha	0.474	0.492	0.544	0.575	0.597	0.675	0.559	13.20
44)	T	1,2-Dichloroethane	0.591	0.561	0.543	0.546	0.561	0.648	0.575	6.88
45)	T	1,1-Dichloropropene	0.365	0.477	0.480	0.528	0.501	0.547	0.483	13.25
46)	T	Cyclohexane	0.537	0.574	0.548	0.576	0.549	0.556	0.557	2.77
47)	T	Benzene		1.089	0.977	0.958	0.928	0.969	0.984	6.24
48)	T	Carbon tetrachlorid	0.264	0.279	0.260	0.296	0.298	0.418	0.303	19.42
49)	T	t-Amyl methyl ether		1.374	1.169	1.206	1.100	1.255	1.221	8.40
50)	T	2,2,4-Trimethylpent	1.650	1.792	1.743	1.933	1.868	2.102	1.848	8.58
51)	T	n-Heptane	0.315	0.353	0.335	0.344	0.337	0.378	0.344	6.11
52)	T	1,2-Dichloropropane	0.440	0.413	0.392	0.396	0.386	0.435	0.410	5.61
53)	T	1,4 Dioxane	0.321	0.262	0.249	0.310	0.233	0.249	0.271	13.40
54)	T	Dibromomethane	0.637	0.540	0.519	0.484	0.488	0.505	0.529	10.79
55)	T	Trichloroethene (TC	0.571	0.487	0.449	0.423	0.403	0.415	0.458	13.72
56)	T	Bromodichloromethan	0.445	0.394	0.424	0.456	0.541	0.738	0.500	25.43
57)	T	Methyl methacrylate	0.215	0.182	0.184	0.202	0.188	0.224	0.199	8.74
58)	T	4-Methyl-2-pentanon	0.333	0.269	0.243	0.311	0.264	0.408	0.305	19.81
59)	T	cis-1,3-Dichloropro	0.337	0.390	0.433	0.456	0.502	0.635	0.459	22.49
60)	S	Toluene-d8	1.108	1.140	1.152	1.128	1.140	1.152	1.137	1.46
61)	T	Toluene	1.586	1.334	1.274	1.172	1.061	1.226	1.276	13.97
62)	T	trans-1,3-Dichlorop	0.343	0.400	0.443	0.447	0.506	0.698	0.473	25.98
63)	T	1,1,2-Trichloroetha	0.397	0.302	0.346	0.318	0.291	0.352	0.334	11.62
64)	T	Ethyl methacrylate		0.375	0.329	0.358	0.359	0.453	0.375	12.52
65)	T	2-Hexanone	0.790	0.431	0.422	0.511	0.400	0.565	0.520	28.12
66)	T	1,3-Dichloropropane	0.807	0.750	0.735	0.684	0.709	0.814	0.750	6.93
67)	T	Octane	0.374	0.446	0.480	0.406	0.450	0.519	0.446	11.60
68)	T	Dibromochloromethan	0.418	0.517	0.477	0.476	0.551	0.822	0.544	26.39
69)	T	1,2-Dibromoethane (	0.799	0.767	0.811	0.737	0.792	0.942	0.808	8.76
70)	T	Tetrachloroethene (	0.828	0.743	0.697	0.645	0.651	0.670	0.706	9.89
71)	IS	Chlorobenzene-d5		----------ISTD----------						
72)	T	Chlorobenzene	1.219	1.005	0.945	0.772	0.778	0.831	0.925	18.55
73)	T	1,1,1,2-Tetrachloro	0.414	0.337	0.298	0.266	0.285	0.352	0.325	16.68
74)	T	Ethylbenzene	1.806	1.752	1.631	1.426	1.454	1.615	1.614	9.48
75)	T	m,p-Xylenes	1.624	1.489	1.429	1.221	1.220	1.419	1.400	11.23
76)	T	Nonane	1.178	1.202	1.154	0.957	1.010	1.197	1.116	9.48
77)	T	Styrene	1.230	1.009	0.962	0.791	0.829	0.981	0.967	16.10
78)	T	Bromoform	0.784	0.605	0.573	0.463	0.555	0.706	0.614	18.65
79)	T	o-Xylene	1.852	1.587	1.462	1.207	1.249	1.428	1.464	16.14
80)	T	1,1,2,2-Tetrachloro	1.807	1.289	1.239	1.005	1.042	1.356	1.290	22.39
81)	T	1,2,3-Trichloroprop	0.491	0.372	0.336	0.270	0.278	0.332	0.346	23.19
82)	T	t-1,4-Dichloro-2-bu		0.131	0.128	0.115	0.135	0.209	0.144	26.04
83)	T	n-Propylbenzene	3.132	2.705	2.505	1.980	2.214	2.711	2.541	16.01
84)	T	Isopropylbenzene	6.797	5.414	5.122	3.723	3.657	3.748	4.743	26.70

(#) = Out of Range

Response Factor Report 5970 - MS

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Initial Calibration

Calibration Files
0.25 =C10184B.D 1.0 =C10184E.D 2.0 =C10184F.D
5.0 =C10184H.D 10.0 =C10184J.D 20.0 =C10184M.D

		Compound	0.25	1.0	2.0	5.0	10.0	20.0	Avg	%RSD
85)	T	4-Ethyltoluene	2.784	2.270	2.141	1.552	1.527	1.566	1.973	25.99
86)	T	1,3,5-Trimethylbenz	2.705	2.124	1.897	1.410	1.536	1.810	1.914	24.25
87)	T	Decane	2.545	1.981	1.993	1.453	1.568	1.908	1.908	20.18
88)	T	tert-butyl benzene	2.873	2.109	1.873	1.418	1.400	1.566	1.873	30.00
89)	T	1,2,4-Trimethylbenz	1.903	1.478	2.030	1.442	1.459	1.708	1.670	15.12
90)	T	i-Butylbenzene	2.681	2.702	2.510	1.883	1.988	2.591	2.392	15.14
91)	T	sec-butylbenzene	2.654	2.069	2.801	2.119	2.217	2.744	2.434	13.73
92)	T	1,3-Dichlorobenzene	1.428	1.341		0.821	0.967	1.197	1.151	22.06
93)	T	Isopropyltoluene	3.420	2.568	2.370	1.705	1.743	2.073	2.313	27.66
94)	T	Benzyl chloride	0.913	0.746	0.858	0.670	0.707	1.106	0.833	19.47
95)	T	1,4-Dichlorobenzene	1.947	1.431	1.361	0.879	0.945	1.133	1.282	30.58
96)	T	n-Butylbenzene	3.960	2.950	2.769	1.883	2.104	2.870	2.756	26.61
97)	T	1,2-Dichlorobenzene	2.255	1.722	1.813	1.100	1.160	1.657	1.618	26.72
98)	T	1,2-Dibromo-3-chlor		0.368	0.446	0.288	0.313	0.822	0.448	48.70
99)	T	1,2,4-Trichlorobenz	0.291	0.313	0.603	0.323	0.334		0.373	34.80
100)	T	Naphthalene	0.135	0.101	0.094	0.060	0.053		0.089	37.69
101)	T	1,2,3-Trichlorobenz	0.069	0.048	0.083	0.043	0.034		0.055	36.23
102)	T	Hexachlorobutadiene		2.789	3.087	1.395	1.562	2.489	2.264	33.13

(#) = Out of Range

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184B.D
Acq Time : 18 Oct 124 9:09 am
Sample : ST62126
Misc : CURVE, 0.25 ML
Quant Time: Dec 8 12:56 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA TO-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.58	168	9012043	20.00	ppbV		-0.24
42) 1,4-Difluorobenzene	10.72	114	9945891	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.24	117	10561987	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	5509700	9.72	ppbV		97.18
Target Compounds							Qvalue
2) Propylene	4.29	42	36714	1.06	ppbV	m	89
3) Dichlorodifluoromethane	4.36	85	95272	0.55	ppbV	#	97
4) Methanol	4.81	31	143740	0.98	ppbV	#	89
5) Chloromethane	4.64	50	46439	0.83	ppbV	#	88
6) 1,2-Dichlorotetrafluoroeth	4.64	85	80666	0.53	ppbV	#	87
7) Vinyl chloride	4.88	62	38597	0.56	ppbV		95
8) 1,3-Butadiene	5.00	54	24553	0.40	ppbV	#	78
9) Bromomethane	5.41	94	35035	0.44	ppbV		90
10) Chloroethane	5.56	64	17554	0.49	ppbV		92
11) Ethanol	5.63	46	43094	7.09	ppbV	m	86
12) Acrolein	6.18	56	19075	0.74	ppbV		99
13) Trichlorofluoromethane	6.19	101	64703	0.41	ppbV		97
14) Acetone	6.28	58	63427	1.29	ppbV		74
15) 2-propanol (isopropylalcoh	6.35	45	172793	0.95	ppbV	#	98
16) t-Butyl alcohol	6.89	59	108911	0.46	ppbV	#	81
17) Methyl iodide	7.00	142	21484	0.07	ppbV	#	96
18) 1,1-Dichloroethene	6.88	61	68567	0.51	ppbV		96
19) Acrylonitrile	6.91	53	29432	0.51	ppbV	#	89
20) 1,1,2-Trichlorotrifluoroet	7.01	151	41487	0.23	ppbV		85
21) Allyl chloride	7.17	76	7522	0.15	ppbV	m	61
22) Methylene chloride	7.15	84	25237	0.43	ppbV		91
23) Carbon disulfide	7.41	76	58539	0.32	ppbV	#	91
24) trans-1,2-Dichloroethene	7.85	96	24813	0.26	ppbV		82
25) Methyl tert butyl ether	7.92	73	53216	0.27	ppbV	#	95
26) Propionitrile	8.14	54	26387	0.40	ppbV	#	96
27) 1,1-Dichloroethane	8.18	63	64063	0.44	ppbV		98
28) Ethyl tert butyl ether	9.19	59	43440	0.22	ppbV	#	88
29) Vinyl acetate	8.21	43	31791	0.92	ppbV	#	67
30) 2-Butanone (MEK)	8.59	72	15515	0.31	ppbV	#	1
32) Hexane	8.62	57	52037	0.40	ppbV	#	1
34) Ethyl acetate	8.93	61	56038	0.36	ppbV	#	70
35) Bromochloromethane	9.19	49	42957	0.30	ppbV	#	90
37) Tetrahydrofuran	9.49	72	19639	0.36	ppbV		83
38) Isobutyl alcohol	9.29	74	6522	0.25	ppbV	m	84
39) cis-1,2-Dichloroethene	8.93	96	31106	0.29	ppbV	#	73

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184B.D
Acq Time : 18 Oct 124 9:09 am
Sample : ST62126
Misc : CURVE, 0.25 ML
Quant Time: Dec 8 12:56 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
40) 2,2-Dichloropropane	9.12	77	44763	0.35	ppbV		95
41) Chloroform	9.17	83	46997	0.31	ppbV		91
43) 1,1,1-Trichloroethane	9.97	97	49686	0.21	ppbV		90
44) 1,2-Dichloroethane	10.01	62	63777	0.34	ppbV		95
45) 1,1-Dichloropropene	10.23	75	31020	0.16	ppbV	#	90
46) Cyclohexane	10.47	56	52884	0.29	ppbV		94
47) Benzene	10.43	78	324063	0.79	ppbV	m	99
48) Carbon tetrachloride	10.47	117	29557	0.16	ppbV		99
49) t-Amyl methyl ether	10.72	73	145684	0.31	ppbV	#	48
50) 2,2,4-Trimethylpentane	10.96	57	115694	0.18	ppbV		94
51) n-Heptane	11.20	71	24615	0.18	ppbV		94
52) 1,2-Dichloropropane	11.36	63	50092	0.32	ppbV		96
53) 1,4 Dioxane	11.53	88	70270	0.42	ppbV		98
54) Dibromomethane	11.46	174	31063	0.06	ppbV	#	87
55) Trichloroethene (TCE)	11.37	130	62740	0.18	ppbV		85
56) Bromodichloromethane	11.56	83	22996	0.11	ppbV		90
57) Methyl methacrylate	11.53	69	18708	0.16	ppbV	#	82
58) 4-Methyl-2-pentanone (MIBK	12.28	58	32282	0.15	ppbV		90
59) cis-1,3-Dichloropropene	12.38	75	38162	0.21	ppbV		97
61) Toluene	13.20	91	180615	0.30	ppbV		95
62) trans-1,3-Dichloropropene	12.98	75	38880	0.23	ppbV		93
63) 1,1,2-Trichloroethane	13.22	61	44616	0.36	ppbV	#	46
64) Ethyl methacrylate	13.37	69	24049	0.10	ppbV	#	96
65) 2-Hexanone	13.53	58	72659	0.19	ppbV	#	73
66) 1,3-Dichloropropane	13.56	76	68185	0.20	ppbV		96
67) Octane	13.75	85	26214	0.14	ppbV	#	82
68) Dibromochloromethane	13.99	129	28508	0.08	ppbV	#	80
69) 1,2-Dibromoethane (EDB)	14.30	107	45716	0.11	ppbV	#	95
70) Tetrachloroethene (PCE)	14.37	166	47762	0.07	ppbV		92
72) Chlorobenzene	15.31	112	140335	0.23	ppbV	#	90
73) 1,1,1,2-Tetrachloroethane	15.32	131	23420	0.09	ppbV		88
74) Ethylbenzene	15.58	91	221237	0.28	ppbV		93
75) m,p-Xylenes	15.75	91	199784	0.29	ppbV		95
76) Nonane	16.11	57	76547	0.25	ppbV	#	96
77) Styrene	16.30	104	148084	0.28	ppbV		94
78) Bromoform	16.35	173	28996	0.06	ppbV	#	90
79) o-Xylene	16.36	91	221046	0.32	ppbV		99
80) 1,1,2,2-Tetrachloroethane	16.69	83	112623	0.18	ppbV	m	100
81) 1,2,3-Trichloropropane	16.89	110	33165	0.13	ppbV	m	95
82) t-1,4-Dichloro-2-butene	16.91	53	18437	0.43	ppbV	#	85
83) n-Propylbenzene	17.70	91	264607	0.23	ppbV		97
84) Isopropylbenzene	17.88	105	585049	0.29	ppbV		96
85) 4-Ethyltoluene	17.88	105	585049	0.69	ppbV	#	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184B.D
Acq Time : 18 Oct 124 9:09 am
Sample : ST62126
Misc : CURVE, 0.25 ML
Quant Time: Dec 8 12:56 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
86)	1,3,5-Trimethylbenzene	17.97	105	325683	0.34	ppbV	m	73
87)	Decane	18.28	57	178731	0.38	ppbV	#	97
88)	tert-butyl benzene	18.58	119	216928	0.15	ppbV		94
89)	1,2,4-Trimethylbenzene	18.60	105	331610	0.43	ppbV		98
90)	i-Butylbenzene	18.89	91	269050	0.29	ppbV		96
91)	sec-butylbenzene	18.96	105	336318	0.29	ppbV		94
92)	1,3-Dichlorobenzene	19.15	146	132706	0.11	ppbV	m	91
93)	Isopropyltoluene	19.18	119	269146	0.22	ppbV	#	93
94)	Benzyl chloride	19.11	91	75659	0.22	ppbV	#	91
95)	1,4-Dichlorobenzene	19.15	146	169649	0.16	ppbV	m	91
96)	n-Butylbenzene	19.85	91	292791	0.25	ppbV		96
97)	1,2-Dichlorobenzene	19.73	146	194079	0.14	ppbV		99
98)	1,2-Dibromo-3-chloropropan	20.67	75	37884	0.37	ppbV	#	55
99)	1,2,4-Trichlorobenzene	22.62	180	12616	0.03	ppbV	m	0
100)	Naphthalene	23.08	128	2718	0.01	ppbV	m	0
101)	1,2,3-Trichlorobenzene	23.40	180	4470	0.05	ppbV	m	0
102)	Hexachlorobutadiene	23.18	225	139401	0.08	ppbV		95

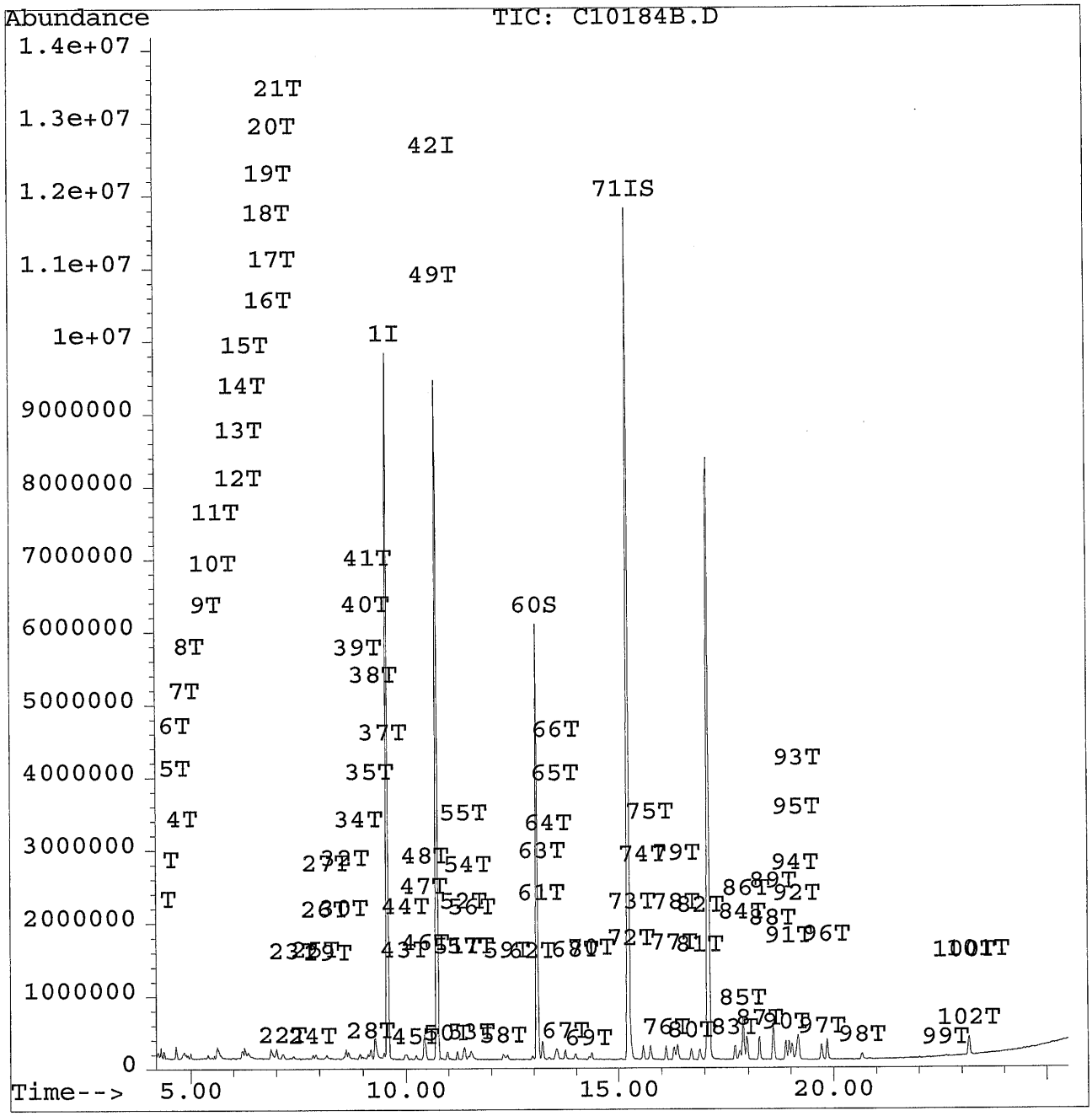
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184B.D
Acq Time : 18 Oct 124 9:09 am
Sample : ST62126
Misc : CURVE, 0.25 ML
Quant Time: Dec 8 12:56 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184E.D
Acq Time : 18 Oct 124 11:20 am
Sample : ST62126
Misc : CURVE, 1 ML
Quant Time: Dec 8 12:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	7346052	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.74	114	8457740	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.23	117	9549817	20.00	ppbV		-0.34
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.10	98	4819367	10.00	ppbV		99.96
Target Compounds							Qvalue
2) Propylene	4.31	42	74746	2.65	ppbV		96
3) Dichlorodifluoromethane	4.40	85	317409	2.23	ppbV	m	95
4) Methanol	4.86	31	303047	2.54	ppbV	m	76
5) Chloromethane	4.65	50	123785	2.70	ppbV		95
6) 1,2-Dichlorotetrafluoroeth	4.67	85	258737	2.09	ppbV		97
7) Vinyl chloride	4.89	62	126956	2.24	ppbV		96
8) 1,3-Butadiene	5.01	54	87770	1.76	ppbV		94
9) Bromomethane	5.42	94	96624	1.50	ppbV		94
10) Chloroethane	5.59	64	60624	2.07	ppbV		96
11) Ethanol	5.68	46	78144	15.78	ppbV	m	82
12) Acrolein	6.21	56	39562	1.87	ppbV		88
13) Trichlorofluoromethane	6.23	101	212773	1.66	ppbV		97
14) Acetone	6.29	58	103843	2.60	ppbV		100
15) 2-propanol (isopropylalcoh	6.40	45	275096	1.86	ppbV	#	90
16) t-Butyl alcohol	6.93	59	191083	0.99	ppbV	#	89
17) Methyl iodide	7.01	142	70736	0.30	ppbV	#	87
18) 1,1-Dichloroethene	6.89	61	241455	2.20	ppbV		97
19) Acrylonitrile	6.94	53	88963	1.91	ppbV	#	98
20) 1,1,2-Trichlorotrifluoroet	7.05	151	136129	0.93	ppbV	#	63
21) Allyl chloride	7.20	76	28941	0.71	ppbV	#	85
22) Methylene chloride	7.17	84	75414	1.56	ppbV	#	87
23) Carbon disulfide	7.42	76	184533	1.26	ppbV		97
24) trans-1,2-Dichloroethene	7.87	96	81245	1.06	ppbV		96
25) Methyl tert butyl ether	7.94	73	237404	1.49	ppbV		97
26) Propionitrile	8.14	54	96249	1.79	ppbV		98
27) 1,1-Dichloroethane	8.19	63	210480	1.76	ppbV		98
28) Ethyl tert butyl ether	9.20	59	197955	1.25	ppbV		95
29) Vinyl acetate	8.23	43	161671	5.76	ppbV	#	74
30) 2-Butanone (MEK)	8.59	72	49461	1.23	ppbV	#	46
31) Diisopropyl ether	8.69	87	42503	0.82	ppbV		94
32) Hexane	8.64	57	193146	1.84	ppbV	#	14
33) Methacrylonitrile	8.69	67	62622	1.72	ppbV		94
34) Ethyl acetate	8.94	61	209021	1.63	ppbV	#	69
35) Bromochloromethane	9.20	49	146526	1.26	ppbV		97
36) Methyl acrylate	9.06	55	38777	0.51	ppbV	#	82

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184E.D
Acq Time : 18 Oct 124 11:20 am
Sample : ST62126
Misc : CURVE, 1 ML
Quant Time: Dec 8 12:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Tetrahydrofuran	9.51	72	78503	1.74 ppbV	94
38) Isobutyl alcohol	9.59	74	208277	9.61 ppbV m	82
39) cis-1,2-Dichloroethene	8.94	96	112313	1.28 ppbV	80
40) 2,2-Dichloropropane	9.13	77	146449	1.40 ppbV	97
41) Chloroform	9.20	83	155533	1.25 ppbV	96
43) 1,1,1-Trichloroethane	9.99	97	174737	0.87 ppbV	96
44) 1,2-Dichloroethane	10.04	62	206380	1.30 ppbV	95
45) 1,1-Dichloropropene	10.24	75	137284	0.81 ppbV	93
46) Cyclohexane	10.48	56	191621	1.24 ppbV	93
47) Benzene	10.45	78	409811	1.18 ppbV	100
48) Carbon tetrachloride	10.48	117	106208	0.69 ppbV	96
49) t-Amyl methyl ether	10.70	73	267185	0.67 ppbV #	72
50) 2,2,4-Trimethylpentane	10.98	57	424364	0.77 ppbV	98
51) n-Heptane	11.22	71	93977	0.80 ppbV	93
52) 1,2-Dichloropropane	11.35	63	160699	1.22 ppbV	95
53) 1,4 Dioxane	11.54	88	193594	1.36 ppbV	100
54) Dibromomethane	11.47	174	89115	0.21 ppbV #	95
55) Trichloroethene (TCE)	11.39	130	183131	0.62 ppbV	93
56) Bromodichloromethane	11.58	83	69947	0.40 ppbV	98
57) Methyl methacrylate	11.52	69	53873	0.53 ppbV	83
58) 4-Methyl-2-pentanone (MIBK	12.28	58	88620	0.48 ppbV	95
59) cis-1,3-Dichloropropene	12.38	75	150003	0.99 ppbV	96
61) Toluene	13.22	91	519113	1.01 ppbV	100
62) trans-1,3-Dichloropropene	12.98	75	153837	1.05 ppbV	95
63) 1,1,2-Trichloroethane	13.22	61	115080	1.10 ppbV	93
64) Ethyl methacrylate	13.37	69	76020	0.37 ppbV #	93
65) 2-Hexanone	13.51	58	135000	0.41 ppbV	93
66) 1,3-Dichloropropane	13.56	76	215538	0.75 ppbV	97
67) Octane	13.75	85	107606	0.66 ppbV #	85
68) Dibromochloromethane	13.99	129	89707	0.30 ppbV	96
69) 1,2-Dibromoethane (EDB)	14.31	107	149187	0.42 ppbV #	98
70) Tetrachloroethene (PCE)	14.38	166	144467	0.24 ppbV	88
72) Chlorobenzene	15.30	112	417520	0.76 ppbV	95
73) 1,1,1,2-Tetrachloroethane	15.32	131	69189	0.30 ppbV	94
74) Ethylbenzene	15.57	91	777817	1.09 ppbV	95
75) m,p-Xylenes	15.75	91	661241	1.07 ppbV #	80
76) Nonane	16.10	57	281147	1.02 ppbV	100
77) Styrene	16.29	104	438591	0.91 ppbV	95
78) Bromoform	16.34	173	80821	0.18 ppbV #	86
79) o-Xylene	16.36	91	689703	1.10 ppbV	95
80) 1,1,2,2-Tetrachloroethane	16.69	83	289275	0.51 ppbV	97
81) 1,2,3-Trichloropropane	16.89	110	90620	0.38 ppbV	96
82) t-1,4-Dichloro-2-butene	16.91	53	36222	0.93 ppbV #	81

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184E.D
Acq Time : 18 Oct 124 11:20 am
Sample : ST62126
Misc : CURVE, 1 ML
Quant Time: Dec 8 12:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.71	91	826753	0.81	ppbV		98
84)	Isopropylbenzene	17.88	105	1680349	0.91	ppbV		97
85)	4-Ethyltoluene	17.88	105	1680349	2.18	ppbV		97
86)	1,3,5-Trimethylbenzene	17.97	105	922783	1.07	ppbV	m	73
87)	Decane	18.27	57	501292	1.19	ppbV	#	99
88)	tert-butyl benzene	18.58	119	574016	0.45	ppbV		97
89)	1,2,4-Trimethylbenzene	18.60	105	931500	1.34	ppbV		97
90)	i-Butylbenzene	18.89	91	735303	0.86	ppbV		99
91)	sec-butylbenzene	18.96	105	889213	0.86	ppbV		98
92)	1,3-Dichlorobenzene	19.14	146	451282	0.43	ppbV	m	95
93)	Isopropyltoluene	19.18	119	732008	0.65	ppbV		97
94)	Benzyl chloride	19.11	91	223549	0.71	ppbV		98
95)	1,4-Dichlorobenzene	19.14	146	449545	0.47	ppbV	m	95
96)	n-Butylbenzene	19.84	91	788836	0.74	ppbV		97
97)	1,2-Dichlorobenzene	19.73	146	533746	0.42	ppbV		97
98)	1,2-Dibromo-3-chloropropan	20.66	75	110270	1.18	ppbV	#	74
99)	1,2,4-Trichlorobenzene	22.61	180	48821	0.14	ppbV		95
100)	Naphthalene	22.95	128	7221	0.04	ppbV	m	0
101)	1,2,3-Trichlorobenzene	23.36	180	11147	0.13	ppbV	m	0
102)	Hexachlorobutadiene	23.18	225	332952	0.20	ppbV		96

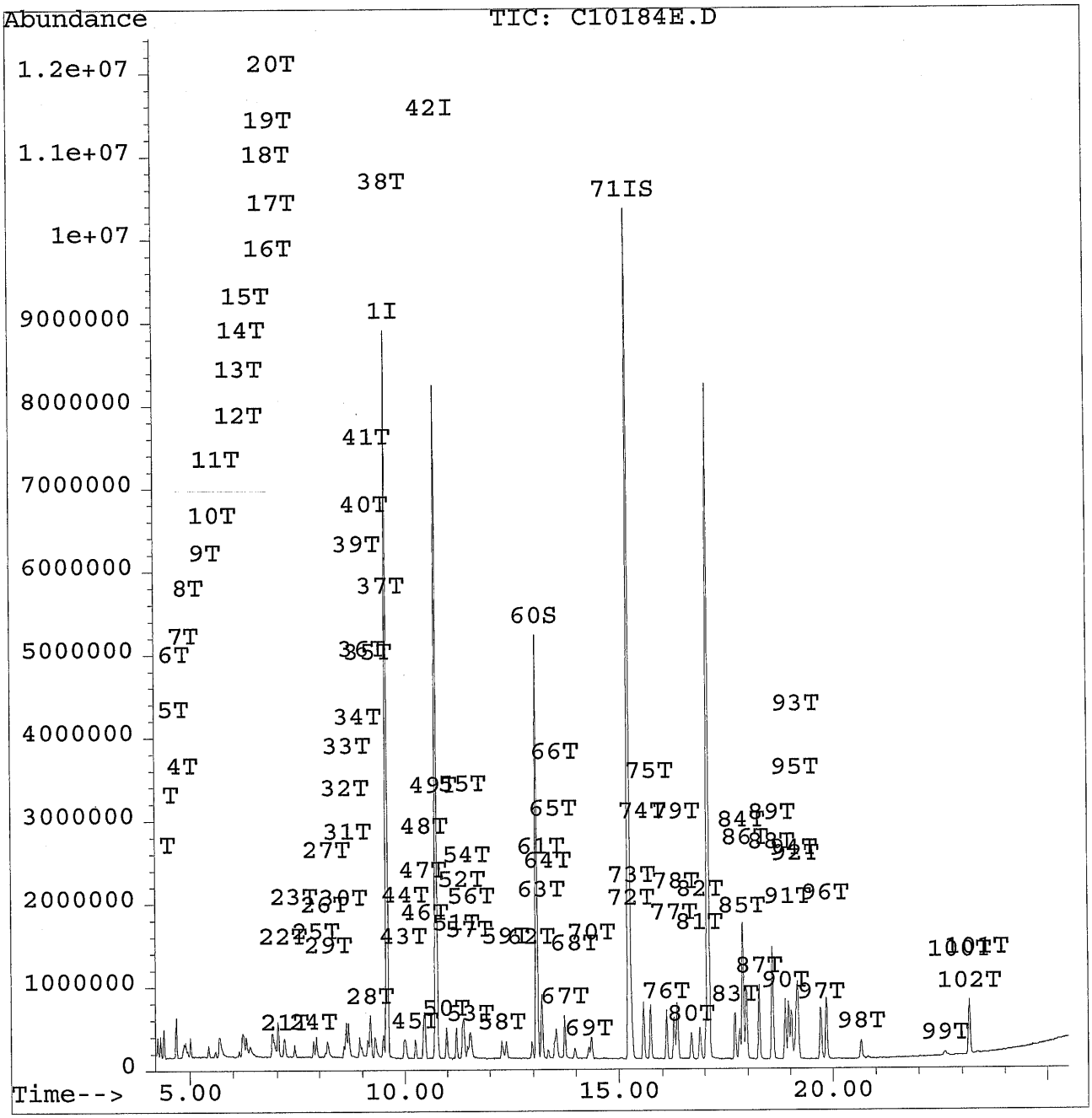
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184E.D
Acq Time : 18 Oct 124 11:20 am
Sample : ST62126
Misc : CURVE, 1 ML
Quant Time: Dec 8 12:52 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184F.D
Acq Time : 18 Oct 124 12:05 pm
Sample : ST62126
Misc : CURVE, 2 ML
Quant Time: Dec 8 13:07 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.58	168	6707230	20.00	ppbV		-0.24
42) 1,4-Difluorobenzene	10.74	114	7688786	20.00	ppbV		-0.26
71) Chlorobenzene-d5	15.24	117	8983116	20.00	ppbV		-0.33
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.08	98	4428912	10.10	ppbV		101.05
Target Compounds							Qvalue
2) Propylene	4.31	42	115029	4.47	ppbV		94
3) Dichlorodifluoromethane	4.38	85	547782	4.21	ppbV	#	99
4) Methanol	4.77	31	615062	5.65	ppbV	#	95
5) Chloromethane	4.65	50	208644	4.99	ppbV		95
6) 1,2-Dichlorotetrafluoroeth	4.65	85	473438	4.18	ppbV	#	85
7) Vinyl chloride	4.89	62	197805	3.82	ppbV		99
8) 1,3-Butadiene	5.01	54	134380	2.95	ppbV		99
9) Bromomethane	5.42	94	172967	2.94	ppbV		93
10) Chloroethane	5.58	64	105453	3.95	ppbV		93
11) Ethanol	5.61	46	178339	39.44	ppbV		95
12) Acrolein	6.19	56	74328	3.86	ppbV		92
13) Trichlorofluoromethane	6.21	101	368239	3.14	ppbV		100
14) Acetone	6.28	58	176624	4.84	ppbV		99
15) 2-propanol (isopropylalcoh	6.36	45	521913	3.87	ppbV	#	90
16) t-Butyl alcohol	6.89	59	309056	1.76	ppbV	#	71
17) Methyl iodide	7.00	142	131681	0.61	ppbV		97
18) 1,1-Dichloroethene	6.89	61	379834	3.79	ppbV		92
19) Acrylonitrile	6.91	53	173540	4.07	ppbV	#	96
20) 1,1,2-Trichlorotrifluoroet	7.03	151	224615	1.68	ppbV		81
21) Allyl chloride	7.18	76	69416	1.87	ppbV	#	38
22) Methylene chloride	7.17	84	130660	2.96	ppbV		96
23) Carbon disulfide	7.41	76	399400	2.98	ppbV		97
24) trans-1,2-Dichloroethene	7.87	96	131825	1.89	ppbV		90
25) Methyl tert butyl ether	7.92	73	431816	2.97	ppbV	#	98
26) Propionitrile	8.12	54	199207	4.05	ppbV		99
27) 1,1-Dichloroethane	8.19	63	370086	3.39	ppbV		96
28) Ethyl tert butyl ether	9.19	59	381377	2.65	ppbV		99
29) Vinyl acetate	8.21	43	285554	11.15	ppbV	#	66
30) 2-Butanone (MEK)	8.57	72	87465	2.38	ppbV	#	52
31) Diisopropyl ether	8.69	87	76567	1.62	ppbV		97
32) Hexane	8.64	57	343190	3.57	ppbV	#	57
33) Methacrylonitrile	8.67	67	109322	3.28	ppbV		95
34) Ethyl acetate	8.93	61	372441	3.17	ppbV	#	68
35) Bromochloromethane	9.19	49	257082	2.43	ppbV		97
36) Methyl acrylate	9.05	55	75563	1.08	ppbV	#	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184F.D
Acq Time : 18 Oct 124 12:05 pm
Sample : ST62126
Misc : CURVE, 2 ML
Quant Time: Dec 8 13:07 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.49	72	127191	3.09	ppbV		88
38)	Isobutyl alcohol	9.29	74	21642	1.09	ppbV	#	86
39)	cis-1,2-Dichloroethene	8.93	96	198987	2.49	ppbV		81
40)	2,2-Dichloropropane	9.13	77	317599	3.33	ppbV		97
41)	Chloroform	9.19	83	331540	2.92	ppbV		96
43)	1,1,1-Trichloroethane	9.99	97	351333	1.92	ppbV		97
44)	1,2-Dichloroethane	10.02	62	361410	2.50	ppbV		98
45)	1,1-Dichloropropene	10.24	75	252767	1.65	ppbV		95
46)	Cyclohexane	10.47	56	334805	2.39	ppbV		96
47)	Benzene	10.43	78	672043	2.13	ppbV		96
48)	Carbon tetrachloride	10.47	117	180211	1.28	ppbV		98
49)	t-Amyl methyl ether	10.69	73	413592	1.15	ppbV	#	73
50)	2,2,4-Trimethylpentane	10.98	57	757195	1.51	ppbV		97
51)	n-Heptane	11.20	71	162067	1.53	ppbV		95
52)	1,2-Dichloropropane	11.36	63	275699	2.30	ppbV		91
53)	1,4 Dioxane	11.53	88	334422	2.58	ppbV		97
54)	Dibromomethane	11.48	174	155486	0.41	ppbV	#	85
55)	Trichloroethene (TCE)	11.39	130	305443	1.14	ppbV	#	94
56)	Bromodichloromethane	11.56	83	135190	0.85	ppbV		95
57)	Methyl methacrylate	11.51	69	98881	1.07	ppbV		96
58)	4-Methyl-2-pentanone (MIBK	12.26	58	146749	0.88	ppbV		97
59)	cis-1,3-Dichloropropene	12.38	75	302895	2.20	ppbV		94
61)	Toluene	13.20	91	896615	1.92	ppbV		86
62)	trans-1,3-Dichloropropene	12.98	75	310297	2.33	ppbV		96
63)	1,1,2-Trichloroethane	13.20	61	241065	2.54	ppbV		87
64)	Ethyl methacrylate	13.36	69	121368	0.66	ppbV	#	94
65)	2-Hexanone	13.49	58	238347	0.79	ppbV	#	96
66)	1,3-Dichloropropane	13.54	76	384266	1.48	ppbV		97
67)	Octane	13.75	85	208622	1.40	ppbV		93
68)	Dibromochloromethane	13.99	129	152107	0.56	ppbV		95
69)	1,2-Dibromoethane (EDB)	14.30	107	286870	0.89	ppbV		99
70)	Tetrachloroethene (PCE)	14.37	166	249259	0.46	ppbV		94
72)	Chlorobenzene	15.29	112	734255	1.43	ppbV		97
73)	1,1,1,2-Tetrachloroethane	15.31	131	115022	0.52	ppbV		97
74)	Ethylbenzene	15.58	91	1362616	2.03	ppbV		93
75)	m,p-Xylenes	15.73	91	1193492	2.05	ppbV		95
76)	Nonane	16.11	57	513182	1.99	ppbV		99
77)	Styrene	16.28	104	786074	1.74	ppbV		97
78)	Bromoform	16.33	173	144020	0.34	ppbV		94
79)	o-Xylene	16.37	91	1188495	2.01	ppbV		97
80)	1,1,2,2-Tetrachloroethane	16.69	83	523000	0.98	ppbV		95
81)	1,2,3-Trichloropropane	16.88	110	153921	0.68	ppbV		98
82)	t-1,4-Dichloro-2-butene	16.91	53	66338	1.81	ppbV		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184F.D
Acq Time : 18 Oct 124 12:05 pm
Sample : ST62126
Misc : CURVE, 2 ML
Quant Time: Dec 8 13:07 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.70	91	1439921	1.50	ppbV		98
84)	Isopropylbenzene	17.88	105	2990597	1.72	ppbV		95
85)	4-Ethyltoluene	17.88	105	2990597	4.13	ppbV		97
86)	1,3,5-Trimethylbenzene	17.97	105	1550479	1.91	ppbV	m	69
87)	Decane	18.26	57	939959	2.37	ppbV	#	97
88)	tert-butyl benzene	18.58	119	967587	0.80	ppbV		94
89)	1,2,4-Trimethylbenzene	18.58	105	1631850	2.50	ppbV		98
90)	i-Butylbenzene	18.88	91	1285306	1.60	ppbV		99
91)	sec-butylbenzene	18.96	105	1522177	1.57	ppbV	#	96
92)	1,3-Dichlorobenzene	19.15	146	804321	0.81	ppbV	m	95
93)	Isopropyltoluene	19.18	119	1266987	1.20	ppbV		98
94)	Benzyl chloride	19.10	91	485317	1.64	ppbV		97
95)	1,4-Dichlorobenzene	19.15	146	806802	0.90	ppbV	m	95
96)	n-Butylbenzene	19.85	91	1392722	1.38	ppbV		97
97)	1,2-Dichlorobenzene	19.71	146	1001568	0.83	ppbV		99
98)	1,2-Dibromo-3-chloropropan	20.65	75	252577	2.86	ppbV	#	85
99)	1,2,4-Trichlorobenzene	22.58	180	176111	0.52	ppbV	m	98
100)	Naphthalene	22.89	128	13114	0.07	ppbV	m	0
101)	1,2,3-Trichlorobenzene	23.33	180	36321	0.46	ppbV	m	97
102)	Hexachlorobutadiene	23.18	225	698736	0.45	ppbV		96

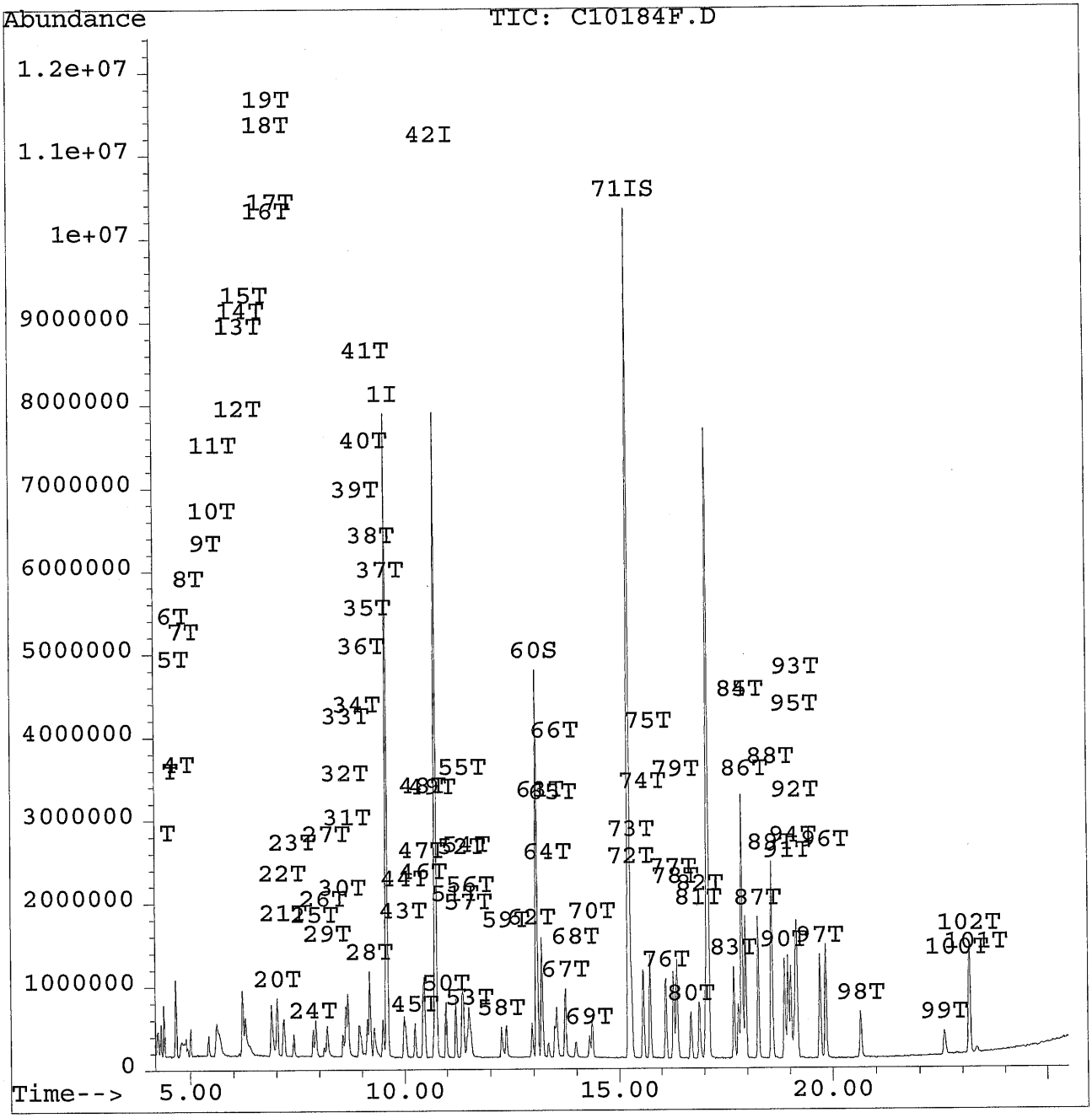
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\10184A_S\C10184F.D
Acq Time : 18 Oct 124 12:05 pm
Sample : ST62126
Misc : CURVE, 2 ML
Quant Time: Dec 8 13:07 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_L.M
Title : EPA T0-15
Last Update : Sun Dec 08 13:08:05 2024
Response via : Multiple Level Calibration



INITIAL CALIBRATION REPORT: Response Factors

SDG:	**LABQC**
QC_Batch:	**121024-MA1**
Sample ID:	ST62126
Sample Analysis Date:	10 Dec 124 9:00 am
Run Method:	A1563_L.M
Quant Method:	A15CS2_M.M
Cal Update:	Mon Dec 09 15:31:36 2024
Template:	A15CHIQ.MA1

Sample Calculation:

1) Avg RFn Sum $\left| \frac{(Astdni)\ (Cistdi)}{(Cstdni)\ (Aistdi)} \right|_i$

Ten Compounds are Allowed to be Out

Response Factors Calculated form ICal Page

Compound	0.25 RF1	1.0 RF2	2.0 RF3	5.0 RF4	10.0 RF5	20.0 RF6	AvgRFn	%RSD	%RSD Limit	RSD Flag
Propylene	0.291	0.194	0.168	0.161	0.190	0.175	0.197	24.4	**30**	IN
Dichlorodifluoromethane	1.210	0.785	0.680	0.637	0.694	0.685	0.782	27.6	**30**	IN
Methanol	0.097	0.188	0.286	0.321	0.204	0.204	0.216	36.4	**50**	IN
Chloromethane	NA	0.276	0.244	0.210	0.216	0.224	0.234	11.5	**30**	IN
1,2-Dichlorotetrafluoroethane	NA	0.754	0.658	0.591	0.565	0.583	0.630	12.3	**30**	IN
Vinyl chloride	0.425	0.300	0.264	0.242	0.233	0.256	0.287	25.0	**30**	IN
1,3-Butadiene	0.339	0.178	0.168	0.164	0.159	0.181	0.198	35.0	**30**	OUT
Bromomethane	NA	0.246	0.264	0.207	0.251	0.253	0.244	9.0	**30**	IN
Chloroethane	0.190	0.124	0.122	0.084	0.126	0.126	0.129	26.3	**30**	IN
Ethanol	0.068	0.049	0.076	0.062	0.056	0.061	0.062	14.9	**50**	IN
Acrolein	0.148	0.078	0.078	0.071	0.070	0.069	0.086	36.0	**40**	IN
Trichlorofluoromethane	NA	0.538	0.470	0.445	0.446	0.479	0.476	8.0	**30**	IN
Acetone	0.327	0.226	0.191	0.189	0.148	0.139	0.203	33.7	**40**	IN
2-propanol (isopropylalcohol)	NA	0.330	0.354	0.517	0.345	0.421	0.393	19.6	**50**	IN
t-Butyl alcohol	0.719	0.327	0.360	0.505	0.342	0.411	0.444	33.7	**40**	IN
Methyl iodide	NA	0.800	0.673	0.711	0.658	0.657	0.700	8.6	**30**	IN
1,1-Dichloroethene	0.772	0.485	0.428	0.394	0.389	0.385	0.475	31.6	**30**	OUT
Acrylonitrile	0.321	0.185	0.187	0.196	0.160	0.169	0.203	29.1	**40**	IN
1,1,2-Trichlorotrifluoroethane	NA	0.493	0.427	0.424	0.373	0.370	0.417	12.0	**30**	IN
Allyl chloride	0.120	0.067	0.064	0.078	0.071	0.084	0.081	25.4	**40**	IN
Methylene chloride	0.351	0.232	0.203	0.199	0.175	0.178	0.223	29.7	**30**	IN
Carbon disulfide	NA	0.732	0.642	0.657	0.608	0.645	0.657	7.0	**30**	IN
trans-1,2-Dichloroethene	0.415	0.281	0.257	0.245	0.220	0.232	0.275	26.0	**30**	IN
Methyl tert butyl ether	1.004	0.577	0.523	0.583	0.536	0.600	0.637	28.6	**40**	IN
Propionitrile	0.200	0.160	0.176	0.217	0.152	0.174	0.180	13.6	**40**	IN
1,1-Dichloroethane	0.748	0.474	0.442	0.426	0.411	0.428	0.488	26.5	**30**	IN
Ethyl tert butyl ether	0.875	0.490	0.487	0.481	0.420	0.460	0.535	31.5	**40**	IN
Vinyl acetate	0.118	0.093	0.082	0.091	0.104	0.131	0.103	17.9	**40**	IN
2-Butanone (MEK)	0.181	0.114	0.117	0.145	0.114	0.125	0.133	20.0	**40**	IN
Diisopropyl ether	NA	0.189	0.171	0.178	0.163	0.160	0.172	6.8	**40**	IN
Hexane	NA	0.468	0.375	0.366	0.335	0.368	0.382	13.1	**40**	IN
Methacrylonitrile	0.208	0.157	0.147	0.156	0.127	0.128	0.154	19.3	**40**	IN
Ethyl acetate	0.624	0.401	0.366	0.351	0.322	0.365	0.405	27.3	**40**	IN
Bromochloromethane	0.493	0.390	0.354	0.315	0.282	0.314	0.358	21.2	**30**	IN

Compound	0.25 RF1	1.0 RF2	2.0 RF3	5.0 RF4	10.0 RF5	20.0 RF6	AvgRFn	%RSD	%RSD Limit	RSD Flag
Methyl acrylate	0.145	0.142	0.139	0.143	0.141	0.175	0.147	9.2	40	IN
Tetrahydrofuran	0.167	0.127	0.140	0.159	0.114	0.119	0.137	15.6	40	IN
Isobutyl alcohol	0.031	NA	0.034	0.039	0.021	0.024	0.030	25.2	40	IN
cis-1,2-Dichloroethene	0.389	0.315	0.293	0.272	0.241	0.241	0.292	19.1	30	IN
2,2-Dichloropropane	0.536	0.372	0.337	0.340	0.332	0.377	0.382	20.2	30	IN
Chloroform	0.676	0.493	0.419	0.396	0.364	0.364	0.452	26.5	30	IN
1,1,1-Trichloroethane	0.718	0.501	0.407	0.413	0.391	0.443	0.479	25.8	30	IN
1,2-Dichloroethane	0.371	0.335	0.272	0.262	0.240	0.301	0.297	16.5	30	IN
1,1-Dichloropropene	0.598	0.382	0.367	0.335	0.322	0.356	0.393	26.1	30	IN
Cyclohexane	0.481	0.369	0.326	0.287	0.264	0.271	0.333	24.8	30	IN
Benzene	NA	1.020	0.873	0.750	0.677	0.651	0.794	19.2	30	IN
Carbon tetrachloride	0.427	0.333	0.268	0.249	0.236	0.278	0.299	23.8	30	IN
t-Amyl methyl ether	NA	0.943	0.710	0.696	0.587	0.660	0.719	18.6	40	IN
2,2,4-Trimethylpentane	1.584	1.163	1.069	1.002	0.912	1.066	1.133	20.8	30	IN
n-Heptane	0.306	0.291	0.253	0.232	0.208	0.232	0.254	14.9	30	IN
1,2-Dichloropropane	0.420	0.309	0.289	0.272	0.243	0.241	0.296	22.4	30	IN
1,4 Dioxane	0.306	0.234	0.240	0.298	0.175	0.185	0.239	22.9	40	IN
Dibromomethane	0.997	0.654	0.551	0.526	0.473	0.487	0.615	32.2	30	OUT
Trichloroethene (TCE)	0.746	0.541	0.472	0.433	0.372	0.361	0.487	29.3	30	IN
Bromodichloromethane	0.589	0.427	0.393	0.396	0.364	0.459	0.438	18.4	40	IN
Methyl methacrylate	0.177	0.167	0.145	0.147	0.130	0.131	0.149	12.9	40	IN
4-Methyl-2-pentanone (MIBK)	0.296	0.213	0.203	0.274	0.193	0.244	0.237	17.4	40	IN
cis-1,3-Dichloropropene	0.427	0.324	0.317	0.344	0.331	0.413	0.360	13.3	30	IN
Toluene	NA	1.354	1.231	1.132	0.942	0.923	1.116	16.6	30	IN
trans-1,3-Dichloropropene	0.312	0.275	0.278	0.306	0.300	0.418	0.315	16.7	30	IN
1,1,2-Trichloroethane	0.243	0.234	0.193	0.178	0.144	0.158	0.192	21.0	30	IN
Ethyl methacrylate	NA	0.237	0.255	0.317	0.248	0.310	0.273	13.6	40	IN
2-Hexanone	0.381	0.292	0.338	0.444	0.277	0.368	0.350	17.6	40	IN
1,3-Dichloropropane	1.064	0.715	0.639	0.594	0.542	0.611	0.694	27.4	30	IN
Octane	0.682	0.440	0.383	0.389	0.339	0.373	0.434	28.9	30	IN
Dibromochloromethane	0.716	0.680	0.645	0.627	0.600	0.763	0.672	9.0	40	IN
1,2-Dibromoethane (EDB)	0.992	0.801	0.778	0.802	0.740	0.797	0.818	10.8	30	IN
Tetrachloroethene (PCE)	1.306	0.904	0.777	0.724	0.646	0.675	0.839	29.4	30	IN
Chlorobenzene	1.265	1.046	0.998	0.884	0.777	0.680	0.942	22.1	30	IN
1,1,1,2-Tetrachloroethane	0.409	0.364	0.325	0.290	0.261	0.273	0.320	17.9	30	IN
Ethylbenzene	2.118	1.575	1.511	1.418	1.209	1.118	1.492	23.7	30	IN
m,p-Xylenes	1.736	1.282	1.271	1.095	0.985	0.927	1.216	24.1	30	IN
Nonane	1.021	0.711	0.731	0.652	0.559	0.593	0.711	23.3	30	IN
Styrene	1.246	0.958	1.000	0.981	0.871	0.813	0.978	15.3	30	IN
Bromoform	0.985	0.746	0.739	0.697	0.627	0.661	0.743	17.1	40	IN
o-Xylene	1.899	1.415	1.384	1.226	1.063	0.956	1.324	25.2	30	IN
1,1,2,2-Tetrachloroethane	1.654	1.167	1.196	1.282	1.004	1.018	1.220	19.5	30	IN
1,2,3-Trichloropropane	0.396	0.315	0.311	0.309	0.244	0.247	0.304	18.3	30	IN
t-1,4-Dichloro-2-butene	NA	0.051	0.071	0.082	0.071	0.084	0.072	18.5	40	IN
n-Propylbenzene	3.213	2.313	2.534	2.358	2.020	1.778	2.369	20.8	30	IN
Isopropylbenzene	5.894	5.052	5.223	4.518	3.489	2.459	4.439	28.4	30	IN
4-Ethyltoluene	2.482	2.119	2.183	1.884	1.457	1.027	1.859	28.6	30	IN
1,3,5-Trimethylbenzene	1.944	1.612	1.781	2.474	2.494	1.228	1.922	25.8	30	IN
Decane	1.923	1.190	1.316	1.177	0.972	0.924	1.250	28.8	30	IN
tert-butyl benzene	2.653	2.056	2.109	1.927	1.467	1.271	1.914	25.8	40	IN

Compound	0.25 RF1	1.0 RF2	2.0 RF3	5.0 RF4	10.0 RF5	20.0 RF6	AvgRFn	%RSD	%RSD Limit	RSD Flag
1,2,4-Trimethylbenzene	1.726	1.242	1.915	1.710	1.412	1.142	1.525	20.0	**30**	IN
i-Butylbenzene	2.379	2.211	2.428	2.280	1.871	1.962	2.188	10.3	**30**	IN
sec-butylbenzene	2.746	2.061	3.169	2.905	2.432	2.047	2.560	17.9	**30**	IN
1,3-Dichlorobenzene	1.586	1.117	NA	1.293	1.092	1.047	1.227	18.0	**40**	IN
Isopropyltoluene	3.466	2.340	2.499	2.403	1.832	1.566	2.351	27.9	**40**	IN
Benzyl chloride	0.565	0.441	0.575	0.773	0.665	0.771	0.632	20.6	**40**	IN
1,4-Dichlorobenzene	1.703	1.128	1.336	1.383	1.170	0.946	1.278	20.4	**40**	IN
n-Butylbenzene	2.987	2.029	2.393	2.360	1.886	1.780	2.239	19.8	**40**	IN
1,2-Dichlorobenzene	1.599	1.065	1.394	1.413	1.161	1.234	1.311	14.8	**40**	IN
1,2-Dibromo-3-chloropropane	NA	0.147	0.176	0.236	0.201	0.238	0.200	19.7	**50**	IN
1,2,4-Trichlorobenzene	0.112	0.044	0.064	0.101	0.133	NA	0.091	39.7	**50**	IN
Naphthalene	0.097	0.062	0.057	0.050	0.054	NA	0.064	29.8	**50**	IN
1,2,3-Trichlorobenzene	0.019	0.031	0.032	0.012	0.011	NA	0.021	47.9	**50**	IN
Hexachlorobutadiene	NA	1.176	1.314	1.040	0.958	0.949	1.087	14.4	**50**	IN

Toluene-d8

NA- This point was an outlier on the curve and was removed

This template is validated

INITIAL CALIBRATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

File Name:	C12104A.D	**SDG:**	**LABQC**
Sample ID:	ST62126	**QC_Batch:**	**C12104**
Sample Analysis Date:	10 Dec 124 9:00 am	IS Conc	20.0
Run Method:	A1563_L.M		
Quant and Calibration Method:	A15CS2_M.M		
Cal Update:	Mon Dec 09 15:31:36 2024 EPA T0-15		
Template:	A15CHIQ.MA1		

Calibration and Response Data Downloaded from Chemsation

		Calibration Amount CA, ppmv						Calibration Response, Area					
		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Amt	Amt	Amt	Amt	Amt	Amt	C12094A.D	C12094C.D	C12094E.D	C12094F.D	C12094G.D	C12094H.D
n	Compound	0.25	1.0	2.0	5.0	10.0	20.0	0.25	1.0	2.0	5.0	10.0	20.0
2	Propylene	0.240	0.950	1.900	4.750	9.500	19.000	44685	116040	204752	461123	1075189	1816399
3	Dichlorodifluoromethane	0.238	0.950	1.900	4.750	9.500	19.000	184194	469474	826776	1818588	3937384	7104764
4	Methanol	0.392	1.570	3.148	7.870	15.700	31.480	24253	185694	575526	1517116	1916435	3500360
5	Chloromethane	-1.000	0.950	1.900	4.750	9.500	19.000	-1	165270	296719	599816	1227407	2321326
6	1,2-Dichlorotetrafluoroethane	-1.000	0.950	1.900	4.750	9.500	19.000	-1	450828	800369	1688274	3207549	6051558
7	Vinyl chloride	0.238	0.950	1.900	4.750	9.500	19.000	64725	179151	320866	691139	1322138	2659053
8	1,3-Butadiene	0.238	0.950	1.900	4.750	9.500	19.000	51566	106490	204197	469001	904045	1882606
9	Bromomethane	-1.000	0.950	1.900	4.750	9.500	19.000	-1	146951	321772	590491	1424049	2624932
10	Chloroethane	0.238	0.950	1.900	4.750	9.500	19.000	28849	74382	148868	240284	716848	1306556
11	Ethanol	0.803	3.210	6.420	16.040	32.080	64.160	34726	99880	311917	601289	1067401	2126744
12	Acrolein	0.344	1.380	2.760	6.890	13.780	27.560	32589	67928	137055	293746	577354	1042475
13	Trichlorofluoromethane	-1.000	0.910	1.830	4.560	9.130	18.260	-1	308531	551192	1219718	2430641	4776963
14	Acetone	0.320	1.280	2.550	6.380	12.750	25.510	66963	181772	311274	724509	1126488	1935509
15	2-propanol (isopropylalcohol)	-1.000	1.230	2.450	6.140	12.270	24.550	128664	255722	555753	1907817	2528882	5642401
16	t-Butyl alcohol	0.228	0.910	1.820	4.560	9.120	18.250	104885	187625	419339	1384059	1861448	4094371
17	Methyl iodide	-1.000	0.280	0.560	1.390	2.780	5.560	-1	141056	241204	594291	1093072	1995298
18	1,1-Dichloroethene	0.217	0.870	1.740	4.350	8.690	17.380	107166	265450	476952	1029777	2018604	3658340
19	Acrylonitrile	0.264	1.050	2.110	5.270	10.550	21.100	54145	122291	252021	621849	1008760	1953275
20	1,1,2-Trichlorotrifluoroethane	-1.000	0.840	1.680	4.200	8.410	16.810	-1	260688	459275	1071449	1870761	3400268
21	Allyl chloride	0.250	1.000	1.990	4.990	9.970	19.950	19132	42174	81300	234661	424569	919593

n	Compound	Amt 0.25	Amt 1.0	Amt 2.0	Amt 5.0	Amt 10.0	Amt 20.0	C12094A.D 0.25	C12094C.D 1.0	C12094E.D 2.0	C12094F.D 5.0	C12094G.D 10.0	C12094H.D 20.0
22	Methylene chloride	0.229	0.920	1.830	4.580	9.160	18.310	51460	134385	238194	548233	955199	1776029
23	Carbon disulfide	-1.000	0.960	1.930	4.810	9.630	19.260	-1	442189	793497	1899813	3494212	6787742
24	trans-1,2-Dichloroethene	0.187	0.750	1.500	3.740	7.490	14.970	49595	132668	246698	550998	985822	1899524
25	Methyl tert butyl ether	0.191	0.760	1.530	3.820	7.640	15.290	122655	275923	512029	1337722	2445485	5009034
26	Propionitrile	0.325	1.300	2.600	6.510	13.020	26.030	41650	131186	293646	849191	1182377	2470312
27	1,1-Dichloroethane	0.219	0.880	1.750	4.380	8.760	17.520	104819	262677	495209	1122409	2149488	4097559
28	Ethyl tert butyl ether	0.151	0.600	1.200	3.010	6.020	12.050	84532	185052	373918	870027	1509047	3027316
29	Vinyl acetate	0.228	0.910	1.820	4.560	9.110	18.220	17202	53352	95911	248986	567823	1307632
30	2-Butanone (MEK)	0.264	1.060	2.110	5.280	10.550	21.110	30644	76350	157671	459347	715993	1446386
31	Diisopropyl ether	-1.000	0.540	1.080	2.700	5.400	10.800	29440	64218	118202	288718	524727	946031
32	Hexane	-1.000	0.770	1.530	3.830	7.660	15.320	-1	226835	367029	841946	1533149	3080723
33	Methacrylonitrile	0.249	1.000	1.990	4.980	9.950	19.910	33143	98700	186786	467357	752363	1394354
34	Ethyl acetate	0.227	0.910	1.820	4.540	9.080	18.160	90590	229510	426078	957131	1743934	3616929
35	Bromochloromethane	0.138	0.550	1.100	2.760	5.520	11.050	43490	134911	249571	523311	928253	1897926
36	Methyl acrylate	0.123	0.490	0.980	2.460	4.910	9.830	11395	43915	87000	211212	414233	938990
37	Tetrahydrofuran	0.270	1.080	2.150	5.380	10.770	21.530	28775	86387	192367	512691	734478	1396764
38	Isobutyl alcohol	0.189	-1.000	1.510	3.780	7.570	15.130	3710	204239	33300	88629	93113	199154
39	cis-1,2-Dichloroethene	0.236	0.940	1.890	4.720	9.430	18.870	58689	186162	354126	771219	1355337	2482423
40	2,2-Dichloropropane	0.231	0.920	1.850	4.620	9.230	18.460	79124	215670	398866	944718	1831804	3801149
41	Chloroform	0.238	0.950	1.910	4.770	9.540	19.070	102942	294766	512490	1136191	2072735	3797113
43	1,1,1-Trichloroethane	0.211	0.840	1.680	4.210	8.420	16.840	94573	255003	440623	1064128	2045987	4164079
44	1,2-Dichloroethane	0.217	0.870	1.730	4.340	8.670	17.350	50213	176619	303485	694455	1293122	2912582
45	1,1-Dichloropropene	0.171	0.680	1.370	3.420	6.830	13.660	63793	157562	323901	699672	1367682	2717184
46	Cyclohexane	0.198	0.790	1.590	3.970	7.940	15.880	59469	176901	334156	696874	1303323	2401692
47	Benzene	-1.000	0.890	1.790	4.460	8.930	17.850	328243	550215	1007672	2046284	3760688	6487381
48	Carbon tetrachloride	0.225	0.900	1.800	4.500	8.990	17.980	59939	181576	310921	686159	1320838	2793882
49	t-Amyl methyl ether	-1.000	0.460	0.920	2.300	4.600	9.200	158634	262939	421324	978546	1680365	3391359
50	2,2,4-Trimethylpentane	0.141	0.560	1.130	2.820	5.650	11.300	139392	394805	779232	1728179	3207132	6727312
51	n-Heptane	0.157	0.630	1.260	3.140	6.280	12.560	30018	111004	205588	445295	814514	1628185
52	1,2-Dichloropropane	0.229	0.920	1.830	4.580	9.150	18.300	60045	172582	341548	762321	1383271	2465840
53	1,4 Dioxane	0.440	1.750	3.500	8.760	17.520	35.030	83916	248071	541340	1595947	1903575	3613137
54	Dibromomethane	0.098	0.390	0.780	1.950	3.900	7.810	60983	154705	277043	627112	1146872	2124110
55	Trichloroethene (TCE)	0.221	0.890	1.770	4.430	8.860	17.710	102823	292032	538972	1171866	2052386	3566543
56	Bromodichloromethane	0.104	0.420	0.830	2.080	4.170	8.330	38203	108776	210552	502982	944400	2133848
57	Methyl methacrylate	0.175	0.700	1.400	3.510	7.010	14.020	19341	70972	130751	315710	565297	1024239
58	4-Methyl-2-pentanone (MIBK)	0.195	0.780	1.570	3.920	7.840	15.690	36032	100925	205417	655539	939939	2137273

n	Compound	Amt 0.25	Amt 1.0	Amt 2.0	Amt 5.0	Amt 10.0	Amt 20.0	C12094A.D 0.25	C12094C.D 1.0	C12094E.D 2.0	C12094F.D 5.0	C12094G.D 10.0	C12094H.D 20.0
59	cis-1,3-Dichloropropene	0.228	0.910	1.820	4.550	9.100	18.210	60748	178916	372644	957314	1876396	4203243
61	Toluene	-1.000	0.920	1.830	4.580	9.160	18.310	-1	754975	1452723	3169707	5368924	9439447
62	trans-1,3-Dichloropropene	0.228	0.910	1.820	4.560	9.110	18.220	44370	151935	326518	852325	1698544	4249079
63	1,1,2-Trichloroethane	0.226	0.900	1.810	4.520	9.030	18.070	34330	127930	225281	492709	809051	1595615
64	Ethyl methacrylate	-1.000	0.480	0.960	2.390	4.790	9.580	20499	68825	157994	462981	739498	1657793
65	2-Hexanone	0.185	0.740	1.470	3.680	7.350	14.710	43969	130883	320806	999540	1267409	3022399
66	1,3-Dichloropropane	0.170	0.680	1.360	3.410	6.810	13.620	112890	294752	560182	1239256	2294958	4651399
67	Octane	0.141	0.570	1.130	2.830	5.650	11.300	59986	152178	278791	673619	1191140	2351309
68	Dibromochloromethane	0.137	0.410	0.830	2.070	4.140	8.280	61254	169025	345109	792846	1544790	3529356
69	1,2-Dibromoethane (EDB)	0.115	0.460	0.920	2.310	4.610	9.230	71197	223293	461814	1133033	2122233	4106548
70	Tetrachloroethene (PCE)	0.116	0.460	0.930	2.310	4.630	9.260	94548	252050	466387	1022318	1859566	3493299
72	Chlorobenzene	0.218	0.870	1.730	4.330	8.650	17.300	214950	690676	1360434	3051834	5417314	9418324
73	1,1,1,2-Tetrachloroethane	0.107	0.430	0.860	2.150	4.290	8.590	34061	118931	220219	496239	903012	1878754
74	Ethylbenzene	0.232	0.930	1.860	4.640	9.290	18.570	382942	1111701	2213877	5245785	9056935	16617615
75	m,p-Xylenes	0.233	0.930	1.860	4.660	9.310	18.620	315241	905059	1863230	4066923	7391735	13812245
76	Nonane	0.123	0.490	0.990	2.470	4.930	9.860	97892	264373	570612	1283317	2223344	4681006
77	Styrene	0.228	0.910	1.820	4.550	9.100	18.190	221314	661920	1434260	3557331	6391451	11829032
78	Bromoform	0.070	0.280	0.560	1.390	2.780	5.560	53746	158580	326089	772373	1405413	2941776
79	o-Xylene	0.226	0.910	1.810	4.530	9.050	18.110	334339	977617	1973932	4428375	7752980	13858383
80	1,1,2,2-Tetrachloroethane	0.118	0.470	0.940	2.350	4.710	9.410	152107	416195	885947	2401579	3812434	7666300
81	1,2,3-Trichloropropane	0.128	0.510	1.020	2.550	5.100	10.200	39488	121826	250216	627318	1004487	2016023
82	t-1,4-Dichloro-2-butene	-1.000	0.580	1.150	2.890	5.770	11.540	9577	22334	64239	188048	328683	779053
83	n-Propylbenzene	0.160	0.640	1.280	3.210	6.420	12.840	400535	1123587	2556226	6033794	10453275	18265811
84	Isopropylbenzene	0.163	0.650	1.300	3.240	6.490	12.980	748536	2492621	5350700	11667161	18256623	25539622
85	4-Ethyltoluene	0.398	1.550	3.110	7.770	15.540	31.070	769731	2492621	5350700	11667161	18256623	25539622
86	1,3,5-Trimethylbenzene	0.228	0.910	1.820	4.540	9.080	18.150	345401	1113722	2553611	8951820	18256623	17828803
87	Decane	0.133	0.530	1.050	2.630	5.250	10.510	199325	478736	1088530	2467149	4113571	7771148
88	tert-butyl benzene	0.143	0.570	1.150	2.860	5.730	11.460	295611	889579	1911074	4392381	6777452	11652692
89	1,2,4-Trimethylbenzene	0.330	1.320	1.790	4.460	8.930	17.860	443917	1244544	2700975	6080448	10164673	16324165
90	i-Butylbenzene	0.190	0.570	1.140	2.850	5.690	11.380	352129	956581	2180987	5178764	8580781	17864018
91	sec-butylbenzene	0.240	0.900	1.210	3.020	6.040	12.080	513434	1407731	3021278	6992114	11839639	19785592
92	1,3-Dichlorobenzene	0.176	0.705	-1.000	3.520	7.050	14.100	217488	597581	1433005	3626471	6208147	11806629
93	Isopropyltoluene	0.149	0.597	1.190	2.980	5.970	11.930	402425	1060535	2343037	5707277	8818122	14943798
94	Benzyl chloride	0.157	0.628	1.260	3.140	6.280	12.600	69103	210001	570424	1935083	3367839	7771492
95	1,4-Dichlorobenzene	0.165	0.658	1.320	3.290	6.580	13.200	218882	563539	1389544	3626471	6208147	9993932
96	n-Butylbenzene	0.140	0.560	1.120	2.800	5.600	11.200	325866	862311	2112250	5266883	8516143	15946730

n	Compound	Amt 0.25	Amt 1.0	Amt 2.0	Amt 5.0	Amt 10.0	Amt 20.0	C12094A.D 0.25	C12094C.D 1.0	C12094E.D 2.0	C12094F.D 5.0	C12094G.D 10.0	C12094H.D 20.0
97	1,2-Dichlorobenzene	0.163	0.649	1.230	3.090	6.492	12.300	203041	524712	1350893	3479960	6077040	12143855
98	1,2-Dibromo-3-chloropropane	-1.000	0.628	1.260	3.140	6.280	12.560	26603	69909	174958	591598	1018824	2395930
99	1,2,4-Trichlorobenzene	0.082	0.327	0.650	1.635	3.270	-1.000	7143	11033	32711	131755	350450	806786
100	Naphthalene	0.038	0.150	0.310	0.770	1.530	-1.000	2874	7032	13932	30745	66156	166297
101	1,2,3-Trichlorobenzene	0.123	0.491	0.980	2.460	4.910	-1.000	1799	11385	25080	23601	44176	800972
102	Hexachlorobutadiene	-1.000	0.250	0.504	1.260	2.520	5.040	114238	223087	521751	1044263	1945455	3825485
1	Pentafluorobenzene	20.000	20.000	20.000	20.000	20.000	20.000	12792180	12592768	12805575	12022740	11942745	10925640
42	1,4-Difluorobenzene	20.000	20.000	20.000	20.000	20.000	20.000	12481466	12125117	12900117	12227072	12441588	11169793
71	Chlorobenzene-d5	20.000	20.000	20.000	20.000	20.000	20.000	15583429	15180776	15759358	15941423	16123321	16001689
60	Toluene-d8	10.000	10.000	10.000	10.000	10.000	10.000	7373221	7194812	7402208	7226849	7382213	6924376

This template is validated

Response Factor Report 5970 - MS

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:28:27 2024
Response via : Initial Calibration

Calibration Files
0.25 =C12094A.D 1.0 =C12094C.D 2.0 =C12094E.D
5.0 =C12094F.D 10.0 =C12094G.D 20.0 =C12094H.D

		Compound	0.25	1.0	2.0	5.0	10.0	20.0	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD							
2)	T	Propylene	0.291	0.194	0.168	0.161	0.190	0.175	0.197	24.38
3)	T	Dichlorodifluoromet	1.210	0.785	0.680	0.637	0.694	0.685	0.782	27.56
4)	T	Methanol	0.097	0.188	0.286	0.321	0.204	0.204	0.216	36.43
5)	T	Chloromethane		0.276	0.244	0.210	0.216	0.224	0.234	11.46
6)	T	1,2-Dichlorotetrafl		0.754	0.658	0.591	0.565	0.583	0.630	12.28
7)	T	Vinyl chloride	0.425	0.300	0.264	0.242	0.233	0.256	0.287	25.00
8)	T	1,3-Butadiene	0.339	0.178	0.168	0.164	0.159	0.181	0.198	34.96
9)	T	Bromomethane		0.246	0.264	0.207	0.251	0.253	0.244	9.01
10)	T	Chloroethane	0.190	0.124	0.122	0.084	0.126	0.126	0.129	26.35
11)	T	Ethanol	0.068	0.049	0.076	0.062	0.056	0.061	0.062	14.86
12)	T	Acrolein	0.148	0.078	0.078	0.071	0.070	0.069	0.086	35.96
13)	T	Trichlorofluorometh		0.538	0.470	0.445	0.446	0.479	0.476	8.02
14)	T	Acetone	0.327	0.226	0.191	0.189	0.148	0.139	0.203	33.68
15)	T	2-propanol (isoprop		0.330	0.354	0.517	0.345	0.421	0.393	19.63
16)	T	t-Butyl alcohol	0.719	0.327	0.360	0.505	0.342	0.411	0.444	33.66
17)	T	Methyl iodide		0.800	0.673	0.711	0.658	0.657	0.700	8.59
18)	T	1,1-Dichloroethene	0.772	0.485	0.428	0.394	0.389	0.385	0.475	31.56
19)	T	Acrylonitrile	0.321	0.185	0.187	0.196	0.160	0.169	0.203	29.10
20)	T	1,1,2-Trichlorotrif		0.493	0.427	0.424	0.373	0.370	0.417	12.02
21)	T	Allyl chloride	0.120	0.067	0.064	0.078	0.071	0.084	0.081	25.38
22)	T	Methylene chloride	0.351	0.232	0.203	0.199	0.175	0.178	0.223	29.69
23)	T	Carbon disulfide		0.732	0.642	0.657	0.608	0.645	0.657	6.96
24)	T	trans-1,2-Dichloroe	0.415	0.281	0.257	0.245	0.220	0.232	0.275	26.00
25)	T	Methyl tert butyl e	1.004	0.577	0.523	0.583	0.536	0.600	0.637	28.60
26)	T	Propionitrile	0.200	0.160	0.176	0.217	0.152	0.174	0.180	13.62
27)	T	1,1-Dichloroethane	0.748	0.474	0.442	0.426	0.411	0.428	0.488	26.45
28)	T	Ethyl tert butyl et	0.875	0.490	0.487	0.481	0.420	0.460	0.535	31.48
29)	T	Vinyl acetate	0.118	0.093	0.082	0.091	0.104	0.131	0.103	17.87
30)	T	2-Butanone (MEK)	0.181	0.114	0.117	0.145	0.114	0.125	0.133	20.02
31)	T	Diisopropyl ether		0.189	0.171	0.178	0.163	0.160	0.172	6.76
32)	T	Hexane		0.468	0.375	0.366	0.335	0.368	0.382	13.13
33)	T	Methacrylonitrile	0.208	0.157	0.147	0.156	0.127	0.128	0.154	19.31
34)	T	Ethyl acetate	0.624	0.401	0.366	0.351	0.322	0.365	0.405	27.31
35)	T	Bromochloromethane	0.493	0.390	0.354	0.315	0.282	0.314	0.358	21.16
36)	T	Methyl acrylate	0.145	0.142	0.139	0.143	0.141	0.175	0.147	9.20
37)	T	Tetrahydrofuran	0.167	0.127	0.140	0.159	0.114	0.119	0.137	15.60
38)	T	Isobutyl alcohol	0.031		0.034	0.039	0.021	0.024	0.030	25.16
39)	T	cis-1,2-Dichloroeth	0.389	0.315	0.293	0.272	0.241	0.241	0.292	19.12
40)	T	2,2-Dichloropropane	0.536	0.372	0.337	0.340	0.332	0.377	0.382	20.24
41)	T	Chloroform	0.676	0.493	0.419	0.396	0.364	0.364	0.452	26.46
42)	I	1,4-Difluorobenzene	ISTD							

(#) = Out of Range

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Response Factor Report 5970 - MS

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Mon Dec 09 15:28:27 2024
Response via : Initial Calibration

Calibration Files
0.25 =C12094A.D 1.0 =C12094C.D 2.0 =C12094E.D
5.0 =C12094F.D 10.0 =C12094G.D 20.0 =C12094H.D

		Compound	0.25	1.0	2.0	5.0	10.0	20.0	Avg	%RSD
43)	T	1,1,1-Trichloroetha	0.718	0.501	0.407	0.413	0.391	0.443	0.479	25.81
44)	T	1,2-Dichloroethane	0.371	0.335	0.272	0.262	0.240	0.301	0.297	16.54
45)	T	1,1-Dichloropropene	0.598	0.382	0.367	0.335	0.322	0.356	0.393	26.08
46)	T	Cyclohexane	0.481	0.369	0.326	0.287	0.264	0.271	0.333	24.80
47)	T	Benzene		1.020	0.873	0.750	0.677	0.651	0.794	19.23
48)	T	Carbon tetrachlorid	0.427	0.333	0.268	0.249	0.236	0.278	0.299	23.83
49)	T	t-Amyl methyl ether		0.943	0.710	0.696	0.587	0.660	0.719	18.60
50)	T	2,2,4-Trimethylpent	1.584	1.163	1.069	1.002	0.912	1.066	1.133	20.84
51)	T	n-Heptane	0.306	0.291	0.253	0.232	0.208	0.232	0.254	14.87
52)	T	1,2-Dichloropropane	0.420	0.309	0.289	0.272	0.243	0.241	0.296	22.42
53)	T	1,4 Dioxane	0.306	0.234	0.240	0.298	0.175	0.185	0.239	22.90
54)	T	Dibromomethane	0.997	0.654	0.551	0.526	0.473	0.487	0.615	32.23
55)	T	Trichloroethene (TC	0.746	0.541	0.472	0.433	0.372	0.361	0.487	29.31
56)	T	Bromodichloromethan	0.589	0.427	0.393	0.396	0.364	0.459	0.438	18.41
57)	T	Methyl methacrylate	0.177	0.167	0.145	0.147	0.130	0.131	0.149	12.86
58)	T	4-Methyl-2-pentanon	0.296	0.213	0.203	0.274	0.193	0.244	0.237	17.45
59)	T	cis-1,3-Dichloropro	0.427	0.324	0.317	0.344	0.331	0.413	0.360	13.32
60)	S	Toluene-d8	1.181	1.187	1.148	1.182	1.187	1.240	1.187	2.50
61)	T	Toluene		1.354	1.231	1.132	0.942	0.923	1.116	16.60
62)	T	trans-1,3-Dichlorop	0.312	0.275	0.278	0.306	0.300	0.418	0.315	16.68
63)	T	1,1,2-Trichloroetha	0.243	0.234	0.193	0.178	0.144	0.158	0.192	20.96
64)	T	Ethyl methacrylate		0.237	0.255	0.317	0.248	0.310	0.273	13.63
65)	T	2-Hexanone	0.381	0.292	0.338	0.444	0.277	0.368	0.350	17.61
66)	T	1,3-Dichloropropane	1.064	0.715	0.639	0.594	0.542	0.611	0.694	27.36
67)	T	Octane	0.682	0.440	0.383	0.389	0.339	0.373	0.434	28.92
68)	T	Dibromochloromethan	0.716	0.680	0.645	0.627	0.600	0.763	0.672	9.03
69)	T	1,2-Dibromoethane (	0.992	0.801	0.778	0.802	0.740	0.797	0.818	10.79
70)	T	Tetrachloroethene (	1.306	0.904	0.777	0.724	0.646	0.675	0.839	29.37
71)	IS	Chlorobenzene-d5		----------	ISTD	----------				
72)	T	Chlorobenzene	1.265	1.046	0.998	0.884	0.777	0.680	0.942	22.15
73)	T	1,1,1,2-Tetrachloro	0.409	0.364	0.325	0.290	0.261	0.273	0.320	17.88
74)	T	Ethylbenzene	2.118	1.575	1.511	1.418	1.209	1.118	1.492	23.69
75)	T	m,p-Xylenes	1.736	1.282	1.271	1.095	0.985	0.927	1.216	24.11
76)	T	Nonane	1.021	0.711	0.731	0.652	0.559	0.593	0.711	23.28
77)	T	Styrene	1.246	0.958	1.000	0.981	0.871	0.813	0.978	15.25
78)	T	Bromoform	0.985	0.746	0.739	0.697	0.627	0.661	0.743	17.14
79)	T	o-Xylene	1.899	1.415	1.384	1.226	1.063	0.956	1.324	25.17
80)	T	1,1,2,2-Tetrachloro	1.654	1.167	1.196	1.282	1.004	1.018	1.220	19.51
81)	T	1,2,3-Trichloroprop	0.396	0.315	0.311	0.309	0.244	0.247	0.304	18.30
82)	T	t-1,4-Dichloro-2-bu		0.051	0.071	0.082	0.071	0.084	0.072	18.47
83)	T	n-Propylbenzene	3.213	2.313	2.534	2.358	2.020	1.778	2.369	20.80
84)	T	Isopropylbenzene	5.894	5.052	5.223	4.518	3.489	2.459	4.439	28.38

(#) = Out of Range

Response Factor Report 5970 - MS

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:28:27 2024
Response via : Initial Calibration

Calibration Files
0.25 =C12094A.D 1.0 =C12094C.D 2.0 =C12094E.D
5.0 =C12094F.D 10.0 =C12094G.D 20.0 =C12094H.D

		Compound	0.25	1.0	2.0	5.0	10.0	20.0	Avg	%RSD
85)	T	4-Ethyltoluene	2.482	2.119	2.183	1.884	1.457	1.027	1.859	28.61
86)	T	1,3,5-Trimethylbenz	1.944	1.612	1.781	2.474	2.494	1.228	1.922	25.80
87)	T	Decane	1.923	1.190	1.316	1.177	0.972	0.924	1.250	28.84
88)	T	tert-butyl benzene	2.653	2.056	2.109	1.927	1.467	1.271	1.914	25.79
89)	T	1,2,4-Trimethylbenz	1.726	1.242	1.915	1.710	1.412	1.142	1.525	20.03
90)	T	i-Butylbenzene	2.379	2.211	2.428	2.280	1.871	1.962	2.188	10.31
91)	T	sec-butylbenzene	2.746	2.061	3.169	2.905	2.432	2.047	2.560	17.93
92)	T	1,3-Dichlorobenzene	1.586	1.117		1.293	1.092	1.047	1.227	18.04
93)	T	Isopropyltoluene	3.466	2.340	2.499	2.403	1.832	1.566	2.351	27.92
94)	T	Benzyl chloride	0.565	0.441	0.575	0.773	0.665	0.771	0.632	20.62
95)	T	1,4-Dichlorobenzene	1.703	1.128	1.336	1.383	1.170	0.946	1.278	20.37
96)	T	n-Butylbenzene	2.987	2.029	2.393	2.360	1.886	1.780	2.239	19.75
97)	T	1,2-Dichlorobenzene	1.599	1.065	1.394	1.413	1.161	1.234	1.311	14.82
98)	T	1,2-Dibromo-3-chlor		0.147	0.176	0.236	0.201	0.238	0.200	19.72
99)	T	1,2,4-Trichlorobenz	0.112	0.044	0.064	0.101	0.133		0.091	39.68
100)	T	Naphthalene	0.097	0.062	0.048	0.050	0.054		0.062	32.50
101)	T	1,2,3-Trichlorobenz	0.019	0.031	0.032	0.012	0.011		0.021	47.92
102)	T	Hexachlorobutadiene		1.176	1.314	1.040	0.958	0.949	1.087	14.35

(#) = Out of Range

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094A.D
Acq Time : 9 Dec 124 9:32 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 0.25 ML Multiplr: 1.00
Quant Time: Dec 9 15:16 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) Pentafluorobenzene	9.57	168	12792180	20.00	ppbV	-0.25
42) 1,4-Difluorobenzene	10.72	114	12481466	20.00	ppbV	-0.28
71) Chlorobenzene-d5	15.23	117	15583429	20.00	ppbV	-0.34
System Monitoring Compounds						%Recovery
60) Toluene-d8	13.08	98	7373221	10.40	ppbV	103.95
Target Compounds						Qvalue
2) Propylene	4.31	42	44685	0.31	ppbV m	92
3) Dichlorodifluoromethane	4.38	85	184194	0.32	ppbV m	94
4) Methanol	4.64	31	24253	0.06	ppbV m	76
5) Chloromethane	4.64	50	79309	0.34	ppbV m	94
6) 1,2-Dichlorotetrafluoroeth	4.65	85	184024	0.38	ppbV m	85
7) Vinyl chloride	4.88	62	64725	0.29	ppbV m	92
8) 1,3-Butadiene	5.00	54	51566	0.33	ppbV m	94
9) Bromomethane	5.41	94	73573	0.39	ppbV m	97
10) Chloroethane	5.56	64	28849	0.26	ppbV m	98
11) Ethanol	5.59	46	34726	0.71	ppbV m	72
12) Acrolein	6.16	56	32589	0.52	ppbV m	95
13) Trichlorofluoromethane	6.19	101	132834	0.32	ppbV m	96
14) Acetone	6.26	58	66963	0.41	ppbV m	13
15) 2-propanol (isopropylalcoh	6.29	45	128664	0.29	ppbV m	84
16) t-Butyl alcohol	6.86	59	104885	0.23	ppbV m	80
17) Methyl iodide	6.98	142	64170	0.14	ppbV m	84
18) 1,1-Dichloroethene	6.87	61	107166	0.24	ppbV m	61
19) Acrylonitrile	6.89	53	54145	0.33	ppbV m	87
20) 1,1,2-Trichlorotrifluoroet	7.01	151	109104	0.40	ppbV m	79
21) Allyl chloride	7.17	76	19132	0.30	ppbV m	15
22) Methylene chloride	7.15	84	51460	0.35	ppbV m	87
23) Carbon disulfide	7.39	76	199872	0.48	ppbV m	86
24) trans-1,2-Dichloroethene	7.85	96	49595	0.27	ppbV m	57
25) Methyl tert butyl ether	7.90	73	122655	0.21	ppbV m	97
26) Propionitrile	8.10	54	41650	0.27	ppbV m	91
27) 1,1-Dichloroethane	8.17	63	104819	0.24	ppbV m	98
28) Ethyl tert butyl ether	9.16	59	84532	0.14	ppbV m	81
29) Vinyl acetate	8.21	43	17202	0.05	ppbV m	64
30) 2-Butanone (MEK)	8.55	72	30644	0.34	ppbV m	91
31) Diisopropyl ether	8.67	87	29440	0.20	ppbV m	86
32) Hexane	8.62	57	112667	0.26	ppbV m	98
33) Methacrylonitrile	8.65	67	33143	0.29	ppbV m	86
34) Ethyl acetate	8.92	61	90590	0.22	ppbV m	68
35) Bromochloromethane	9.16	49	43490	0.09	ppbV m	39
36) Methyl acrylate	9.03	55	11395	0.06	ppbV m	0

(#) = qualifier out of range (m) = manual integration

'$%	581	,167	7<3(	6'*	,'	)IOI,'	&DQ	'HVFUSWRQ	&CHQW	9RO	7HFK	4XDO	0HWKRG	&RPPHQW	4HGLW	3URF
120924-MSA	01	MSA	BLK			B12094A		METHOD BLANK		1000	TR	A1563_L				
120924-MSA	02	MSA	STD			C12094A		ST62126	CURVE START	0.25	TR	A1563_L				
120924-MSA	03	MSA	STD			C12094B		ST62126		0.25	TR	A1563_L				
120924-MSA	04	MSA	STD			C12094C		ST62126		1.0	TR	A1563_L				
120924-MSA	05	MSA	STD			C12094D		ST62126		1.0	TR	A1563_L				
120924-MSA	06	MSA	STD			C12094E		ST62126		2.0	TR	A1563_L				
120924-MSA	07	MSA	STD			C12094F		ST62126		5.0	TR	A1563_L				
120924-MSA	08	MSA	STD			C12094G		ST62126		10.0	TR	A1563_L				
120924-MSA	09	MSA	STD			C12094H		ST62126	CURVE END	20.0	TR	A1563_L				
120924-MSA	10	MSA	BLK			B12094B		METHOD BLANK		1000	TR	A1563_L				
120924-MSA	11	MSA	SA	224456 01		2445601A		DGCFS-1	E.B.M.U.D.	5	TR	A1563_L				
120924-MSA	12	MSA	SA	224456 02		2445602A		DGCFS-2	E.B.M.U.D.	5	TR	A1563_L				

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094A.D
Acq Time : 9 Dec 124 9:32 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 0.25 ML Multiplr: 1.00
Quant Time: Dec 9 15:16 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.47	72	28775	0.24	ppbV	m	89
38)	Isobutyl alcohol	9.27	74	3710	0.12	ppbV	m	75
39)	cis-1,2-Dichloroethene	8.92	96	58689	0.29	ppbV	m	43
40)	2,2-Dichloropropane	9.11	77	79124	0.23	ppbV	m	98
41)	Chloroform	9.16	83	102942	0.31	ppbV	m	100
43)	1,1,1-Trichloroethane	9.97	97	94573	0.27	ppbV	m	83
44)	1,2-Dichloroethane	10.00	62	50213	0.14	ppbV	m	95
45)	1,1-Dichloropropene	10.22	75	63793	0.21	ppbV	m	89
46)	Cyclohexane	10.44	56	59469	0.17	ppbV	m	73
47)	Benzene	10.41	78	328243	0.53	ppbV	m	84
48)	Carbon tetrachloride	10.44	117	59939	0.32	ppbV	m	93
49)	t-Amyl methyl ether	10.72	73	158634	0.21	ppbV	m	60
50)	2,2,4-Trimethylpentane	10.96	57	139392	0.12	ppbV	m	83
51)	n-Heptane	11.18	71	30018	0.14	ppbV	m	82
52)	1,2-Dichloropropane	11.33	63	60045	0.23	ppbV	m	99
53)	1,4 Dioxane	11.50	88	83916	0.50	ppbV	m	64
54)	Dibromomethane	11.45	174	60983	0.18	ppbV	m	71
55)	Trichloroethene (TCE)	11.37	130	102823	0.36	ppbV	m	82
56)	Bromodichloromethane	11.55	83	38203	0.12	ppbV	m	89
57)	Methyl methacrylate	11.50	69	19341	0.16	ppbV	m	27
58)	4-Methyl-2-pentanone (MIBK	12.26	58	36032	0.19	ppbV	m	86
59)	cis-1,3-Dichloropropene	12.36	75	60748	0.21	ppbV	m	89
61)	Toluene	13.18	91	326761	0.41	ppbV	m	90
62)	trans-1,3-Dichloropropene	12.96	75	44370	0.15	ppbV	m	86
63)	1,1,2-Trichloroethane	13.19	61	34330	0.16	ppbV	m	25
64)	Ethyl methacrylate	13.35	69	20499	0.09	ppbV	m	78
65)	2-Hexanone	13.50	58	43969	0.14	ppbV	m	83
66)	1,3-Dichloropropane	13.54	76	112890	0.24	ppbV	m	96
67)	Octane	13.72	85	59986	0.22	ppbV	m	81
68)	Dibromochloromethane	13.96	129	61254	0.18	ppbV	m	92
69)	1,2-Dibromoethane (EDB)	14.29	107	71197	0.14	ppbV	m	92
70)	Tetrachloroethene (PCE)	14.36	166	94548	0.21	ppbV	m	74
72)	Chlorobenzene	15.28	112	214950	0.30	ppbV	m	79
73)	1,1,1,2-Tetrachloroethane	15.30	131	34061	0.13	ppbV	m	94
74)	Ethylbenzene	15.55	91	382942	0.30	ppbV	#	86
75)	m,p-Xylenes	15.72	91	315241	0.29	ppbV	#	75
76)	Nonane	16.08	57	97892	0.11	ppbV	#	81
77)	Styrene	16.27	104	221314	0.29	ppbV	#	82
78)	Bromoform	16.32	173	53746	0.11	ppbV		97
79)	o-Xylene	16.35	91	334339	0.29	ppbV	#	82
80)	1,1,2,2-Tetrachloroethane	16.66	83	152107	0.15	ppbV		100
81)	1,2,3-Trichloropropane	16.87	110	39488	0.15	ppbV		91
82)	t-1,4-Dichloro-2-butene	16.90	53	9577	0.09	ppbV	m	0

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094A.D
Acq Time : 9 Dec 124 9:32 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 0.25 ML Multiplr: 1.00
Quant Time: Dec 9 15:16 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	400535	0.20	ppbV	#	92
84)	Isopropylbenzene	17.87	105	748536	0.20	ppbV	m	86
85)	4-Ethyltoluene	17.87	105	769731	0.50	ppbV	m	82
86)	1,3,5-Trimethylbenzene	17.96	105	345401	0.23	ppbV	m	84
87)	Decane	18.25	57	199325	0.13	ppbV	#	83
88)	tert-butyl benzene	18.55	119	295611	0.20	ppbV	m	78
89)	1,2,4-Trimethylbenzene	18.57	105	443917	0.34	ppbV	#	85
90)	i-Butylbenzene	18.86	91	352129	0.19	ppbV	#	91
91)	sec-butylbenzene	18.95	105	513434	0.27	ppbV	#	94
92)	1,3-Dichlorobenzene	19.02	146	217488	0.24	ppbV		86
93)	Isopropyltoluene	19.15	119	402425	0.22	ppbV	#	90
94)	Benzyl chloride	19.08	91	69103	0.11	ppbV	#	92
95)	1,4-Dichlorobenzene	19.13	146	218882	0.22	ppbV	m	86
96)	n-Butylbenzene	19.83	91	325866	0.15	ppbV	#	97
97)	1,2-Dichlorobenzene	19.70	146	203041	0.16	ppbV	#	87
98)	1,2-Dibromo-3-chloropropan	20.64	75	26603	0.08	ppbV	#	47
99)	1,2,4-Trichlorobenzene	22.58	180	7143	0.02	ppbV	m	0
100)	Naphthalene	22.89	128	2874	0.04	ppbV	m	0
101)	1,2,3-Trichlorobenzene	23.34	180	1799	0.04	ppbV	m	0
102)	Hexachlorobutadiene	23.15	225	114238	0.06	ppbV	#	86

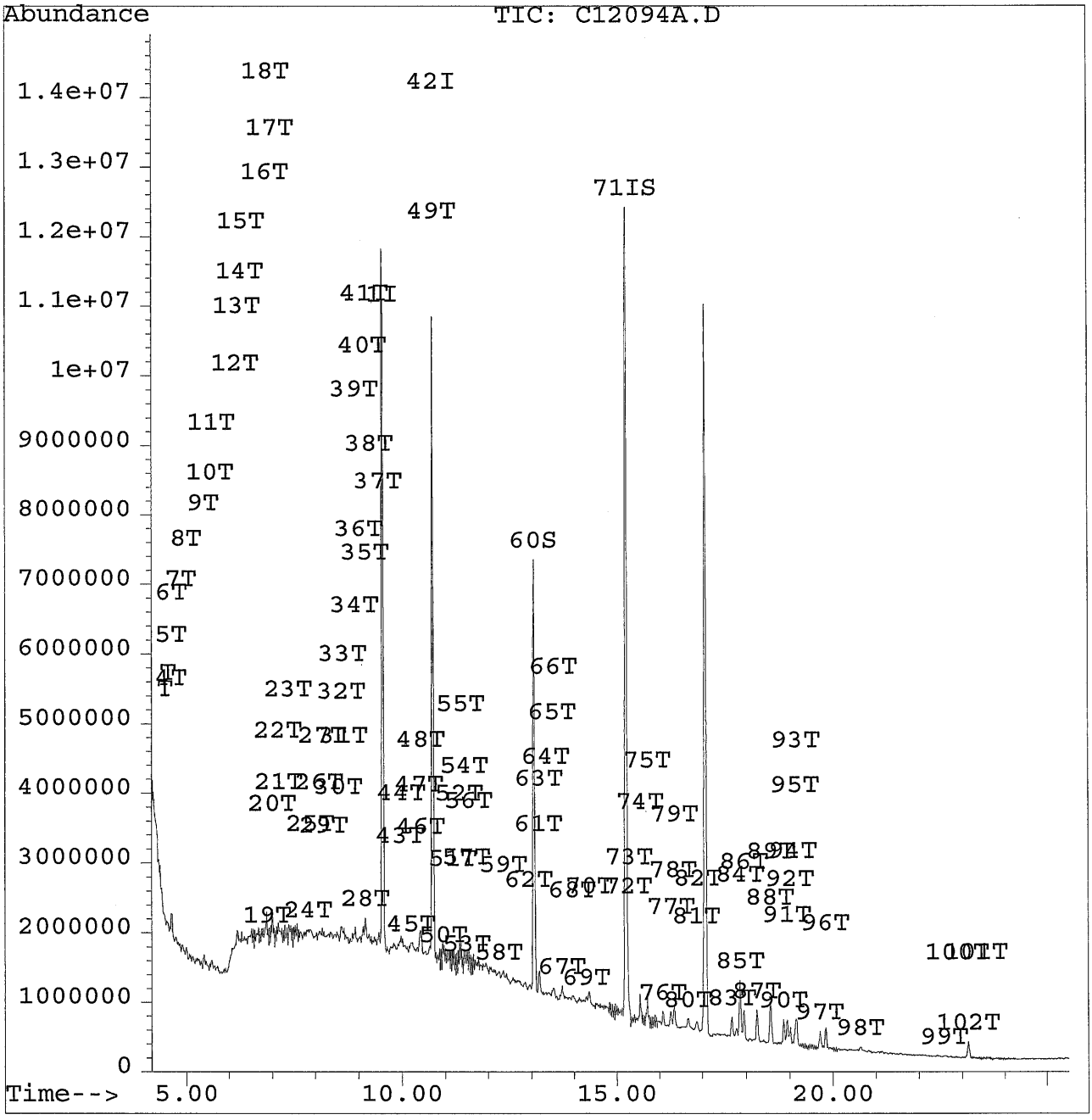
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094A.D
Acq Time : 9 Dec 124 9:32 am
Sample : ST62126
Misc : CURVE, 0.25 ML
Quant Time: Dec 9 15:16 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094C.D
Acq Time : 9 Dec 124 10:58 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 1.0 ML Multiplr: 1.00
Quant Time: Dec 9 11:36 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	12592768	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.73	114	12125117	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.23	117	15180776	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	7194812	10.33	ppbV		103.26
Target Compounds							Qvalue
2) Propylene	4.33	42	116040	0.76	ppbV		90
3) Dichlorodifluoromethane	4.40	85	469474	0.74	ppbV	#	96
4) Methanol	4.77	31	185694	0.59	ppbV	#	95
5) Chloromethane	4.67	50	165270	0.67	ppbV		99
6) 1,2-Dichlorotetrafluoroeth	4.67	85	450828	0.81	ppbV		94
7) Vinyl chloride	4.91	62	179151	0.73	ppbV		97
8) 1,3-Butadiene	5.03	54	106490	0.63	ppbV	#	89
9) Bromomethane	5.42	94	146951	0.71	ppbV		93
10) Chloroethane	5.59	64	74382	0.64	ppbV		96
11) Ethanol	5.59	46	99880	2.32	ppbV	m	84
12) Acrolein	6.17	56	67928	1.06	ppbV		96
13) Trichlorofluoromethane	6.21	101	308531	0.67	ppbV		99
14) Acetone	6.28	58	181772	1.14	ppbV	#	4
15) 2-propanol (isopropylalcoh	6.31	45	255722	0.59	ppbV	#	88
16) t-Butyl alcohol	6.87	59	187625	0.46	ppbV	#	73
17) Methyl iodide	6.99	142	141056	0.25	ppbV	#	86
18) 1,1-Dichloroethene	6.89	61	265450	0.57	ppbV	#	67
19) Acrylonitrile	6.91	53	122291	0.72	ppbV	#	97
20) 1,1,2-Trichlorotrifluoroet	7.03	151	260688	0.81	ppbV	#	76
21) Allyl chloride	7.18	76	42174	0.63	ppbV	#	26
22) Methylene chloride	7.16	84	134385	0.83	ppbV	#	89
23) Carbon disulfide	7.42	76	442189	0.88	ppbV	#	86
24) trans-1,2-Dichloroethene	7.87	96	132668	0.65	ppbV	#	58
25) Methyl tert butyl ether	7.92	73	275923	0.46	ppbV	#	95
26) Propionitrile	8.10	54	131186	0.85	ppbV		98
27) 1,1-Dichloroethane	8.17	63	262677	0.59	ppbV	#	91
28) Ethyl tert butyl ether	9.16	59	185052	0.30	ppbV	#	78
29) Vinyl acetate	8.19	43	53352	0.18	ppbV	#	67
30) 2-Butanone (MEK)	8.55	72	76350	0.80	ppbV	#	63
31) Diisopropyl ether	8.67	87	64218	0.45	ppbV		88
32) Hexane	8.62	57	226835	0.50	ppbV	#	96
33) Methacrylonitrile	8.65	67	98700	0.85	ppbV	#	77
34) Ethyl acetate	8.92	61	229510	0.56	ppbV	#	68
35) Bromochloromethane	9.18	49	134911	0.30	ppbV	#	36
36) Methyl acrylate	9.03	55	43915	0.28	ppbV	#	83

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094C.D
Acq Time : 9 Dec 124 10:58 am
Sample : ST62126
Misc : CURVE, 1.0 ML
Quant Time: Dec 9 11:36 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.47	72	86387	0.73	ppbV		96
38)	Isobutyl alcohol	9.57	74	204239	0.87	ppbV	#	76
39)	cis-1,2-Dichloroethene	8.92	96	186162	0.83	ppbV	#	53
40)	2,2-Dichloropropane	9.11	77	215670	0.58	ppbV		95
41)	Chloroform	9.18	83	294766	0.79	ppbV		97
43)	1,1,1-Trichloroethane	9.97	97	255003	0.67	ppbV	#	88
44)	1,2-Dichloroethane	10.00	62	176619	0.52	ppbV		95
45)	1,1-Dichloropropene	10.22	75	157562	0.50	ppbV	#	91
46)	Cyclohexane	10.46	56	176901	0.51	ppbV	#	72
47)	Benzene	10.43	78	550215	0.92	ppbV	#	83
48)	Carbon tetrachloride	10.46	117	181576	0.86	ppbV		92
49)	t-Amyl methyl ether	10.68	73	262939	0.36	ppbV	#	72
50)	2,2,4-Trimethylpentane	10.96	57	394805	0.34	ppbV	#	91
51)	n-Heptane	11.20	71	111004	0.49	ppbV		87
52)	1,2-Dichloropropane	11.33	63	172582	0.66	ppbV		96
53)	1,4 Dioxane	11.50	88	248071	1.53	ppbV	#	68
54)	Dibromomethane	11.45	174	154705	0.43	ppbV	#	84
55)	Trichloroethene (TCE)	11.37	130	292032	0.94	ppbV	#	78
56)	Bromodichloromethane	11.55	83	108776	0.34	ppbV	#	87
57)	Methyl methacrylate	11.49	69	70972	0.61	ppbV	#	40
58)	4-Methyl-2-pentanone (MIBK	12.25	58	100925	0.56	ppbV	#	85
59)	cis-1,3-Dichloropropene	12.36	75	178916	0.62	ppbV	#	83
61)	Toluene	13.19	91	754975	0.89	ppbV		96
62)	trans-1,3-Dichloropropene	12.95	75	151935	0.54	ppbV	#	86
63)	1,1,2-Trichloroethane	13.19	61	127930	0.65	ppbV	#	26
64)	Ethyl methacrylate	13.33	69	68825	0.30	ppbV	#	89
65)	2-Hexanone	13.48	58	130883	0.48	ppbV		90
66)	1,3-Dichloropropane	13.54	76	294752	0.61	ppbV		92
67)	Octane	13.72	85	152178	0.50	ppbV	#	93
68)	Dibromochloromethane	13.96	129	169025	0.47	ppbV		94
69)	1,2-Dibromoethane (EDB)	14.29	107	223293	0.44	ppbV		91
70)	Tetrachloroethene (PCE)	14.35	166	252050	0.52	ppbV	#	85
72)	Chlorobenzene	15.28	112	690676	0.93	ppbV	#	83
73)	1,1,1,2-Tetrachloroethane	15.29	131	118931	0.44	ppbV	#	95
74)	Ethylbenzene	15.55	91	1111701	0.88	ppbV	#	88
75)	m,p-Xylenes	15.72	91	905059	0.84	ppbV	#	78
76)	Nonane	16.08	57	264373	0.32	ppbV	#	81
77)	Styrene	16.27	104	661920	0.90	ppbV	#	85
78)	Bromoform	16.32	173	158580	0.32	ppbV	#	94
79)	o-Xylene	16.35	91	977617	0.87	ppbV	#	78
80)	1,1,2,2-Tetrachloroethane	16.66	83	416195	0.43	ppbV		98
81)	1,2,3-Trichloropropane	16.86	110	121826	0.49	ppbV		96
82)	t-1,4-Dichloro-2-butene	16.90	53	22334	0.20	ppbV	#	55

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094C.D
Acq Time : 9 Dec 124 10:58 am Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 1.0 ML Multiplr: 1.00
Quant Time: Dec 9 11:36 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	1123587	0.58	ppbV	#	93
84)	Isopropylbenzene	17.87	105	2492621	0.69	ppbV	#	88
85)	4-Ethyltoluene	17.87	105	2492621	1.65	ppbV	#	85
86)	1,3,5-Trimethylbenzene	17.96	105	1113722	0.77	ppbV	m	81
87)	Decane	18.25	57	478736	0.35	ppbV	#	87
88)	tert-butyl benzene	18.55	119	889579	0.61	ppbV	#	79
89)	1,2,4-Trimethylbenzene	18.57	105	1244544	1.00	ppbV	#	87
90)	i-Butylbenzene	18.86	91	956581	0.54	ppbV	#	93
91)	sec-butylbenzene	18.95	105	1407731	0.76	ppbV	#	91
92)	1,3-Dichlorobenzene	19.02	146	597581	0.67	ppbV	#	89
93)	Isopropyltoluene	19.15	119	1060535	0.60	ppbV	#	90
94)	Benzyl chloride	19.08	91	210001	0.36	ppbV	m	93
95)	1,4-Dichlorobenzene	19.13	146	563539	0.60	ppbV	m	89
96)	n-Butylbenzene	19.83	91	862311	0.44	ppbV	#	96
97)	1,2-Dichlorobenzene	19.70	146	524712	0.46	ppbV		96
98)	1,2-Dibromo-3-chloropropan	20.64	75	69909	0.21	ppbV	#	61
99)	1,2,4-Trichlorobenzene	22.57	180	11033	0.04	ppbV	m	0
100)	Naphthalene	22.91	128	7032	0.08	ppbV	m	0
101)	1,2,3-Trichlorobenzene	22.57	180	11385	0.29	ppbV	m	0
102)	Hexachlorobutadiene	23.15	225	223087	0.13	ppbV		94

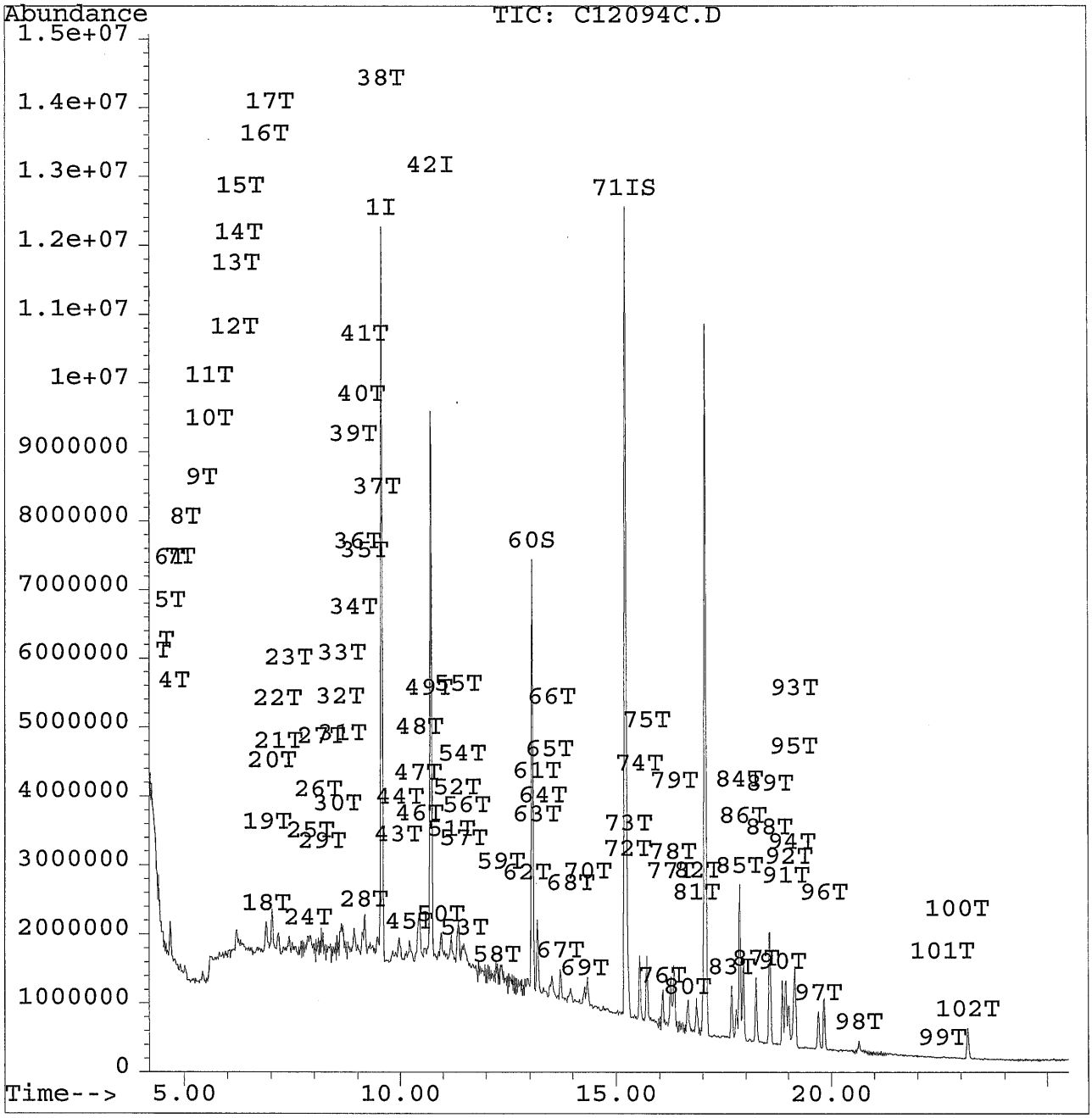
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094C.D
Acq Time : 9 Dec 124 10:58 am
Sample : ST62126
Misc : CURVE, 1.0 ML
Quant Time: Dec 9 11:36 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



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Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094E.D
Acq Time : 9 Dec 124 12:13 pm Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 2.0 ML Multiplr: 1.00
Quant Time: Dec 9 15:29 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.59	168	12805575	20.00	ppbV		-0.23
42) 1,4-Difluorobenzene	10.73	114	12900117	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.22	117	15759358	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	7402208	9.92	ppbV		99.17
Target Compounds							Qvalue
2) Propylene	4.33	42	204752	1.34	ppbV	#	87
3) Dichlorodifluoromethane	4.41	85	826776	1.31	ppbV	#	94
4) Methanol	4.79	31	575526	2.02	ppbV	#	91
5) Chloromethane	4.67	50	296719	1.22	ppbV		99
6) 1,2-Dichlorotetrafluoroeth	4.69	85	800369	1.41	ppbV	#	88
7) Vinyl chloride	4.91	62	320866	1.31	ppbV		94
8) 1,3-Butadiene	5.03	54	204197	1.24	ppbV		95
9) Bromomethane	5.44	94	321772	1.55	ppbV		96
10) Chloroethane	5.59	64	148868	1.32	ppbV		92
11) Ethanol	5.61	46	311917	7.43	ppbV		84
12) Acrolein	6.19	56	137055	2.10	ppbV		96
13) Trichlorofluoromethane	6.22	101	551192	1.21	ppbV		97
14) Acetone	6.27	58	311274	1.92	ppbV	#	10
15) 2-propanol (isopropylalcoh	6.31	45	555753	1.37	ppbV	#	89
16) t-Butyl alcohol	6.87	59	419339	1.08	ppbV	#	92
17) Methyl iodide	7.01	142	241204	0.42	ppbV	#	87
18) 1,1-Dichloroethene	6.91	61	476952	1.08	ppbV	#	53
19) Acrylonitrile	6.91	53	252021	1.51	ppbV		96
20) 1,1,2-Trichlorotrifluoroet	7.04	151	459275	1.37	ppbV	#	68
21) Allyl chloride	7.20	76	81300	1.21	ppbV	#	63
22) Methylene chloride	7.16	84	238194	1.43	ppbV	#	92
23) Carbon disulfide	7.42	76	793497	1.49	ppbV	#	85
24) trans-1,2-Dichloroethene	7.86	96	246698	1.19	ppbV	#	66
25) Methyl tert butyl ether	7.91	73	512029	0.87	ppbV	#	96
26) Propionitrile	8.10	54	293646	1.93	ppbV		99
27) 1,1-Dichloroethane	8.19	63	495209	1.13	ppbV		97
28) Ethyl tert butyl ether	9.18	59	373918	0.64	ppbV	#	88
29) Vinyl acetate	8.19	43	95911	0.37	ppbV	#	83
30) 2-Butanone (MEK)	8.55	72	157671	1.65	ppbV	#	71
31) Diisopropyl ether	8.67	87	118202	0.84	ppbV	#	81
32) Hexane	8.63	57	367029	0.83	ppbV	#	92
33) Methacrylonitrile	8.67	67	186786	1.59	ppbV	#	81
34) Ethyl acetate	8.92	61	426078	1.09	ppbV	#	68
35) Bromochloromethane	9.18	49	249571	0.59	ppbV	#	39
36) Methyl acrylate	9.02	55	87000	0.57	ppbV	#	87

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094E.D
Acq Time : 9 Dec 124 12:13 pm
Sample : ST62126
Misc : CURVE, 2.0 ML
Quant Time: Dec 9 15:29 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.49	72	192367	1.72	ppbV		88
38)	Isobutyl alcohol	9.26	74	33300	0.14	ppbV	#	79
39)	cis-1,2-Dichloroethene	8.94	96	354126	1.56	ppbV	#	46
40)	2,2-Dichloropropane	9.13	77	398866	1.08	ppbV		95
41)	Chloroform	9.18	83	512490	1.33	ppbV		98
43)	1,1,1-Trichloroethane	9.98	97	440623	1.08	ppbV	#	91
44)	1,2-Dichloroethane	10.01	62	303485	0.90	ppbV		94
45)	1,1-Dichloropropene	10.24	75	323901	0.99	ppbV	#	90
46)	Cyclohexane	10.46	56	334156	0.96	ppbV	#	78
47)	Benzene	10.42	78	1007672	1.61	ppbV	#	82
48)	Carbon tetrachloride	10.46	117	310921	1.35	ppbV		95
49)	t-Amyl methyl ether	10.68	73	421324	0.58	ppbV	#	82
50)	2,2,4-Trimethylpentane	10.97	57	779232	0.67	ppbV	#	97
51)	n-Heptane	11.19	71	205588	0.87	ppbV		85
52)	1,2-Dichloropropane	11.33	63	341548	1.29	ppbV		97
53)	1,4 Dioxane	11.50	88	541340	3.18	ppbV	#	61
54)	Dibromomethane	11.45	174	277043	0.71	ppbV	#	80
55)	Trichloroethene (TCE)	11.38	130	538972	1.60	ppbV	#	81
56)	Bromodichloromethane	11.55	83	210552	0.62	ppbV	#	95
57)	Methyl methacrylate	11.48	69	130751	1.06	ppbV	#	39
58)	4-Methyl-2-pentanone (MIBK	12.25	58	205417	1.10	ppbV	#	82
59)	cis-1,3-Dichloropropene	12.36	75	372644	1.25	ppbV	#	90
61)	Toluene	13.19	91	1452723	1.61	ppbV		98
62)	trans-1,3-Dichloropropene	12.97	75	326518	1.13	ppbV	#	78
63)	1,1,2-Trichloroethane	13.19	61	225281	1.12	ppbV	#	34
64)	Ethyl methacrylate	13.33	69	157994	0.71	ppbV		98
65)	2-Hexanone	13.48	58	320806	1.16	ppbV	#	88
66)	1,3-Dichloropropane	13.53	76	560182	1.10	ppbV	#	97
67)	Octane	13.74	85	278791	0.87	ppbV	#	88
68)	Dibromochloromethane	13.96	129	345109	0.86	ppbV		87
69)	1,2-Dibromoethane (EDB)	14.29	107	461814	0.85	ppbV		97
70)	Tetrachloroethene (PCE)	14.35	166	466387	0.88	ppbV	#	83
72)	Chlorobenzene	15.28	112	1360434	1.75	ppbV	#	85
73)	1,1,1,2-Tetrachloroethane	15.29	131	220219	0.78	ppbV	#	94
74)	Ethylbenzene	15.55	91	2213877	1.72	ppbV	#	88
75)	m,p-Xylenes	15.72	91	1863230	1.71	ppbV	#	80
76)	Nonane	16.09	57	570612	0.72	ppbV	#	87
77)	Styrene	16.26	104	1434260	1.89	ppbV	#	85
78)	Bromoform	16.32	173	326089	0.62	ppbV	#	94
79)	o-Xylene	16.35	91	1973932	1.74	ppbV		89
80)	1,1,2,2-Tetrachloroethane	16.66	83	885947	0.90	ppbV		97
81)	1,2,3-Trichloropropane	16.86	110	250216	0.99	ppbV		94
82)	t-1,4-Dichloro-2-butene	16.90	53	64239	0.64	ppbV	#	53

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094E.D
Acq Time : 9 Dec 124 12:13 pm Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 2.0 ML Multiplr: 1.00
Quant Time: Dec 9 15:29 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	2556226	1.30	ppbV	#	93
84)	Isopropylbenzene	17.87	105	5350700	1.44	ppbV	#	87
85)	4-Ethyltoluene	17.87	105	5350700	3.45	ppbV	#	86
86)	1,3,5-Trimethylbenzene	17.95	105	2553611	1.77	ppbV	m	81
87)	Decane	18.25	57	1088530	0.83	ppbV	#	89
88)	tert-butyl benzene	18.55	119	1911074	1.28	ppbV	#	76
89)	1,2,4-Trimethylbenzene	18.57	105	2700975	2.14	ppbV	#	85
90)	i-Butylbenzene	18.86	91	2180987	1.22	ppbV	#	96
91)	sec-butylbenzene	18.94	105	3021278	1.57	ppbV	#	85
92)	1,3-Dichlorobenzene	19.01	146	1433005	1.60	ppbV	#	91
93)	Isopropyltoluene	19.17	119	2343037	1.30	ppbV	#	90
94)	Benzyl chloride	19.08	91	570424	1.00	ppbV	#	94
95)	1,4-Dichlorobenzene	19.13	146	1389544	1.48	ppbV	m	91
96)	n-Butylbenzene	19.83	91	2112250	1.10	ppbV		97
97)	1,2-Dichlorobenzene	19.70	146	1350893	1.23	ppbV		95
98)	1,2-Dibromo-3-chloropropan	20.63	75	174958	0.55	ppbV	#	42
99)	1,2,4-Trichlorobenzene	22.58	180	32711	0.14	ppbV		96
100)	Naphthalene	22.87	128	13932	0.16	ppbV	m	0
101)	1,2,3-Trichlorobenzene	22.58	180	25080	0.67	ppbV	m	0
102)	Hexachlorobutadiene	23.16	225	521751	0.34	ppbV		95

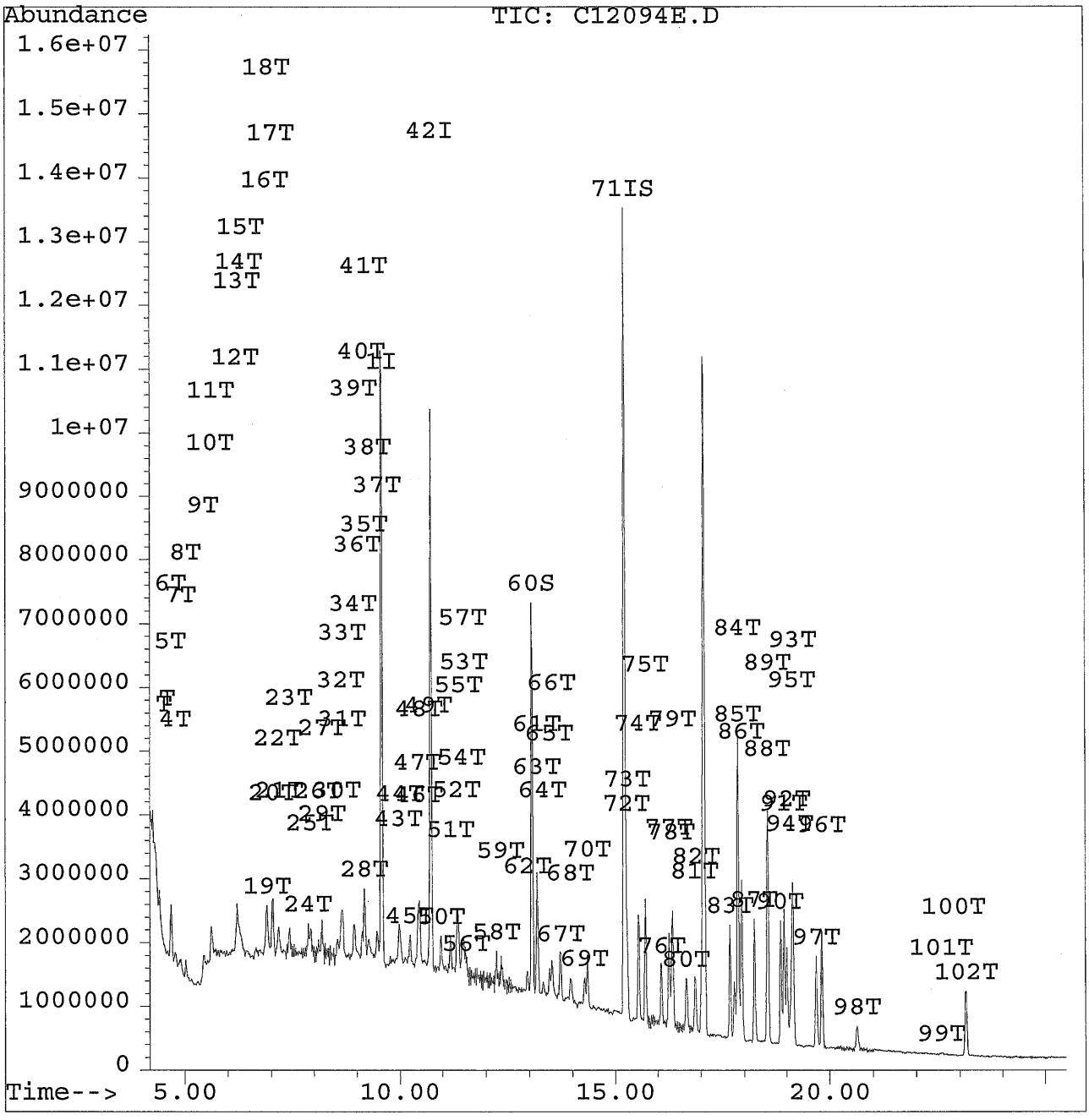
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094E.D
Acq Time : 9 Dec 124 12:13 pm
Sample : ST62126
Misc : CURVE, 2.0 ML
Quant Time: Dec 9 15:29 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094F.D
Acq Time : 9 Dec 124 12:52 pm Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 5.0 ML Multiplr: 1.00
Quant Time: Dec 9 15:24 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	12022740	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.73	114	12227072	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.22	117	15941423	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	7226849	10.22	ppbV		102.22
Target Compounds							Qvalue
2) Propylene	4.33	42	461123	3.25	ppbV	#	83
3) Dichlorodifluoromethane	4.41	85	1818588	3.18	ppbV	#	95
4) Methanol	4.76	31	1517116	6.37	ppbV	#	91
5) Chloromethane	4.67	50	599816	2.73	ppbV		99
6) 1,2-Dichlorotetrafluoroeth	4.67	85	1688274	3.22	ppbV		94
7) Vinyl chloride	4.91	62	691139	3.08	ppbV		95
8) 1,3-Butadiene	5.03	54	469001	3.11	ppbV		93
9) Bromomethane	5.42	94	590491	3.03	ppbV		100
10) Chloroethane	5.59	64	240284	2.37	ppbV		97
11) Ethanol	5.58	46	601289	15.53	ppbV		93
12) Acrolein	6.16	56	293746	4.81	ppbV		96
13) Trichlorofluoromethane	6.21	101	1219718	2.94	ppbV		98
14) Acetone	6.24	58	724509	4.81	ppbV	#	8
15) 2-propanol (isopropylalcoh	6.29	45	1907817	5.49	ppbV	#	93
16) t-Butyl alcohol	6.86	59	1384059	3.95	ppbV	#	92
17) Methyl iodide	6.99	142	594291	1.10	ppbV	#	82
18) 1,1-Dichloroethene	6.89	61	1029777	2.63	ppbV	#	56
19) Acrylonitrile	6.89	53	621849	4.11	ppbV	#	92
20) 1,1,2-Trichlorotrifluoroet	7.03	151	1071449	3.38	ppbV	#	77
21) Allyl chloride	7.18	76	234661	3.96	ppbV	#	64
22) Methylene chloride	7.16	84	548233	3.53	ppbV	#	83
23) Carbon disulfide	7.42	76	1899813	3.78	ppbV	#	85
24) trans-1,2-Dichloroethene	7.85	96	550998	2.85	ppbV	#	64
25) Methyl tert butyl ether	7.90	73	1337722	2.58	ppbV	#	92
26) Propionitrile	8.08	54	849191	6.15	ppbV		97
27) 1,1-Dichloroethane	8.17	63	1122409	2.87	ppbV		99
28) Ethyl tert butyl ether	9.16	59	870027	1.72	ppbV	#	86
29) Vinyl acetate	8.17	43	248986	1.23	ppbV	#	72
30) 2-Butanone (MEK)	8.53	72	459347	5.16	ppbV	#	71
31) Diisopropyl ether	8.67	87	288718	2.27	ppbV	#	80
32) Hexane	8.61	57	841946	2.18	ppbV	#	90
33) Methacrylonitrile	8.65	67	467357	4.31	ppbV	#	79
34) Ethyl acetate	8.92	61	957131	2.80	ppbV	#	90
35) Bromochloromethane	9.18	49	523311	1.45	ppbV	#	35
36) Methyl acrylate	9.01	55	211212	1.57	ppbV	#	83

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094F.D
Acq Time : 9 Dec 124 12:52 pm Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 5.0 ML Multiplr: 1.00
Quant Time: Dec 9 15:24 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.47	72	512691	5.05	ppbV		95
38)	Isobutyl alcohol	9.26	74	88629	0.40	ppbV	#	87
39)	cis-1,2-Dichloroethene	8.92	96	771219	3.65	ppbV	#	50
40)	2,2-Dichloropropane	9.11	77	944718	2.87	ppbV	#	93
41)	Chloroform	9.16	83	1136191	3.22	ppbV		99
43)	1,1,1-Trichloroethane	9.96	97	1064128	2.87	ppbV	#	87
44)	1,2-Dichloroethane	10.00	62	694455	2.37	ppbV		99
45)	1,1-Dichloropropene	10.22	75	699672	2.35	ppbV	#	88
46)	Cyclohexane	10.46	56	696874	2.28	ppbV	#	73
47)	Benzene	10.42	78	2046284	3.52	ppbV	#	81
48)	Carbon tetrachloride	10.46	117	686159	3.12	ppbV		95
49)	t-Amyl methyl ether	10.68	73	978546	1.54	ppbV	#	91
50)	2,2,4-Trimethylpentane	10.95	57	1728179	1.67	ppbV	#	97
51)	n-Heptane	11.19	71	445295	2.07	ppbV		88
52)	1,2-Dichloropropane	11.33	63	762321	3.16	ppbV		96
53)	1,4 Dioxane	11.50	88	1595947	9.96	ppbV	#	58
54)	Dibromomethane	11.45	174	627112	1.67	ppbV		87
55)	Trichloroethene (TCE)	11.36	130	1171866	3.64	ppbV	#	84
56)	Bromodichloromethane	11.55	83	502982	1.57	ppbV	#	98
57)	Methyl methacrylate	11.48	69	315710	2.81	ppbV	#	39
58)	4-Methyl-2-pentanone (MIBK	12.23	58	655539	3.79	ppbV		88
59)	cis-1,3-Dichloropropene	12.35	75	957314	3.53	ppbV	#	85
61)	Toluene	13.19	91	3169707	3.73	ppbV		96
62)	trans-1,3-Dichloropropene	12.97	75	852325	3.32	ppbV	#	75
63)	1,1,2-Trichloroethane	13.19	61	492709	2.81	ppbV	#	37
64)	Ethyl methacrylate	13.33	69	462981	2.28	ppbV		96
65)	2-Hexanone	13.48	58	999540	3.94	ppbV		90
66)	1,3-Dichloropropane	13.53	76	1239256	2.63	ppbV		93
67)	Octane	13.74	85	673619	2.29	ppbV		97
68)	Dibromochloromethane	13.96	129	792846	2.00	ppbV		96
69)	1,2-Dibromoethane (EDB)	14.28	107	1133033	2.20	ppbV		95
70)	Tetrachloroethene (PCE)	14.35	166	1022318	1.99	ppbV	#	85
72)	Chlorobenzene	15.29	112	3051834	3.86	ppbV	#	76
73)	1,1,1,2-Tetrachloroethane	15.29	131	496239	1.72	ppbV	#	94
74)	Ethylbenzene	15.56	91	5245785	4.07	ppbV	#	87
75)	m,p-Xylenes	15.72	91	4066923	3.76	ppbV	#	78
76)	Nonane	16.09	57	1283317	1.72	ppbV	#	85
77)	Styrene	16.26	104	3557331	4.61	ppbV	#	82
78)	Bromoform	16.31	173	772373	1.39	ppbV	#	96
79)	o-Xylene	16.35	91	4428375	3.88	ppbV	#	85
80)	1,1,2,2-Tetrachloroethane	16.67	83	2401579	2.44	ppbV		96
81)	1,2,3-Trichloropropane	16.86	110	627318	2.48	ppbV		99
82)	t-1,4-Dichloro-2-butene	16.89	53	188048	2.03	ppbV	#	50

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094F.D
Acq Time : 9 Dec 124 12:52 pm Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 5.0 ML Multiplr: 1.00
Quant Time: Dec 9 15:24 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	6033794	3.04	ppbV	#	94
84)	Isopropylbenzene	17.87	105	11667161	3.09	ppbV	#	87
85)	4-Ethyltoluene	17.87	105	11667161	7.42	ppbV	#	88
86)	1,3,5-Trimethylbenzene	17.87	105	8951820	6.19	ppbV	m	79
87)	Decane	18.26	57	2467149	1.98	ppbV	#	86
88)	tert-butyl benzene	18.57	119	4392381	2.84	ppbV	#	76
89)	1,2,4-Trimethylbenzene	18.58	105	6080448	4.82	ppbV	#	87
90)	i-Butylbenzene	18.87	91	5178764	2.89	ppbV	#	95
91)	sec-butylbenzene	18.94	105	6992114	3.50	ppbV	#	93
92)	1,3-Dichlorobenzene	19.01	146	3626471	4.00	ppbV	#	91
93)	Isopropyltoluene	19.16	119	5707277	3.11	ppbV	#	88
94)	Benzyl chloride	19.08	91	1935083	3.58	ppbV	#	91
95)	1,4-Dichlorobenzene	19.01	146	3626471	3.83	ppbV	#	91
96)	n-Butylbenzene	19.83	91	5266883	2.78	ppbV		97
97)	1,2-Dichlorobenzene	19.69	146	3479960	3.28	ppbV		92
98)	1,2-Dibromo-3-chloropropan	20.63	75	591598	2.12	ppbV	#	45
99)	1,2,4-Trichlorobenzene	22.58	180	131755	0.87	ppbV		97
100)	Naphthalene	22.85	128	30745	0.39	ppbV	#	84
101)	1,2,3-Trichlorobenzene	23.33	180	23601	0.74	ppbV	m	83
102)	Hexachlorobutadiene	23.16	225	1044263	0.83	ppbV		95

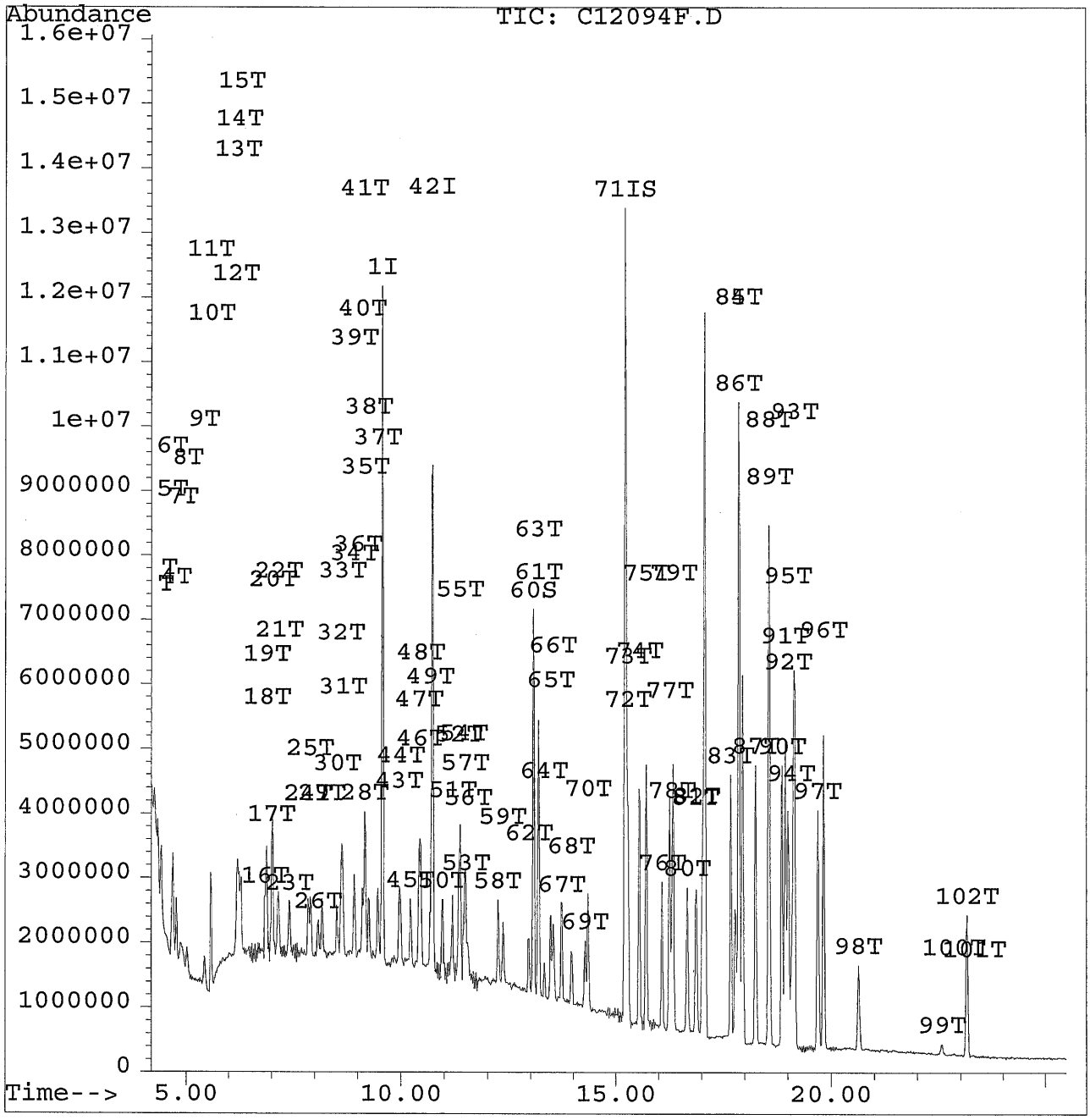
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094F.D
Acq Time : 9 Dec 124 12:52 pm
Sample : ST62126
Misc : CURVE, 5.0 ML
Quant Time: Dec 9 15:24 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094G.D
Acq Time : 9 Dec 124 1:29 pm
Sample : ST62126
Misc : CURVE, 10.0 ML
Quant Time: Dec 9 13:57 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	11942745	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.71	114	12441588	20.00	ppbV		-0.29
71) Chlorobenzene-d5	15.22	117	16123321	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	7382213	10.18	ppbV		101.82
Target Compounds							Qvalue
2) Propylene	4.28	42	1075189	7.79	ppbV		88
3) Dichlorodifluoromethane	4.35	85	3937384	7.03	ppbV	#	93
4) Methanol	4.74	31	1916435	8.56	ppbV	#	99
5) Chloromethane	4.60	50	1227407	5.98	ppbV		99
6) 1,2-Dichlorotetrafluoroeth	4.60	85	3207549	6.33	ppbV		94
7) Vinyl chloride	4.84	62	1322138	6.14	ppbV		100
8) 1,3-Butadiene	4.96	54	904045	6.29	ppbV		94
9) Bromomethane	5.37	94	1424049	7.64	ppbV		100
10) Chloroethane	5.52	64	716848	7.82	ppbV		98
11) Ethanol	5.56	46	1067401	27.80	ppbV		89
12) Acrolein	6.12	56	577354	9.84	ppbV		97
13) Trichlorofluoromethane	6.17	101	2430641	6.21	ppbV		99
14) Acetone	6.22	58	1126488	7.69	ppbV	#	14
15) 2-propanol (isopropylalcoh	6.28	45	2528882	8.14	ppbV	#	95
16) t-Butyl alcohol	6.84	59	1861448	5.76	ppbV	#	81
17) Methyl iodide	6.96	142	1093072	2.05	ppbV		92
18) 1,1-Dichloroethene	6.86	61	2018604	5.59	ppbV	#	64
19) Acrylonitrile	6.86	53	1008760	6.94	ppbV	#	96
20) 1,1,2-Trichlorotrifluoroet	6.99	151	1870761	5.91	ppbV	#	78
21) Allyl chloride	7.15	76	424569	7.48	ppbV	#	52
22) Methylene chloride	7.13	84	955199	6.23	ppbV	#	93
23) Carbon disulfide	7.37	76	3494212	7.00	ppbV	#	86
24) trans-1,2-Dichloroethene	7.83	96	985822	5.20	ppbV	#	62
25) Methyl tert butyl ether	7.88	73	2445485	5.09	ppbV		92
26) Propionitrile	8.07	54	1182377	8.93	ppbV		98
27) 1,1-Dichloroethane	8.15	63	2149488	5.85	ppbV		97
28) Ethyl tert butyl ether	9.14	59	1509047	3.37	ppbV	#	85
29) Vinyl acetate	8.15	43	567823	3.57	ppbV	#	72
30) 2-Butanone (MEK)	8.51	72	715993	8.07	ppbV	#	68
31) Diisopropyl ether	8.65	87	524727	4.31	ppbV	#	76
32) Hexane	8.60	57	1533149	4.39	ppbV	#	91
33) Methacrylonitrile	8.63	67	752363	7.20	ppbV	#	78
34) Ethyl acetate	8.90	61	1743934	5.58	ppbV	#	88
35) Bromochloromethane	9.16	49	928253	2.90	ppbV	#	39
36) Methyl acrylate	8.99	55	414233	3.44	ppbV	#	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094G.D
Acq Time : 9 Dec 124 1:29 pm Operator: TR
Sample : ST62126 Inst : 5970 - M
Misc : CURVE, 10.0 ML Multiplr: 1.00
Quant Time: Dec 9 13:57 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.45	72	734478	7.60	ppbV		98
38)	Isobutyl alcohol	9.25	74	93113	0.42	ppbV	#	89
39)	cis-1,2-Dichloroethene	8.90	96	1355337	6.59	ppbV	#	52
40)	2,2-Dichloropropane	9.09	77	1831804	6.05	ppbV		95
41)	Chloroform	9.16	83	2072735	6.17	ppbV		100
43)	1,1,1-Trichloroethane	9.96	97	2045987	5.67	ppbV	#	85
44)	1,2-Dichloroethane	10.00	62	1293122	4.81	ppbV		96
45)	1,1-Dichloropropene	10.22	75	1367682	4.83	ppbV	#	89
46)	Cyclohexane	10.44	56	1303323	4.63	ppbV	#	75
47)	Benzene	10.41	78	3760688	6.66	ppbV	#	83
48)	Carbon tetrachloride	10.44	117	1320838	6.04	ppbV		99
49)	t-Amyl methyl ether	10.66	73	1680365	2.87	ppbV		96
50)	2,2,4-Trimethylpentane	10.95	57	3207132	3.36	ppbV	#	95
51)	n-Heptane	11.18	71	814514	3.93	ppbV		87
52)	1,2-Dichloropropane	11.33	63	1383271	5.95	ppbV		99
53)	1,4 Dioxane	11.48	88	1903575	11.77	ppbV	#	60
54)	Dibromomethane	11.45	174	1146872	2.97	ppbV	#	80
55)	Trichloroethene (TCE)	11.36	130	2052386	6.25	ppbV	#	78
56)	Bromodichloromethane	11.55	83	944400	2.95	ppbV	#	94
57)	Methyl methacrylate	11.47	69	565297	5.20	ppbV	#	36
58)	4-Methyl-2-pentanone (MIBK	12.23	58	939939	5.47	ppbV		87
59)	cis-1,3-Dichloropropene	12.35	75	1876396	7.09	ppbV	#	82
61)	Toluene	13.19	91	5368924	6.24	ppbV		94
62)	trans-1,3-Dichloropropene	12.95	75	1698544	6.89	ppbV	#	86
63)	1,1,2-Trichloroethane	13.19	61	809051	4.93	ppbV	#	28
64)	Ethyl methacrylate	13.33	69	739498	3.67	ppbV		96
65)	2-Hexanone	13.46	58	1267409	5.05	ppbV	#	87
66)	1,3-Dichloropropane	13.53	76	2294958	4.88	ppbV		96
67)	Octane	13.74	85	1191140	4.01	ppbV		96
68)	Dibromochloromethane	13.96	129	1544790	3.69	ppbV		88
69)	1,2-Dibromoethane (EDB)	14.28	107	2122233	4.01	ppbV		97
70)	Tetrachloroethene (PCE)	14.35	166	1859566	3.51	ppbV	#	82
72)	Chlorobenzene	15.27	112	5417314	6.64	ppbV	#	82
73)	1,1,1,2-Tetrachloroethane	15.29	131	903012	3.07	ppbV	#	89
74)	Ethylbenzene	15.55	91	9056935	6.96	ppbV	#	87
75)	m,p-Xylenes	15.72	91	7391735	6.86	ppbV	#	78
76)	Nonane	16.09	57	2223344	3.11	ppbV	#	85
77)	Styrene	16.26	104	6391451	7.93	ppbV	#	82
78)	Bromoform	16.32	173	1405413	2.36	ppbV	#	95
79)	o-Xylene	16.35	91	7752980	6.71	ppbV	#	80
80)	1,1,2,2-Tetrachloroethane	16.67	83	3812434	3.69	ppbV		94
81)	1,2,3-Trichloropropane	16.86	110	1004487	3.85	ppbV		99
82)	t-1,4-Dichloro-2-butene	16.90	53	328683	3.73	ppbV	#	38

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094G.D
Acq Time : 9 Dec 124 1:29 pm
Sample : ST62126
Misc : CURVE, 10.0 ML
Quant Time: Dec 9 13:57 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	10453275	5.07	ppbV	#	94
84)	Isopropylbenzene	17.87	105	18256623	4.64	ppbV	#	88
85)	4-Ethyltoluene	17.87	105	18256623	11.17	ppbV	#	87
86)	1,3,5-Trimethylbenzene	17.87	105	18256623	10.71	ppbV	#	80
87)	Decane	18.26	57	4113571	3.37	ppbV	#	87
88)	tert-butyl benzene	18.57	119	6777452	4.15	ppbV	#	77
89)	1,2,4-Trimethylbenzene	18.59	105	10164673	7.75	ppbV	#	89
90)	i-Butylbenzene	18.88	91	8580781	4.60	ppbV	#	97
91)	sec-butylbenzene	18.94	105	11839639	5.56	ppbV	#	93
92)	1,3-Dichlorobenzene	19.01	146	6208147	6.25	ppbV	#	89
93)	Isopropyltoluene	19.17	119	8818122	4.52	ppbV	#	87
94)	Benzyl chloride	19.10	91	3367839	6.02	ppbV	#	90
95)	1,4-Dichlorobenzene	19.01	146	6208147	6.06	ppbV	#	89
96)	n-Butylbenzene	19.83	91	8516143	4.30	ppbV		97
97)	1,2-Dichlorobenzene	19.69	146	6077040	5.46	ppbV		98
98)	1,2-Dibromo-3-chloropropan	20.63	75	1018824	3.73	ppbV	#	52
99)	1,2,4-Trichlorobenzene	22.58	180	350450	2.97	ppbV		100
100)	Naphthalene	22.85	128	66156	0.84	ppbV	#	90
101)	1,2,3-Trichlorobenzene	23.33	180	44176	1.66	ppbV	#	95
102)	Hexachlorobutadiene	23.16	225	1945455	1.59	ppbV		99

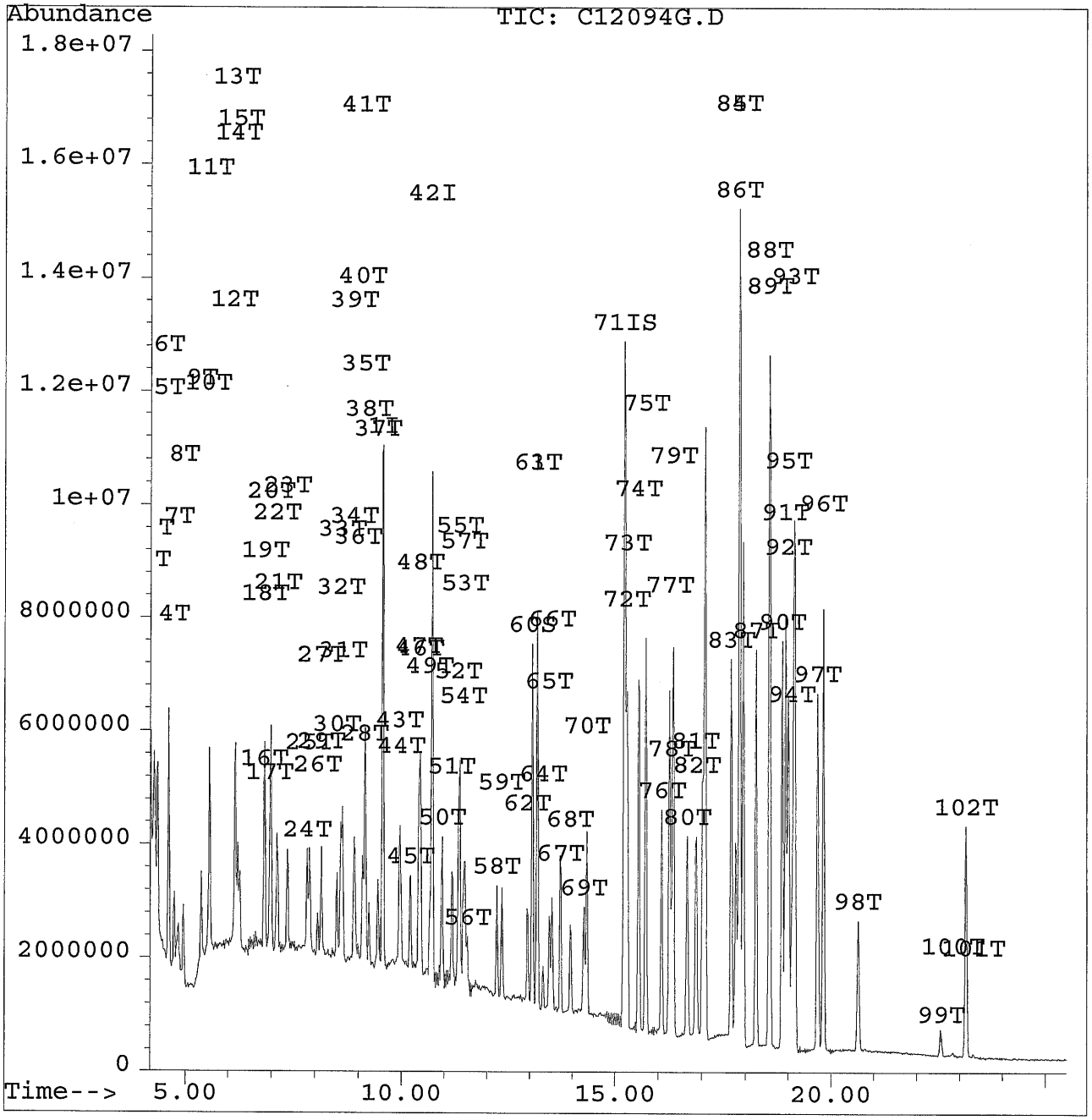
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094G.D
Acq Time : 9 Dec 124 1:29 pm
Sample : ST62126
Misc : CURVE, 10.0 ML
Quant Time: Dec 9 13:57 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094H.D
Acq Time : 9 Dec 124 2:15 pm
Sample : ST62126
Misc : CURVE, 20.0 ML
Quant Time: Dec 9 14:45 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	10925640	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.73	114	11169793	20.00	ppbV		-0.27
71) Chlorobenzene-d5	15.22	117	16001689	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	6924376	10.57	ppbV		105.68
Target Compounds							Qvalue
2) Propylene	4.31	42	1816399	14.50	ppbV	#	89
3) Dichlorodifluoromethane	4.40	85	7104764	14.41	ppbV	#	94
4) Methanol	4.76	31	3500360	22.99	ppbV	#	97
5) Chloromethane	4.65	50	2321326	13.06	ppbV		97
6) 1,2-Dichlorotetrafluoroeth	4.64	85	6051558	13.47	ppbV		96
7) Vinyl chloride	4.88	62	2659053	14.12	ppbV		93
8) 1,3-Butadiene	5.00	54	1882606	15.11	ppbV		93
9) Bromomethane	5.41	94	2624932	15.82	ppbV		98
10) Chloroethane	5.58	64	1306556	16.50	ppbV		98
11) Ethanol	5.59	46	2126744	63.12	ppbV		87
12) Acrolein	6.14	56	1042475	20.35	ppbV		99
13) Trichlorofluoromethane	6.21	101	4776963	14.14	ppbV		98
14) Acetone	6.24	58	1935509	15.11	ppbV	#	33
15) 2-propanol (isopropylalcoh	6.29	45	5642401	22.46	ppbV	#	96
16) t-Butyl alcohol	6.86	59	4094371	14.94	ppbV	#	82
17) Methyl iodide	6.98	142	1995298	4.17	ppbV	#	88
18) 1,1-Dichloroethene	6.87	61	3658340	12.04	ppbV	#	79
19) Acrylonitrile	6.87	53	1953275	15.89	ppbV	#	96
20) 1,1,2-Trichlorotrifluoroet	7.01	151	3400268	11.91	ppbV	#	73
21) Allyl chloride	7.16	76	919593	18.91	ppbV	#	55
22) Methylene chloride	7.15	84	1776029	13.09	ppbV		90
23) Carbon disulfide	7.40	76	6787742	15.20	ppbV	#	87
24) trans-1,2-Dichloroethene	7.83	96	1899524	11.40	ppbV	#	70
25) Methyl tert butyl ether	7.90	73	5009034	12.59	ppbV	#	91
26) Propionitrile	8.09	54	2470312	22.41	ppbV		98
27) 1,1-Dichloroethane	8.17	63	4097559	13.15	ppbV		98
28) Ethyl tert butyl ether	9.16	59	3027316	8.53	ppbV	#	90
29) Vinyl acetate	8.17	43	1307632	12.45	ppbV	#	73
30) 2-Butanone (MEK)	8.51	72	1446386	18.42	ppbV	#	60
31) Diisopropyl ether	8.65	87	946031	9.08	ppbV	#	79
32) Hexane	8.60	57	3080723	10.63	ppbV	#	86
33) Methacrylonitrile	8.65	67	1394354	15.36	ppbV	#	80
34) Ethyl acetate	8.91	61	3616929	14.11	ppbV	#	68
35) Bromochloromethane	9.16	49	1897926	7.46	ppbV	#	59
36) Methyl acrylate	9.01	55	938990	9.68	ppbV	#	83

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094H.D
Acq Time : 9 Dec 124 2:15 pm
Sample : ST62126
Misc : CURVE, 20.0 ML
Quant Time: Dec 9 14:45 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) Tetrahydrofuran	9.47	72	1396764	16.99 ppbV	100
38) Isobutyl alcohol	9.26	74	199154	1.00 ppbV #	77
39) cis-1,2-Dichloroethene	8.92	96	2482423	13.71 ppbV #	59
40) 2,2-Dichloropropane	9.11	77	3801149	14.98 ppbV	97
41) Chloroform	9.16	83	3797113	13.16 ppbV	97
43) 1,1,1-Trichloroethane	9.96	97	4164079	13.66 ppbV #	88
44) 1,2-Dichloroethane	10.00	62	2912582	13.77 ppbV	98
45) 1,1-Dichloropropene	10.22	75	2717184	11.44 ppbV	94
46) Cyclohexane	10.46	56	2401692	10.63 ppbV #	79
47) Benzene	10.42	78	6487381	13.54 ppbV #	85
48) Carbon tetrachloride	10.46	117	2793882	14.66 ppbV	97
49) t-Amyl methyl ether	10.68	73	3391359	7.25 ppbV	97
50) 2,2,4-Trimethylpentane	10.95	57	6727312	8.75 ppbV #	98
51) n-Heptane	11.19	71	1628185	9.35 ppbV	87
52) 1,2-Dichloropropane	11.33	63	2465840	12.63 ppbV	99
53) 1,4 Dioxane	11.50	88	3613137	25.86 ppbV #	62
54) Dibromomethane	11.45	174	2124110	6.15 ppbV #	89
55) Trichloroethene (TCE)	11.36	130	3566543	12.22 ppbV #	83
56) Bromodichloromethane	11.55	83	2133848	7.88 ppbV	96
57) Methyl methacrylate	11.48	69	1024239	11.11 ppbV #	48
58) 4-Methyl-2-pentanone (MIBK	12.25	58	2137273	14.47 ppbV	88
59) cis-1,3-Dichloropropene	12.35	75	4203243	18.97 ppbV #	90
61) Toluene	13.19	91	9439447	12.40 ppbV	96
62) trans-1,3-Dichloropropene	12.97	75	4249079	21.04 ppbV #	87
63) 1,1,2-Trichloroethane	13.19	61	1595615	11.94 ppbV #	64
64) Ethyl methacrylate	13.33	69	1657793	9.83 ppbV	95
65) 2-Hexanone	13.48	58	3022399	14.13 ppbV #	89
66) 1,3-Dichloropropane	13.53	76	4651399	11.43 ppbV	98
67) Octane	13.74	85	2351309	9.17 ppbV	96
68) Dibromochloromethane	13.98	129	3529356	9.27 ppbV	98
69) 1,2-Dibromoethane (EDB)	14.28	107	4106548	8.72 ppbV	99
70) Tetrachloroethene (PCE)	14.35	166	3493299	7.34 ppbV #	88
72) Chlorobenzene	15.29	112	9418324	11.64 ppbV #	85
73) 1,1,1,2-Tetrachloroethane	15.31	131	1878754	6.50 ppbV #	91
74) Ethylbenzene	15.56	91	16617615	13.19 ppbV #	79
75) m,p-Xylenes	15.72	91	13812245	13.30 ppbV	88
76) Nonane	16.09	57	4681006	7.20 ppbV #	92
77) Styrene	16.28	104	11829032	14.69 ppbV #	84
78) Bromoform	16.31	173	2941776	4.90 ppbV #	94
79) o-Xylene	16.36	91	13858383	12.35 ppbV #	82
80) 1,1,2,2-Tetrachloroethane	16.67	83	7666300	7.51 ppbV	97
81) 1,2,3-Trichloropropane	16.88	110	2016023	7.93 ppbV	98
82) t-1,4-Dichloro-2-butene	16.89	53	779053	10.08 ppbV #	59

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094H.D
Acq Time : 9 Dec 124 2:15 pm
Sample : ST62126
Misc : CURVE, 20.0 ML
Quant Time: Dec 9 14:45 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.70	91	18265811	9.04	ppbV	#	92
84)	Isopropylbenzene	17.88	105	25539622	6.58	ppbV	#	87
85)	4-Ethyltoluene	17.88	105	25539622	15.83	ppbV	#	76
86)	1,3,5-Trimethylbenzene	17.97	105	17828803	9.79	ppbV	m	91
87)	Decane	18.26	57	7771148	6.87	ppbV	#	93
88)	tert-butyl benzene	18.57	119	11652692	7.15	ppbV	#	79
89)	1,2,4-Trimethylbenzene	18.58	105	16324165	12.60	ppbV		90
90)	i-Butylbenzene	18.87	91	17864018	9.74	ppbV		94
91)	sec-butylbenzene	18.96	105	19785592	9.24	ppbV	#	85
92)	1,3-Dichlorobenzene	19.03	146	11806629	11.74	ppbV	#	89
93)	Isopropyltoluene	19.18	119	14943798	7.67	ppbV	#	86
94)	Benzyl chloride	19.09	91	7771492	14.13	ppbV	#	89
95)	1,4-Dichlorobenzene	19.15	146	9993932	9.54	ppbV	m	89
96)	n-Butylbenzene	19.83	91	15946730	8.23	ppbV	#	96
97)	1,2-Dichlorobenzene	19.71	146	12143855	10.99	ppbV		92
98)	1,2-Dibromo-3-chloropropan	20.63	75	2395930	9.46	ppbV	#	58
99)	1,2,4-Trichlorobenzene	22.56	180	806786	9.51	ppbV		100
100)	Naphthalene	22.85	128	166297	2.13	ppbV	#	94
101)	1,2,3-Trichlorobenzene	22.56	180	800972	35.32	ppbV	m	95
102)	Hexachlorobutadiene	23.15	225	3825485	3.43	ppbV		98

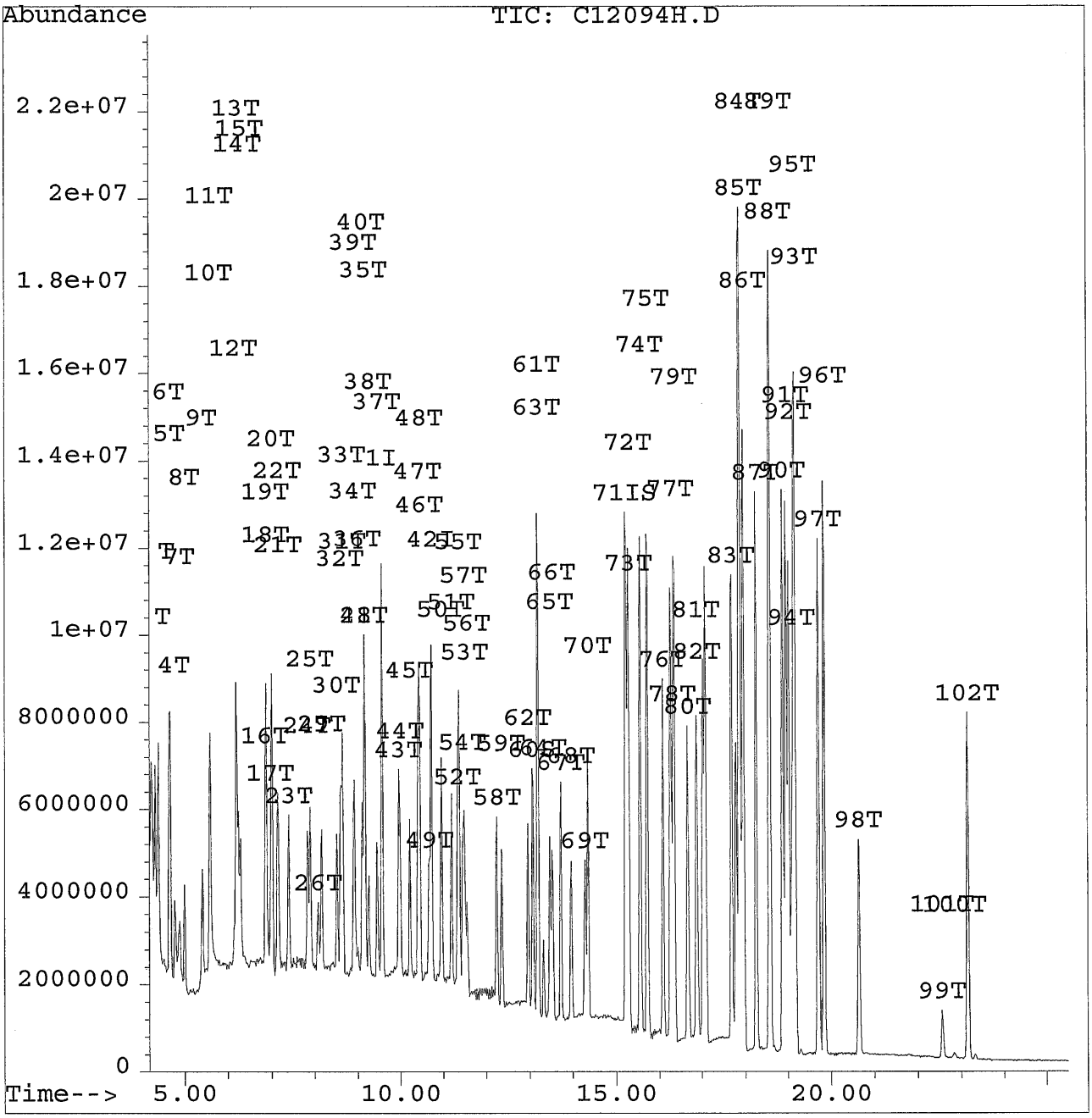
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12094A_S\C12094H.D
Acq Time : 9 Dec 124 2:15 pm
Sample : ST62126
Misc : CURVE, 20.0 ML
Quant Time: Dec 9 14:45 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Secondary Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

'$%	581	,167	7<3(	6'*	,'	)ID,'	&DQ	'HVFULSWRQ	&QHQW	9RO	7HK	4XDO	0HWKRG	&RPPHQW	4HGLW 3URF
121124-MSA	01	MSA	STD		C12114AA		ST62126			10	TR		A1563_L		
121124-MSA	02	MSA	STD		C12114B		ST62126			10	TR		A1563_L		
121124-MSA	03	MSA	STD		C12114C		ST62125		SECONDARY ST	10	TR		A1563_L		
121124-MSA	04	MSA	SPK		QC12114A		ST63255			5	TR		A1563_L		
121124-MSA	05	MSA	SPK		QC12114B		ST63255			5	TR		A1563_L		
121124-MSA	06	MSA	BLK		B12114A		HUMID BLANK			500	TR		A1563_L		
121124-MSA	07	MSA	BLK		B12114B		HUMID BLANK			500	TR		A1563_L		
121124-MSA	08	MSA	BLK		B12114C		METHOD BLANK			1000	TR		A1563_L		
121124-MSA	09	MSA	BLK		B12114D		METHOD BLANK			1000	TR		A1563_L		

CONTINUING CALIBRATION REPORT

SDG:	**LABQC**		
QC_Batch:	**121124-MA1**		
Sample ID:	ST62125		
Sample Analysis Date:	11 Dec 124 10:05 am		
Run Method:	A1563_L.M		
Quant/Calibration Method:	A15CS2_M.M		
Calibration Level:	**Level 4**	**10**	

A passing calibration can have (10%) or 10 compounds out

Sample Calculation:

1) $CCRFi = \left| \frac{(Astdi)\ (Cistdi)}{(Cstdi)\ (Aistdi)} \right|_i$

CCRFi is the Continuing Calibration RF

PFB - Pentafluorobenzene
14DFB - 1,4-Difluorobenzene
d5CB - d5-Chlorobenzene

Compound	Area Astdi	**Cal Level Cstdi ppbv**	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	**Quant IS**
Propylene	803263	**9.500**	0.190	0.197	3.3	**30**	IN	**PFB**
Dichlorodifluoromethane	3360066	**9.500**	0.795	0.782	-1.7	**30**	IN	**PFB**
Methanol	2104921	**15.700**	0.301	0.216	-39.2	**50**	IN	**PFB**
Chloromethane	1008464	**9.500**	0.239	0.234	-1.9	**30**	IN	**PFB**
1,2-Dichlorotetrafluoroethane	2795225	**9.500**	0.661	0.630	-4.9	**30**	IN	**PFB**
Vinyl chloride	1099981	**9.500**	0.260	0.287	9.2	**30**	IN	**PFB**
1,3-Butadiene	948372	**9.500**	0.224	0.198	-13.1	**30**	IN	**PFB**
Bromomethane	1054001	**9.500**	0.249	0.244	-2.1	**30**	IN	**PFB**
Chloroethane	528702	**9.500**	0.125	0.129	2.9	**30**	IN	**PFB**
Ethanol	1094642	**32.080**	0.077	0.062	-23.8	**50**	IN	**PFB**
Acrolein	628858	**13.780**	0.103	0.086	-19.7	**30**	IN	**PFB**
Trichlorofluoromethane	2259669	**9.130**	0.556	0.476	-16.9	**30**	IN	**PFB**
Acetone	1116974	**12.750**	0.197	0.203	3.1	**40**	IN	**PFB**
2-propanol (isopropylalcohol)	3055973	**12.270**	0.560	0.393	-42.3	**50**	IN	**PFB**
t-Butyl alcohol	2097242	**9.120**	0.517	0.444	-16.4	**40**	IN	**PFB**
Methyl iodide	1015598	**2.780**	0.821	0.700	-17.3	**30**	IN	**PFB**
1,1-Dichloroethene	1933721	**8.690**	0.500	0.475	-5.2	**30**	IN	**PFB**
Acrylonitrile	1298313	**10.550**	0.277	0.203	-36.2	**40**	IN	**PFB**
1,1,2-Trichlorotrifluoroethane	1765790	**8.410**	0.472	0.417	-13.0	**30**	IN	**PFB**
Allyl chloride	394125	**9.970**	0.089	0.081	-10.0	**40**	IN	**PFB**
Methylene chloride	808765	**9.160**	0.198	0.223	11.0	**30**	IN	**PFB**
Carbon disulfide	3165137	**9.630**	0.739	0.657	-12.5	**30**	IN	**PFB**
trans-1,2-Dichloroethene	922606	**7.490**	0.277	0.275	-0.6	**30**	IN	**PFB**
Methyl tert butyl ether	2343995	**7.640**	0.689	0.637	-8.2	**40**	IN	**PFB**
Propionitrile	1338523	**13.020**	0.231	0.180	-28.4	**40**	IN	**PFB**
1,1-Dichloroethane	2098025	**8.760**	0.538	0.488	-10.2	**30**	IN	**PFB**
Ethyl tert butyl ether	1491127	**6.020**	0.557	0.535	-4.0	**40**	IN	**PFB**
Vinyl acetate	545483	**9.110**	0.135	0.103	-30.2	**40**	IN	**PFB**
2-Butanone (MEK)	787041	**10.550**	0.168	0.133	-26.3	**40**	IN	**PFB**
Diisopropyl ether	465171	**5.400**	0.194	0.172	-12.4	**40**	IN	**PFB**
Hexane	1503455	**7.660**	0.441	0.382	-15.4	**40**	IN	**PFB**
Methacrylonitrile	783530	**9.950**	0.177	0.154	-15.1	**40**	IN	**PFB**
Ethyl acetate	1876123	**9.080**	0.464	0.405	-14.8	**40**	IN	**PFB**
Bromochloromethane	909571	**5.520**	0.370	0.358	-3.4	**30**	IN	**PFB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
Methyl acrylate	338603	**4.910**	0.155	0.147	-5.1	**40**	IN	**PFB**
Tetrahydrofuran	772178	**10.770**	0.161	0.137	-17.2	**40**	IN	**PFB**
Isobutyl alcohol	103360	**7.570**	0.031	0.030	-3.1	**40**	IN	**PFB**
cis-1,2-Dichloroethene	1305874	**9.430**	0.311	0.292	-6.7	**30**	IN	**PFB**
2,2-Dichloropropane	1711048	**9.230**	0.417	0.382	-9.0	**30**	IN	**PFB**
Chloroform	1795478	**9.540**	0.423	0.452	6.5	**30**	IN	**PFB**
1,1,1-Trichloroethane	1816568	**8.420**	0.463	0.479	3.3	**30**	IN	**14DFB**
1,2-Dichloroethane	1252771	**8.670**	0.310	0.297	-4.6	**30**	IN	**14DFB**
1,1-Dichloropropene	1154126	**6.830**	0.363	0.393	7.7	**30**	IN	**14DFB**
Cyclohexane	1148507	**7.940**	0.311	0.333	6.8	**30**	IN	**14DFB**
Benzene	3586625	**8.930**	0.862	0.794	-8.6	**30**	IN	**14DFB**
Carbon tetrachloride	1186388	**8.990**	0.283	0.299	5.1	**30**	IN	**14DFB**
t-Amyl methyl ether	1585882	**4.600**	0.740	0.719	-2.9	**40**	IN	**14DFB**
2,2,4-Trimethylpentane	2823949	**5.650**	1.073	1.133	5.3	**30**	IN	**14DFB**
n-Heptane	708227	**6.280**	0.242	0.254	4.6	**30**	IN	**14DFB**
1,2-Dichloropropane	1141315	**9.150**	0.268	0.296	9.5	**30**	IN	**14DFB**
1,4 Dioxane	2317860	**17.520**	0.284	0.239	-18.6	**40**	IN	**14DFB**
Dibromomethane	1040187	**3.900**	0.573	0.615	6.8	**30**	IN	**14DFB**
Trichloroethene (TCE)	1675409	**8.860**	0.406	0.487	16.7	**30**	IN	**14DFB**
Bromodichloromethane	1003591	**4.170**	0.517	0.438	-18.0	**40**	IN	**14DFB**
Methyl methacrylate	617770	**7.010**	0.189	0.149	-26.6	**40**	IN	**14DFB**
4-Methyl-2-pentanone (MIBK)	1202164	**7.840**	0.329	0.237	-38.8	**40**	IN	**14DFB**
cis-1,3-Dichloropropene	1925673	**9.100**	0.454	0.360	-26.3	**30**	IN	**14DFB**
Toluene	5580792	**9.160**	1.308	1.116	-17.2	**30**	IN	**14DFB**
trans-1,3-Dichloropropene	1932682	**9.110**	0.455	0.315	-44.7	**30**	OUT	**14DFB**
1,1,2-Trichloroethane	940849	**9.030**	0.224	0.192	-16.6	**30**	IN	**14DFB**
Ethyl methacrylate	739345	**4.790**	0.331	0.273	-21.2	**40**	IN	**14DFB**
2-Hexanone	1795010	**7.350**	0.524	0.350	-49.8	**40**	OUT	**14DFB**
1,3-Dichloropropane	2469378	**6.810**	0.778	0.694	-12.1	**30**	IN	**14DFB**
Octane	1328685	**5.650**	0.505	0.434	-16.3	**30**	IN	**14DFB**
Dibromochloromethane	1487278	**4.140**	0.771	0.672	-14.8	**40**	IN	**14DFB**
1,2-Dibromoethane (EDB)	2245937	**4.610**	1.046	0.818	-27.8	**30**	IN	**14DFB**
Tetrachloroethene (PCE)	1528315	**4.630**	0.709	0.839	15.5	**30**	IN	**14DFB**
Chlorobenzene	5198614	**8.650**	0.890	0.942	5.5	**30**	IN	**d5CB**
1,1,1,2-Tetrachloroethane	943987	**4.290**	0.326	0.320	-1.7	**30**	IN	**d5CB**
Ethylbenzene	10085690	**9.290**	1.607	1.492	-7.7	**30**	IN	**d5CB**
m,p-Xylenes	8197147	**9.310**	1.303	1.216	-7.2	**30**	IN	**d5CB**
Nonane	2458447	**4.930**	0.738	0.711	-3.8	**30**	IN	**d5CB**
Styrene	6409675	**9.100**	1.043	0.978	-6.6	**30**	IN	**d5CB**
Bromoform	1808825	**2.780**	0.963	0.743	-29.7	**40**	IN	**d5CB**
o-Xylene	8732268	**9.050**	1.428	1.324	-7.9	**30**	IN	**d5CB**
1,1,2,2-Tetrachloroethane	4939121	**4.710**	1.552	1.220	-27.2	**30**	IN	**d5CB**
1,2,3-Trichloropropane	1179065	**5.100**	0.342	0.304	-12.7	**30**	IN	**d5CB**
t-1,4-Dichloro-2-butene	606926	**5.770**	0.156	0.072	-117.3	**40**	OUT	**d5CB**
n-Propylbenzene	12414835	**6.420**	2.863	2.369	-20.8	**30**	IN	**d5CB**
Isopropylbenzene	19848851	**6.490**	4.528	4.439	-2.0	**30**	IN	**d5CB**
4-Ethyltoluene	19848851	**15.540**	1.891	1.859	-1.7	**30**	IN	**d5CB**
1,3,5-Trimethylbenzene	11851383	**9.080**	1.932	1.922	-0.5	**30**	IN	**d5CB**
Decane	4951771	**5.250**	1.396	1.250	-11.7	**30**	IN	**d5CB**
tert-butyl benzene	7865808	**5.730**	2.032	1.914	-6.2	**40**	IN	**d5CB**

Compound	Area Astdi	Cal Level Cstdi ppbv	CCRRFi	ICALRF AvgRFn	%Dev	%Dev Limit	%Dev Flag	Quant IS
1,2,4-Trimethylbenzene	10590097	**8.930**	1.756	1.525	-15.1	**30**	IN	**d5CB**
i-Butylbenzene	11110858	**5.690**	2.891	2.188	-32.1	**40**	IN	**d5CB**
sec-butylbenzene	14403489	**6.040**	3.530	2.560	-37.9	**40**	IN	**d5CB**
1,3-Dichlorobenzene	7722947	**7.050**	1.622	1.227	-32.2	**40**	IN	**d5CB**
Isopropyltoluene	11094862	**5.970**	2.751	2.351	-17.0	**40**	IN	**d5CB**
Benzyl chloride	4391675	**6.280**	1.035	0.632	-63.9	**40**	OUT	**d5CB**
1,4-Dichlorobenzene	7235427	**6.580**	1.628	1.278	-27.4	**40**	IN	**d5CB**
n-Butylbenzene	10835508	**5.600**	2.864	2.239	-27.9	**40**	IN	**d5CB**
1,2-Dichlorobenzene	9515084	**6.492**	2.170	1.311	-65.5	**40**	OUT	**d5CB**
1,2-Dibromo-3-chloropropane	2608787	**6.280**	0.615	0.200	-207.8	**50**	OUT	**d5CB**
1,2,4-Trichlorobenzene	1143792	**3.270**	0.518	0.091	-470.1	**50**	OUT	**d5CB**
Naphthalene	303702	**1.530**	0.294	0.064	-359.7	**50**	OUT	**d5CB**
1,2,3-Trichlorobenzene	84287	**4.910**	0.025	0.021	-21.0	**50**	IN	**d5CB**
Hexachlorobutadiene	4039513	**2.520**	2.373	1.087	-118.3	**50**	OUT	**d5CB**
Pentafluorobenzene	8899705	**20.000**		0.000				
1,4-Difluorobenzene	9316360	**20.000**		0.000				
Chlorobenzene-d5	13509942	**20.000**		0.000				
Toluene-d8	6099765	**10.000**		0.000				

QUANTITATION REPORT

EPA Method TO-15 Modified Full Scan GC/MS

				SDG:	**LABQC**		
				EAS ID:	**S12114**		
File Name:	C12114C.D	**Method:**	**TO-15**	**Date Sampled:**	**NA**	**Time:**	**NA**
Sample ID:	ST62125	**Matrix:**	**AA**	**Date Received:**	**NA**	**Time:**	**NA**
MiscInfo-Vol:	10 ML, SECONDARY STANDARD	**Detect:**	**ND**	**Date Analyzed:**	**12/11/24**	**Time:**	**10:05**
Anal Date:	11 Dec 124 10:05 am	**SF:**	**2**	**QCbatch:**	**121124-MA1**		
Quant Method:	A15CS2_M.M	**MDLSF:**	**2**	**Volume:**	**200.0**		
Run Method:	A1563_L.M	**Type:**	**TRG**	**Can (Vial) No:**	**NA**		
Cal Update:	Mon Dec 09 15:31:36 2024	**Instrument:**	**MA1**	**Can Factor:**	**1.00**		
Instrument:	5970 - MS	**EDD SURR:**	**PERCENT**	**SamType:**	**MB**		
Analyst:	TR	**UnitDil:**	**1000**	PPBV			
Template:	**A15CHIQ.MA1**	**MDL FAC**	**1**	UG/M3			
Temp	**24.5**	**EFLAG:**	**1.3**				

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
115-07-1	Propylene	2	TRG	9.183	4.41	42.00	803263
75-71-8	Dichlorodifluoromethane	3	TRG	9.660	4.48	85.00	3360066
67-56-1	Methanol	4	TRG	21.853	4.86	31.00	2104921
74-87-3	Chloromethane	5	TRG	9.683	4.77	50.00	1008464
76-14-2	1,2-Dichlorotetrafluoroetha	6	TRG	9.967	4.77	85.00	2795225
75-01-4	Vinyl chloride	7	TRG	8.624	5.02	62.00	1099981
106-99-0	1,3-Butadiene	8	TRG	10.749	5.14	54.00	948372
74-83-9	Bromomethane	9	TRG	9.700	5.56	94.00	1054001
75-00-3	Chloroethane	10	TRG	9.227	5.72	64.00	528702
64-17-5	Ethanol	11	TRG	39.712	5.72	46.00	1094642
107-02-8	Acrolein	12	TRG	16.491	6.32	56.00	628858
75-69-4	Trichlorofluoromethane	13	TRG	10.675	6.38	101.00	2259669
67-64-1	Acetone	14	TRG	12.354	6.42	58.00	1116974
67-63-0	2-propanol (isopropylalcoh	15	TRG	17.455	6.45	45.00	3055973
75-65-0	t-Butyl alcohol	16	TRG	10.615	7.03	59.00	2097242
4227-95-6	Methyl iodide	17	TRG	3.261	7.19	142.00	1015598
75-35-4	1,1-Dichloroethene	18	TRG	9.139	7.07	61.00	1933721
107-13-1	Acrylonitrile	19	TRG	14.372	7.07	53.00	1298313
76-13-1	1,1,2-Trichlorotrifluoroetha	20	TRG	9.507	7.21	151.00	1765790
107-05-1	Allyl chloride	21	TRG	10.972	7.37	76.00	394125
75-09-2	Methylene chloride	22	TRG	8.151	7.35	84.00	808765
75-15-0	Carbon disulfide	23	TRG	10.831	7.61	76.00	3165137
156-60-5	trans-1,2-Dichloroethene	24	TRG	7.538	8.06	96.00	922606
1634-04-4	Methyl tert butyl ether	25	TRG	8.270	8.11	73.00	2343995
107-12-0	Propionitrile	26	TRG	16.714	8.31	54.00	1338523
75-34-3	1,1-Dichloroethane	27	TRG	9.656	8.41	63.00	2098025
637-92-3	Ethyl tert butyl ether	28	TRG	6.259	9.40	59.00	1491127
108-05-4	Vinyl acetate	29	TRG	11.864	8.39	43.00	545483
78-93-3	2-Butanone (MEK)	30	TRG	13.325	8.75	72.00	787041
108-20-3	Diisopropyl ether	31	TRG	6.072	8.90	87.00	465171
110-54-3	Hexane	32	TRG	8.838	8.86	57.00	1503455
126-98-7	Methacrylonitrile	33	TRG	11.454	8.88	67.00	783530
141-78-6	Ethyl acetate	34	TRG	10.423	9.17	61.00	1876123
74-97-5	Bromochloromethane	35	TRG	5.709	9.43	49.00	909571

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
96-33-3	Methyl acrylate	36	TRG	5.160	9.25	55.00	338603
109-99-9	Tetrahydrofuran	37	TRG	12.622	9.72	72.00	772178
78-83-1	Isobutyl alcohol	38	TRG	7.803	9.51	74.00	103360
156-59-2	cis-1,2-Dichloroethene	39	TRG	10.066	9.16	96.00	1305874
594-20-7	2,2-Dichloropropane	40	TRG	10.057	9.37	77.00	1711048
67-66-3	Chloroform	41	TRG	8.925	9.42	83.00	**1795478**
71-55-6	1,1,1-Trichloroethane	43	TRG	8.146	10.24	97.00	1816568
107-06-2	1,2-Dichloroethane	44	TRG	9.067	10.27	61.95	1252771
563-58-6	1,1-Dichloropropene	45	TRG	6.301	10.50	75.00	1154126
110-82-7	Cyclohexane	46	TRG	7.403	10.74	56.00	1148507
71-43-2	Benzene	47	TRG	9.696	10.70	78.00	3586625
56-23-5	Carbon tetrachloride	48	TRG	8.531	10.73	116.90	1186388
994-05-8	t-Amyl methyl ether	49	TRG	4.734	10.95	73.00	1585882
540-84-1	2,2,4-Trimethylpentane	50	TRG	5.352	11.25	57.00	2823949
142-82-5	n-Heptane	51	TRG	5.992	11.48	71.00	708227
78-87-5	1,2-Dichloropropane	52	TRG	8.280	11.64	63.00	1141315
123-91-1	1,4 Dioxane	53	TRG	20.782	11.79	88.00	2317860
74-95-3	Dibromomethane	54	TRG	3.633	11.75	174.00	1040187
79-01-6	Trichloroethene (TCE)	55	TRG	7.379	10.70	130.00	1675409
75-27-4	Bromodichloromethane	56	TRG	4.920	11.85	83.00	1003591
80-62-6	Methyl methacrylate	57	TRG	8.874	11.76	69.00	617770
108-10-1	4-Methyl-2-pentanone (MI	58	TRG	10.885	12.55	58.00	1202164
10061-01-5	cis-1,3-Dichloropropene	59	TRG	11.496	12.67	75.00	**1925673**
108-88-3	Toluene	61	TRG	10.732	13.50	91.00	5580792
10061-02-6	trans-1,3-Dichloropropene	62	TRG	13.183	13.28	75.00	1932682
79-00-5	1,1,2-Trichloroethane	63	TRG	10.526	13.52	61.00	940849
97-63-2	Ethyl methacrylate	64	TRG	5.807	13.63	69.00	739345
591-78-6	2-Hexanone	65	TRG	11.008	13.79	58.00	1795010
142-28-9	1,3-Dichloropropane	66	TRG	7.636	13.86	76.00	2469378
111-65-9	Octane	67	TRG	6.569	14.04	85.00	1328685
124-48-1	Dibromochloromethane	68	TRG	4.753	14.30	129.00	1487278
106-93-4	1,2-Dibromoethane (EDB)	69	TRG	5.892	14.62	107.00	2245937
127-18-4	Tetrachloroethene (PCE)	70	TRG	3.912	14.69	166.00	1528315
108-90-7	Chlorobenzene	72	TRG	8.171	15.62	112.00	5198614
630-20-6	1,1,1,2-Tetrachloroethane	73	TRG	4.363	15.64	131.00	943987
100-41-4	Ethylbenzene	74	TRG	10.009	15.90	106	10085690
1330-20-7	m,p-Xylenes	75	TRG	9.978	16.06	91.00	8197147
111-84-2	Nonane	76	TRG	5.116	16.43	57.00	2458447
100-42-5	Styrene	77	TRG	9.700	16.61	104.00	6409675
75-25-2	Bromoform	78	TRG	3.606	16.67	173.00	1808825
95-47-6	o-Xylene	79	TRG	9.764	16.35	91.00	8732268
79-34-5	1,1,2,2-Tetrachloroethane	80	TRG	5.992	17.02	83.00	4939121
96-18-4	1,2,3-Trichloropropane	81	TRG	5.748	17.22	110.00	1179065
110-57-6	t-1,4-Dichloro-2-butene	82	TRG	12.538	17.24	53.00	606926
103-65-1	n-Propylbenzene	83	TRG	7.757	18.04	91.00	12414835
98-82-8	Isopropylbenzene	84	TRG	6.619	18.23	105.00	19848851
622-96-8	4-Ethyltoluene	85	TRG	15.808	18.23	105.00	19848851
108-67-8	1,3,5-Trimethylbenzene	86	TRG	9.128	18.31	105.00	11851383
124-18-5	Decane	87	TRG	5.863	18.60	57.00	4951771
98-06-6	tert-butyl benzene	88	TRG	6.084	18.93	119.00	7865808

CAS#	Compound	n	Type	Raw Amount	Target RT	Ion	Sample Area
95-63-6	1,2,4-Trimethylbenzene	89	TRG	10.282	18.95	105.00	10590097
538-93-2	i-Butylbenzene	90	TRG	7.516	19.24	91.00	11110858
135-98-8	sec-butylbenzene	91	TRG	8.330	19.32	105.00	14403489
541-73-1	1,3-Dichlorobenzene	92	TRG	9.319	19.39	146.00	7722947
99-87-6	Isopropyltoluene	93	TRG	6.986	19.53	119.00	11094862
100-44-7	Benzyl chloride	94	TRG	10.294	19.46	91.00	4391675
106-46-7	1,4-Dichlorobenzene	95	TRG	8.383	19.39	146.00	7235427
104-51-8	n-Butylbenzene	96	TRG	7.164	20.20	91.00	10835508
95-50-1	1,2-Dichlorobenzene	97	TRG	10.745	20.07	146.00	9515084
96-12-8	1,2-Dibromo-3-chloropropa	98	TRG	19.331	21.02	75.00	2608787
120-82-1	1,2,4-Trichlorobenzene	99	TRG	18.642	22.95	180.00	1143792
91-20-3	Naphthalene	100	TRG	7.034	23.23	128.00	303702
87-61-6	1,2,3-Trichlorobenzene	101	TRG	5.942	23.71	180.00	84287
87-68-3	Hexachlorobutadiene	102	TRG	5.501	23.15	225.00	4039513
363-72-4	Pentafluorobenzene	1	IS	20.000	9.82	168.00	**8899705**
540-36-3	1,4-Difluorobenzene	42	IS	20.000	11.00	114.00	**9316360**
3114-55-4	Chlorobenzene-d5	71	IS	20.000	15.57	117.00	**13509942**
2037-26-5	Toluene-d8	60	SURR	11.028	13.40	98.00	**6099765**

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114C.D
Acq Time : 11 Dec 124 10:05 am Operator: TR
Sample : ST62125 Inst : 5970 - M
Misc : 10 ML, SECONDARY STANDARD Multiplr: 1.00
Quant Time: Dec 11 15:05 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min
1) Pentafluorobenzene	9.57	168	8899705	20.00	ppbV		-0.25
42) 1,4-Difluorobenzene	10.72	114	9316360	20.00	ppbV		-0.28
71) Chlorobenzene-d5	15.22	117	13509942	20.00	ppbV		-0.35
System Monitoring Compounds							%Recovery
60) Toluene-d8	13.07	98	6099765	11.03	ppbV		110.28
Target Compounds							Qvalue
2) Propylene	4.33	42	803263	9.18	ppbV		91
3) Dichlorodifluoromethane	4.41	85	3360066	9.66	ppbV	#	95
4) Methanol	4.76	31	2104921	21.85	ppbV	m	96
5) Chloromethane	4.67	50	1008464	9.68	ppbV		98
6) 1,2-Dichlorotetrafluoroeth	4.67	85	2795225	9.97	ppbV		96
7) Vinyl chloride	4.91	62	1099981	8.62	ppbV		94
8) 1,3-Butadiene	5.01	54	948372	10.75	ppbV		95
9) Bromomethane	5.42	94	1054001	9.70	ppbV		94
10) Chloroethane	5.58	64	528702	9.23	ppbV		96
11) Ethanol	5.59	46	1094642	39.71	ppbV	m	87
12) Acrolein	6.14	56	628858	16.49	ppbV	m	96
13) Trichlorofluoromethane	6.21	101	2259669	10.67	ppbV		97
14) Acetone	6.24	58	1116974	12.35	ppbV	#	29
15) 2-propanol (isopropylalcoh	6.29	45	3055973	17.45	ppbV	m	97
16) t-Butyl alcohol	6.86	59	2097242	10.62	ppbV	m	84
17) Methyl iodide	6.99	142	1015598	3.26	ppbV	#	90
18) 1,1-Dichloroethene	6.87	61	1933721	9.14	ppbV	#	79
19) Acrylonitrile	6.89	53	1298313	14.37	ppbV	#	98
20) 1,1,2-Trichlorotrifluoroet	7.03	151	1765790	9.51	ppbV	#	71
21) Allyl chloride	7.16	76	394125	10.97	ppbV	m	48
22) Methylene chloride	7.15	84	808765	8.15	ppbV		92
23) Carbon disulfide	7.40	76	3165137	10.83	ppbV	#	88
24) trans-1,2-Dichloroethene	7.85	96	922606	7.54	ppbV	#	67
25) Methyl tert butyl ether	7.90	73	2343995	8.27	ppbV	#	91
26) Propionitrile	8.07	54	1338523	16.71	ppbV	m	99
27) 1,1-Dichloroethane	8.17	63	2098025	9.66	ppbV		98
28) Ethyl tert butyl ether	9.16	59	1491127	6.26	ppbV	#	89
29) Vinyl acetate	8.17	43	545483	11.86	ppbV	m	74
30) 2-Butanone (MEK)	8.51	72	787041	13.33	ppbV	#	65
31) Diisopropyl ether	8.65	87	465171	6.07	ppbV	#	80
32) Hexane	8.60	57	1503455	8.84	ppbV		86
33) Methacrylonitrile	8.63	67	783530	11.45	ppbV	#	81
34) Ethyl acetate	8.92	61	1876123	10.42	ppbV	#	89
35) Bromochloromethane	9.16	49	909571	5.71	ppbV	#	48
36) Methyl acrylate	9.01	55	338603	5.16	ppbV	m	81

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114C.D
Acq Time : 11 Dec 124 10:05 am Operator: TR
Sample : ST62125 Inst : 5970 - M
Misc : 10 ML, SECONDARY STANDARD Multiplr: 1.00
Quant Time: Dec 11 15:05 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	Tetrahydrofuran	9.45	72	772178	12.62	ppbV		100
38)	Isobutyl alcohol	9.26	74	103360	7.80	ppbV	m	78
39)	cis-1,2-Dichloroethene	8.92	96	1305874	10.07	ppbV	#	62
40)	2,2-Dichloropropane	9.11	77	1711048	10.06	ppbV		95
41)	Chloroform	9.16	83	1795478	8.92	ppbV		93
43)	1,1,1-Trichloroethane	9.97	97	1816568	8.15	ppbV	#	85
44)	1,2-Dichloroethane	10.00	62	1252771	9.07	ppbV		98
45)	1,1-Dichloropropene	10.22	75	1154126	6.30	ppbV	#	92
46)	Cyclohexane	10.44	56	1148507	7.40	ppbV	#	80
47)	Benzene	10.41	78	3586625	9.70	ppbV	#	82
48)	Carbon tetrachloride	10.44	117	1186388	8.53	ppbV		99
49)	t-Amyl methyl ether	10.67	73	1585882	4.73	ppbV		96
50)	2,2,4-Trimethylpentane	10.96	57	2823949	5.35	ppbV	#	94
51)	n-Heptane	11.18	71	708227	5.99	ppbV	m	86
52)	1,2-Dichloropropane	11.33	63	1141315	8.28	ppbV		98
53)	1,4 Dioxane	11.48	88	2317860	20.78	ppbV	#	63
54)	Dibromomethane	11.45	174	1040187	3.63	ppbV	#	88
55)	Trichloroethene (TCE)	11.36	130	1675409	7.38	ppbV	#	84
56)	Bromodichloromethane	11.55	83	1003591	4.92	ppbV	#	96
57)	Methyl methacrylate	11.47	69	617770	8.87	ppbV	#	45
58)	4-Methyl-2-pentanone (MIBK	12.23	58	1202164	10.89	ppbV		88
59)	cis-1,3-Dichloropropene	12.35	75	1925673	11.50	ppbV	m	85
61)	Toluene	13.17	91	5580792	10.73	ppbV		96
62)	trans-1,3-Dichloropropene	12.95	75	1932682	13.18	ppbV	m	90
63)	1,1,2-Trichloroethane	13.19	61	940849	10.53	ppbV	#	36
64)	Ethyl methacrylate	13.33	69	739345	5.81	ppbV	m	96
65)	2-Hexanone	13.46	58	1795010	11.01	ppbV	m	88
66)	1,3-Dichloropropane	13.53	76	2469378	7.64	ppbV		95
67)	Octane	13.72	85	1328685	6.57	ppbV		92
68)	Dibromochloromethane	13.96	129	1487278	4.75	ppbV	m	99
69)	1,2-Dibromoethane (EDB)	14.28	107	2245937	5.89	ppbV		92
70)	Tetrachloroethene (PCE)	14.35	166	1528315	3.91	ppbV	#	85
72)	Chlorobenzene	15.27	112	5198614	8.17	ppbV	#	83
73)	1,1,1,2-Tetrachloroethane	15.29	131	943987	4.36	ppbV	#	95
74)	Ethylbenzene	15.55	91	10085690	10.01	ppbV	#	88
75)	m,p-Xylenes	15.72	91	8197147	9.98	ppbV	#	82
76)	Nonane	16.07	57	2458447	5.12	ppbV	#	91
77)	Styrene	16.26	104	6409675	9.70	ppbV	m	85
78)	Bromoform	16.31	173	1808825	3.61	ppbV	#	96
79)	o-Xylene	16.35	91	8732268	9.76	ppbV	#	83
80)	1,1,2,2-Tetrachloroethane	16.67	83	4939121	5.99	ppbV	m	97
81)	1,2,3-Trichloropropane	16.86	110	1179065	5.75	ppbV	m	99
82)	t-1,4-Dichloro-2-butene	16.89	53	606926	12.54	ppbV	m	34

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114C.D
Acq Time : 11 Dec 124 10:05 am Operator: TR
Sample : ST62125 Inst : 5970 - M
Misc : 10 ML, SECONDARY STANDARD Multiplr: 1.00
Quant Time: Dec 11 15:05 19124

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83)	n-Propylbenzene	17.68	91	12414835	7.76	ppbV		96
84)	Isopropylbenzene	17.86	105	19848851	6.62	ppbV	#	88
85)	4-Ethyltoluene	17.86	105	19848851	15.81	ppbV	#	86
86)	1,3,5-Trimethylbenzene	17.95	105	11851383	9.13	ppbV	m	81
87)	Decane	18.26	57	4951771	5.86	ppbV	#	89
88)	tert-butyl benzene	18.56	119	7865808	6.08	ppbV	#	79
89)	1,2,4-Trimethylbenzene	18.58	105	10590097	10.28	ppbV	m	87
90)	i-Butylbenzene	18.87	91	11110858	7.52	ppbV		97
91)	sec-butylbenzene	18.94	105	14403489	8.33	ppbV	#	93
92)	1,3-Dichlorobenzene	19.01	146	7722947	9.32	ppbV	m	91
93)	Isopropyltoluene	19.16	119	11094862	6.99	ppbV	#	73
94)	Benzyl chloride	19.09	91	4391675	10.29	ppbV	m	90
95)	1,4-Dichlorobenzene	19.13	146	7235427	8.38	ppbV	m	91
96)	n-Butylbenzene	19.82	91	10835508	7.16	ppbV	m	97
97)	1,2-Dichlorobenzene	19.69	146	9515084	10.74	ppbV		97
98)	1,2-Dibromo-3-chloropropan	20.63	75	260878 7	19.33	ppbV	m	37
99)	1,2,4-Trichlorobenzene	22.55	180	1143792	18.64	ppbV	m	99
100)	Naphthalene	22.83	128	303702	7.03	ppbV	m	94
101)	1,2,3-Trichlorobenzene	23.30	180	84287	5.94	ppbV	m	98
102)	Hexachlorobutadiene	23.15	225	4039513	5.50	ppbV		96

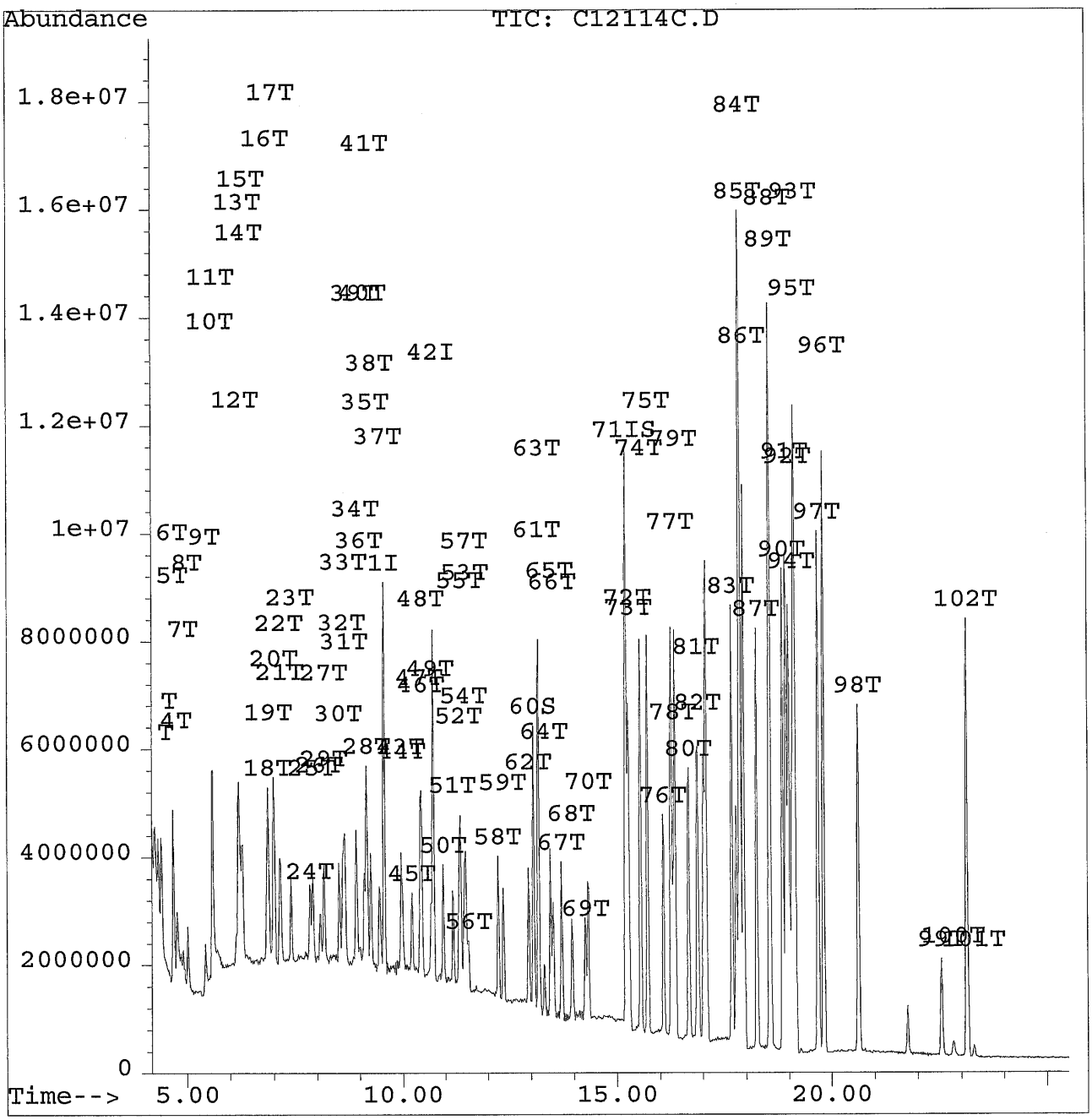
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\MSCHEM\1\DATA\12114A_S\C12114C.D
Acq Time : 11 Dec 124 10:05 am
Sample : ST62125
Misc : 10 ML, SECONDARY STANDARD
Quant Time: Dec 11 15:05 19124

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA TO-15
Last Update : Mon Dec 09 15:31:36 2024
Response via : Multiple Level Calibration



Section 5 Standard Calibration Certificates

This section contains the Standard Calibration Certificates for the Standards and Internal Standards.

Section Contents

Standard Calibration Certificates

STANDARD CERTIFICATE
CALIBRATION GAS STANDARD

EPA Method TO-15 Calibration Standard

Standard: ST62126
Prepared: 5/12/2018
Recertified: 10/5/2023
Expiration: 10/5/2028

CAS	Component	MW	Std ppmv
	TO-14 Gas		
75-71-8	Freon 12	120.9	0.95
74-87-3	Chloromethane	50.5	0.95
76-14-2	Freon 114	170.9	0.95
106-99-0	1,3-Butadiene	54.1	0.95
74-83-9	Bromomethane	94.9	0.95
75-00-3	Chloroethane	64.5	0.95
75-37-6	1,1-Difluoroethane	66.05	0.95
75-01-4	Vinyl chloride	62.5	0.95
	TO-14 Mix A		
75-09-2	Dichloromethane	84.9	0.92
67-66-3	Chloroform	119.4	0.95
75-69-4	Trichlorofluoromethane	137.4	0.91
107-06-2	1,2-Dichloroethane	99	0.87
71-55-6	1,1,1-Trichloroethane	133.4	0.84
56-23-5	Carbon Tetrachloride	153.8	0.90
78-87-5	1,2-Dichloropropane	113	0.92
79-01-6	Trichloroethene	131.4	0.89
106-93-4	1,2-Dibromoethane	187.9	0.46
127-18-4	Tetrachloroethene	165.8	0.46
108-90-7	Chlorobenzene	112.6	0.87
79-34-5	1,1,2,2-Tetrachloroethane	167.8	0.47
541-73-1	1,3-Dichlorobenzene	147	0.70
106-46-7	1,4-Dichlorobenzene	147	0.66
95-50-1	1,2-Dichlorobenzene	147	0.62
120-82-1	1,2,4-Trichlorobenzene	181.4	0.33
87-68-3	Hexachlorobutadiene	260.8	0.25
	TO-14 Mix B		
71-43-2	Benzene	78.1	0.89
108-88-3	Toluene	92.1	0.92
100-41-4	Ethylbenzene	106.2	0.93
1330-20-7	m,p-Xylenes	106.2	0.93
100-42-5	Styrene	104.2	0.91
95-47-6	o-Xylene	106.2	0.91
TO-15 N	4-Ethyltoluene (Added to TO-15)	120.2	0.91
108-67-8	1,3,5-Trimethylbenzene	120.2	0.91
95-63-6	1,2,4-Trimethylbenzene	120.2	0.89
10061-01-5	c-1,3-Dichloropropene	111	0.91
10061-02-6	t-1,3-Dichloropropene	111	0.91

75-34-3	1,1-Dichloroethane	99	0.88
75-35-4	1,1-Dichloroethene	96.9	0.87
156-59-2	c-1,2-Dichloroethene	96.9	0.94
79-00-5	1,1,2-Trichloroethane	133.4	0.90
76-13-1	Freon 113	187.3	0.84
	TO-15 Normal		
78-93-3	2-Butanone	72.1	1.06
67-64-1	Acetone	58.1	1.28
75-15-0	Carbon Disulfide	76.1	0.96
75-25-2	Bromoform	252.7	0.28
108-10-1	4-Methyl-2-pentanone	100.2	0.78
591-78-6	2-Hexanone	100.2	0.74
75-27-4	Bromodichloromethane	163.8	0.42
124-48-1	Dibromochloromethane	208.3	0.41
108-05-4	Vinyl acetate	86.1	0.91
156-60-5	t-1,2-Dichloroethene(total)	96.9	0.75
100-44-7	Benzylchloride	126.6	0.63
622-96-8	4-Ethyltoluene	120.2	0.64
1634-04-4	Methyl t-butyl ether	88.1	0.76
110-82-7	Cyclohexane	84.2	0.79
594-20-7	2,2-Dichloropropane	113	0.92
110-54-3	Hexane	86.2	0.77
630-20-6	1,1,1,2-Tetrachloroethane	167.8	0.43
74-97-5	Bromochloromethane	163.8	0.55
540-84-1	2,2,4-Trimethylpentane (isooctane)	114.2	0.56
107-05-1	Allyl Chloride	76.5	1.00
141-78-6	Ethyl acetate	88.1	0.91
142-82-5	Heptane	100.2	0.63
11-65-9	Octane	114.2	0.57
111-84-2	Nonane	128.2	0.49
124-18-5	Decane	142.3	0.53
563-58-6	1,1-Dichloropropene	111	0.68
96-18-4	1,2,3 Trichloropropane	147.4	0.51
142-28-9	1,3-Dichloropropane	113	0.68
74-95-3	Dibromomethane	173.8	0.39
80-62-6	Methyl methacrylate	100.1	0.70
	TO-15 Extended		
123-91-1	1,4-Dioxane	88.1	1.75
64-17-5	Ethanol	46.1	3.21
104-51-8	n-Butylbenzene	134.2	0.56
135-98-8	sec-Butylbenzene	134.2	0.60
98-06-6	tert-butylbenzene	134.2	0.57
104-51-8	i-Butylbenzene	134.2	0.57
99-87-6	p-Isopropyltoluene(cymene)	134.2	0.60
110-57-6	t-1,4-Dichloro-2-butene	125	0.58
98-82-8	Isopropylbenzene (Cumene)	120.2	0.65
103-65-1	n-Propylbenzene	120.2	0.64
96-12-8	1,2-Dibromo-3-chloropropane	236.3	0.63
75-05-8	Acetonitrile	41.1	1.90
109-99-9	Tetrahydrofuran	72.1	1.08
67-63-0	2-Propanol (Isopropanol)	60.1	1.23
107-02-8	Acrolein	56.1	1.38

	TO-15 Special		
67-56-1	Methanol	32	1.57
75-65-0	t-Butanol	74.1	0.91
95-49-8	2-Chlorotoluene	126.6	0.44
126-98-7	Methacrylonitrile	67.1	1.00
97-63-2	Ethyl methacrylate	114.2	0.48
4227-95-6	Methyl iodide	142.9	0.28
107-12-0	Propionitrile	55.1	1.30
78-83-1	Isobutyl Alcohol (2-methyl-1-propanol)	74.1	0.76
107-13-1	Acrylonitrile	41.1	1.05
108-20-3	Di-isopropyl ether	102.2	0.54
78-00-2	Tetraethyl lead	323.4	0.17
106-43-4	4-Chlorotoluene	126.6	0.54
91-20-3	Naphthalene	128.2	0.15
87-61-6	1,2,3-Trichlorobenzene	181.5	0.17
637-92-3	Ethyl tert butyl Ether	102.2	0.60
96-33-3	Methyl Acrylate	86.1	0.49
994-05-8	tert-Amyl methyl ether	102.18	0.46

Analyst: Steve Hoyt, Ph.D.

Approved:

Section 6 Miscellaneous Documents

This section contains additional documents that pertain to the project.

Section Contents

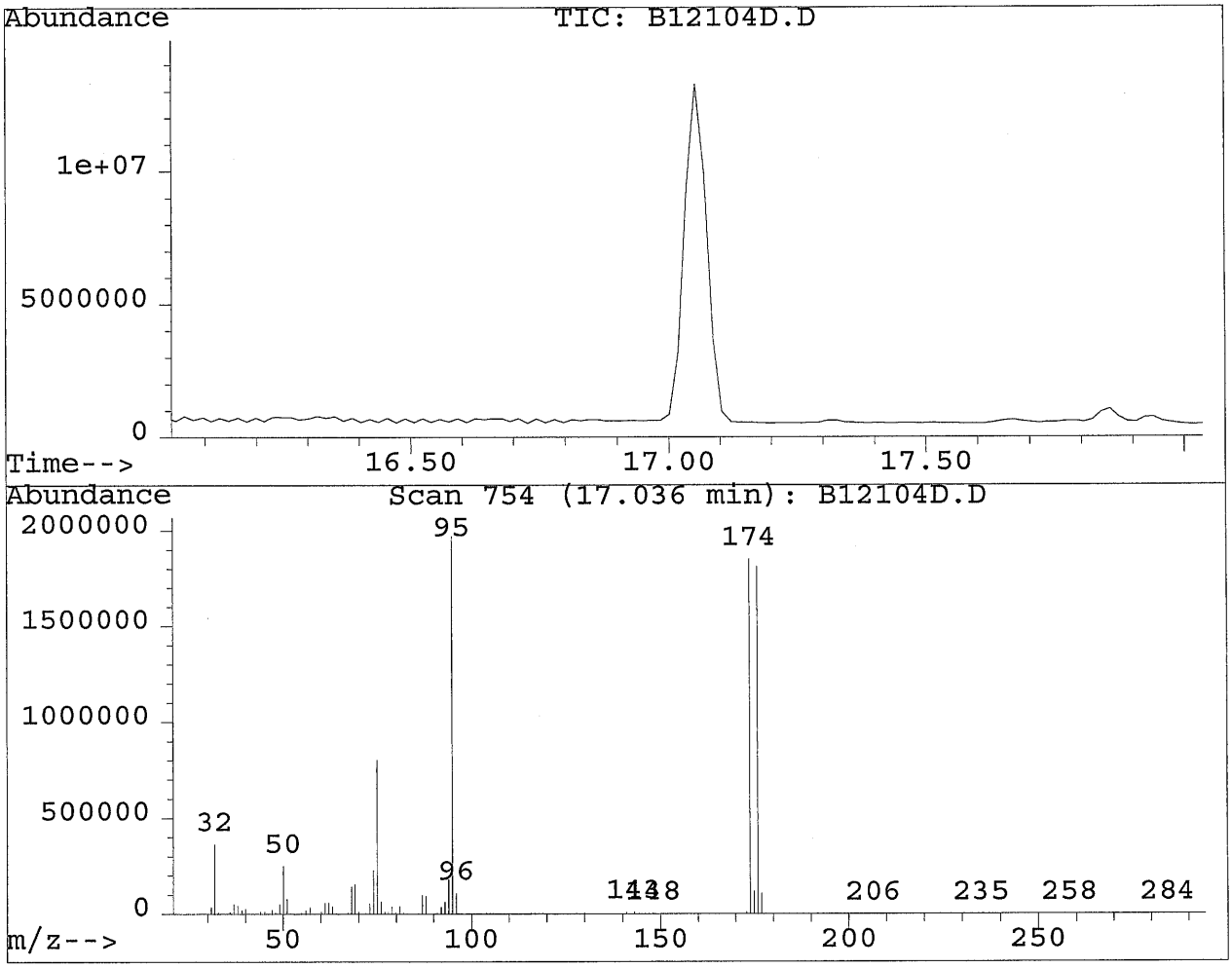
Shipping and Receiving Documents
Contact Logs and Correspondence
Additional Documents for Sampling

BFB

Data File : C:\MSCHEM\1\DATA\12104A\B12104D.D
Acq Time : 10 Dec 124 2:37 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15



Peak Apex is scan: 754

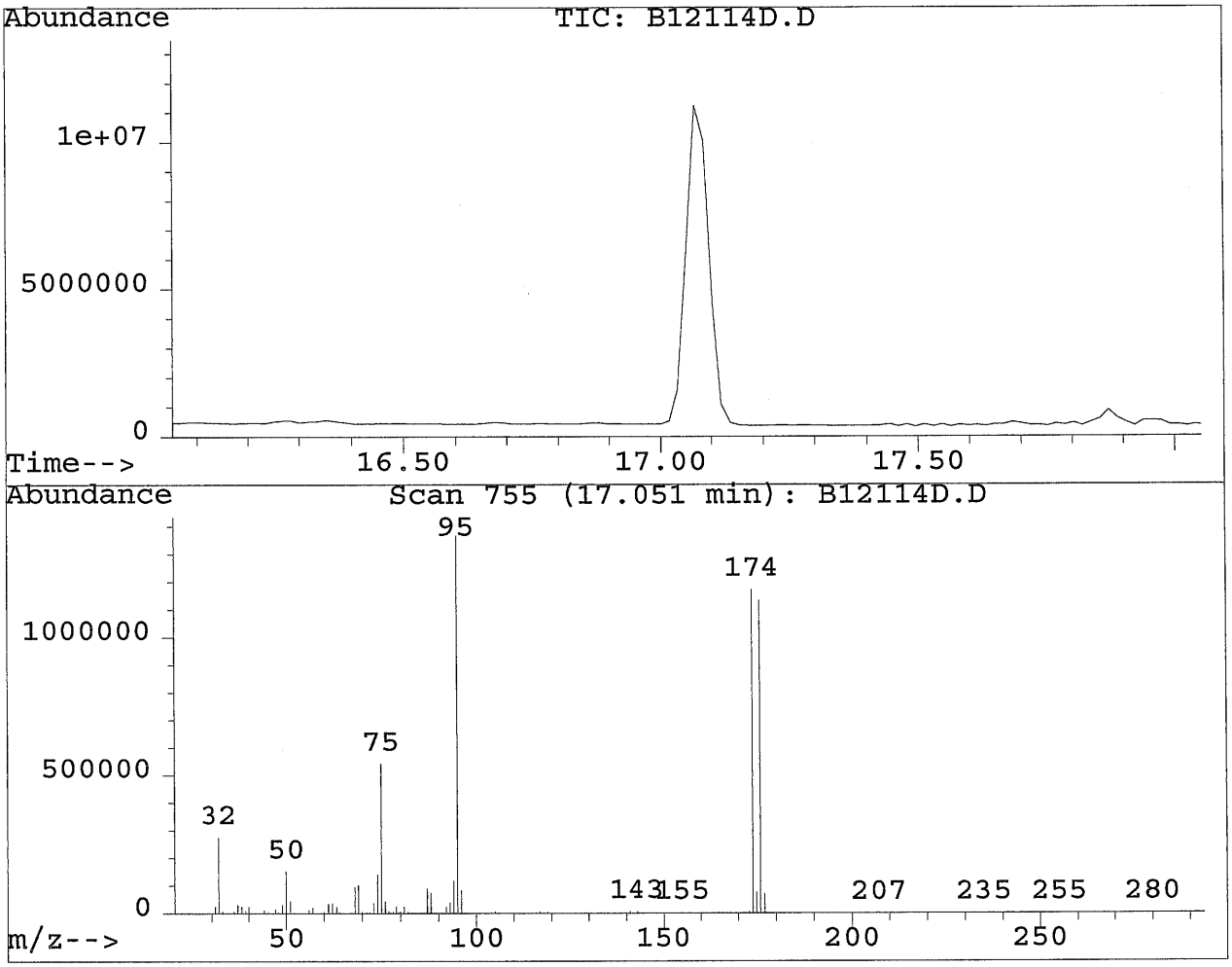
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	12.7	249984	PASS
75	95	30	66	40.7	801408	PASS
95	95	100	100	100.0	1969152	PASS
96	95	5	9	5.5	108448	PASS
173	174	0	2	0.5	8920	PASS
174	95	50	120	94.0	1850368	PASS
175	174	4	9	6.3	117008	PASS
176	174	93	101	97.8	1810432	PASS
177	176	5	9	5.9	106704	PASS

BFB

Data File : C:\MSCHEM\1\DATA\12114A_C\B12114D.D
Acq Time : 11 Dec 124 2:36 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15



Peak Apex is scan: 755

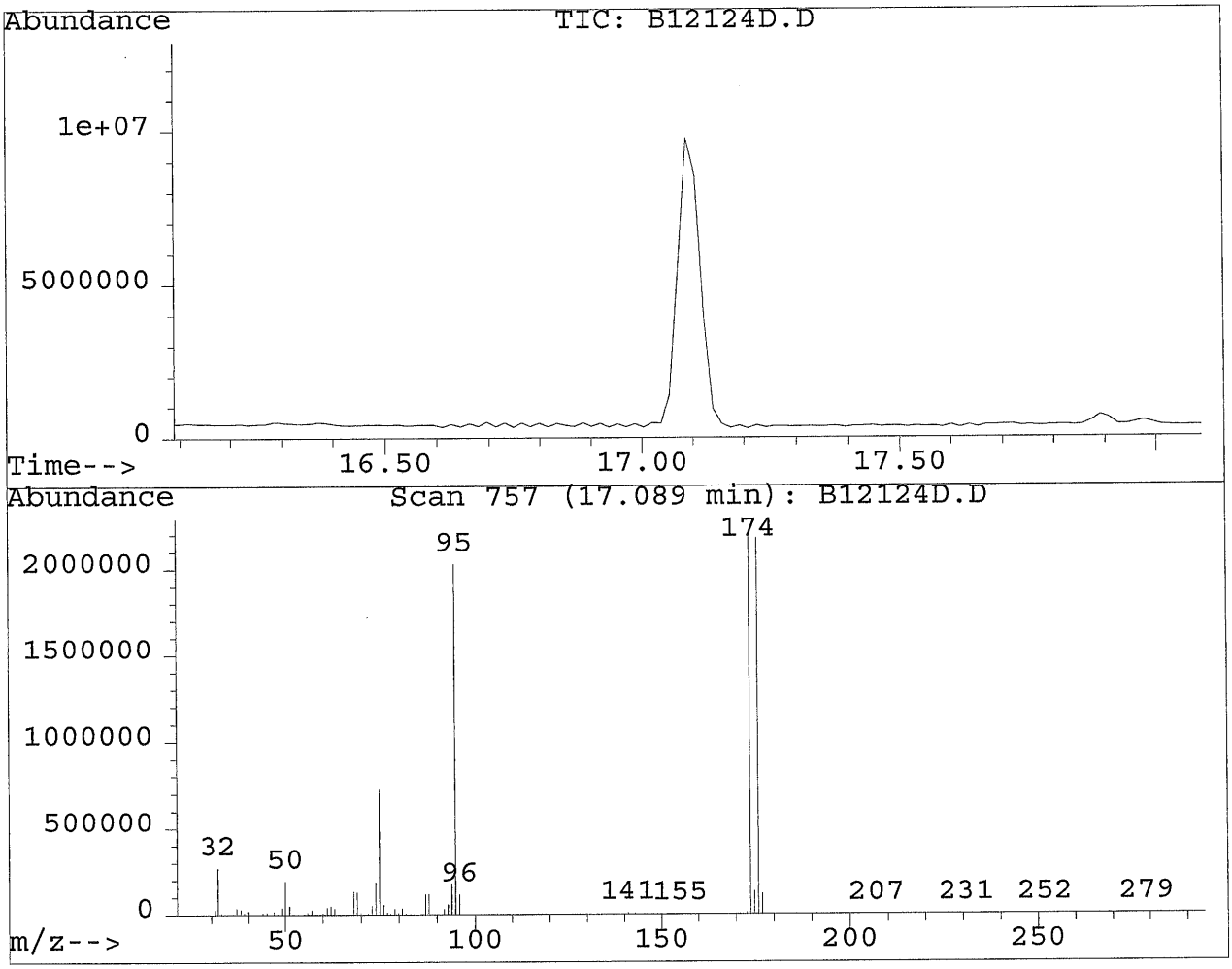
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	11.0	150528	PASS
75	95	30	66	39.6	541120	PASS
95	95	100	100	100.0	1366016	PASS
96	95	5	9	6.1	82896	PASS
173	174	0	2	0.5	6120	PASS
174	95	50	120	85.7	1170432	PASS
175	174	4	9	6.5	76000	PASS
176	174	93	101	96.8	1133056	PASS
177	176	5	9	6.1	69672	PASS

BFB

Data File : C:\MSCHEM\1\DATA\12124A\B12124D.D
Acq Time : 12 Dec 124 1:46 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15



Peak Apex is scan: 757

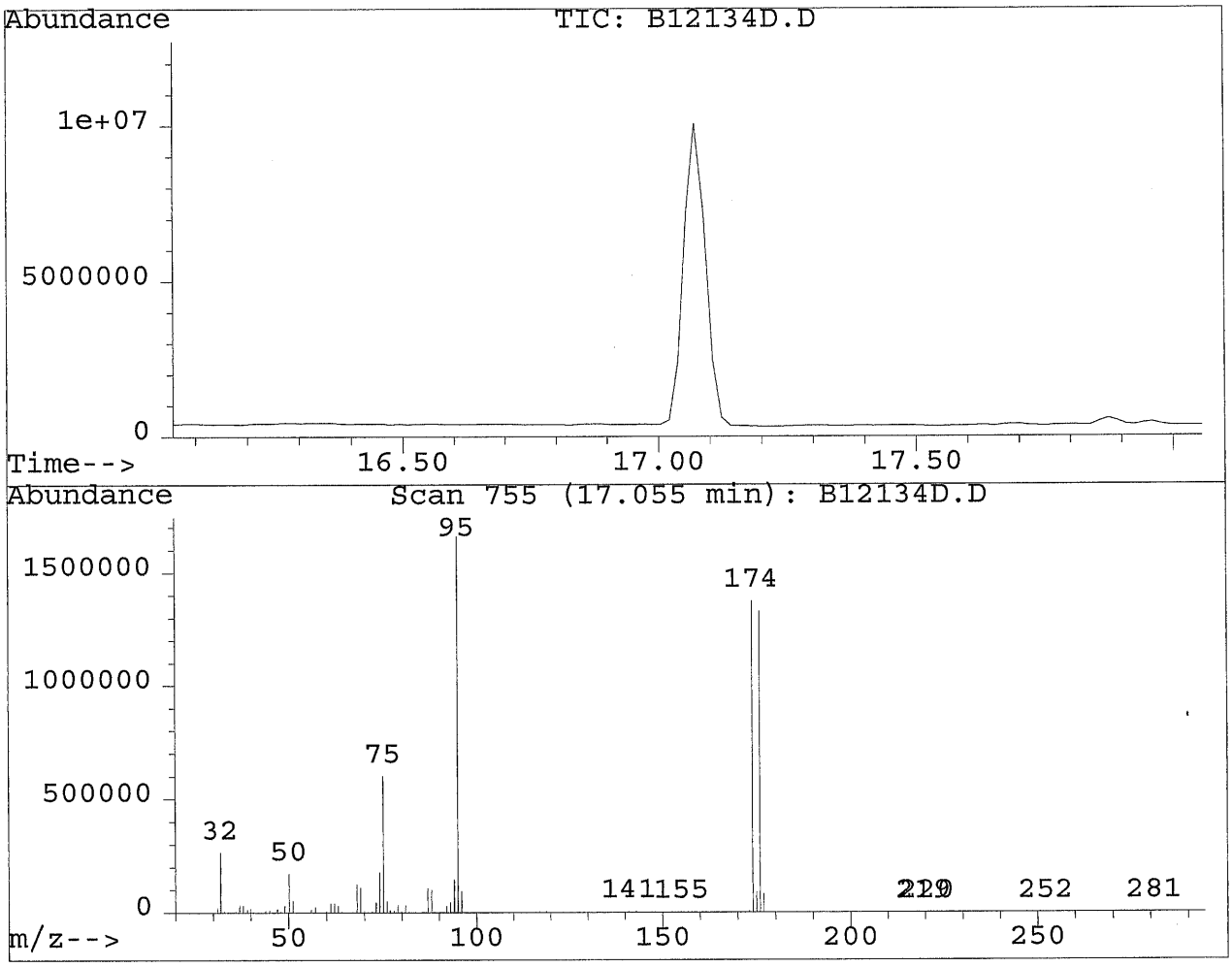
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	9.6	193728	PASS
75	95	30	66	35.9	728896	PASS
95	95	100	100	100.0	2028544	PASS
96	95	5	9	5.7	116064	PASS
173	174	0	2	0.4	9670	PASS
174	95	50	120	107.6	2182656	PASS
175	174	4	9	6.1	132544	PASS
176	174	93	101	99.7	2176512	PASS
177	176	5	9	5.5	120232	PASS

BFB

Data File : C:\MSCHEM\1\DATA\12134A\B12134D.D
Acq Time : 13 Dec 124 2:44 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15CS2_M.M
Title : EPA T0-15



Peak Apex is scan: 755

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	10.3	171520	PASS
75	95	30	66	36.2	601408	PASS
95	95	100	100	100.0	1660416	PASS
96	95	5	9	5.6	93664	PASS
173	174	0	2	0.4	5899	PASS
174	95	50	120	82.7	1373696	PASS
175	174	4	9	6.5	88720	PASS
176	174	93	101	96.8	1329664	PASS
177	176	5	9	6.2	81776	PASS

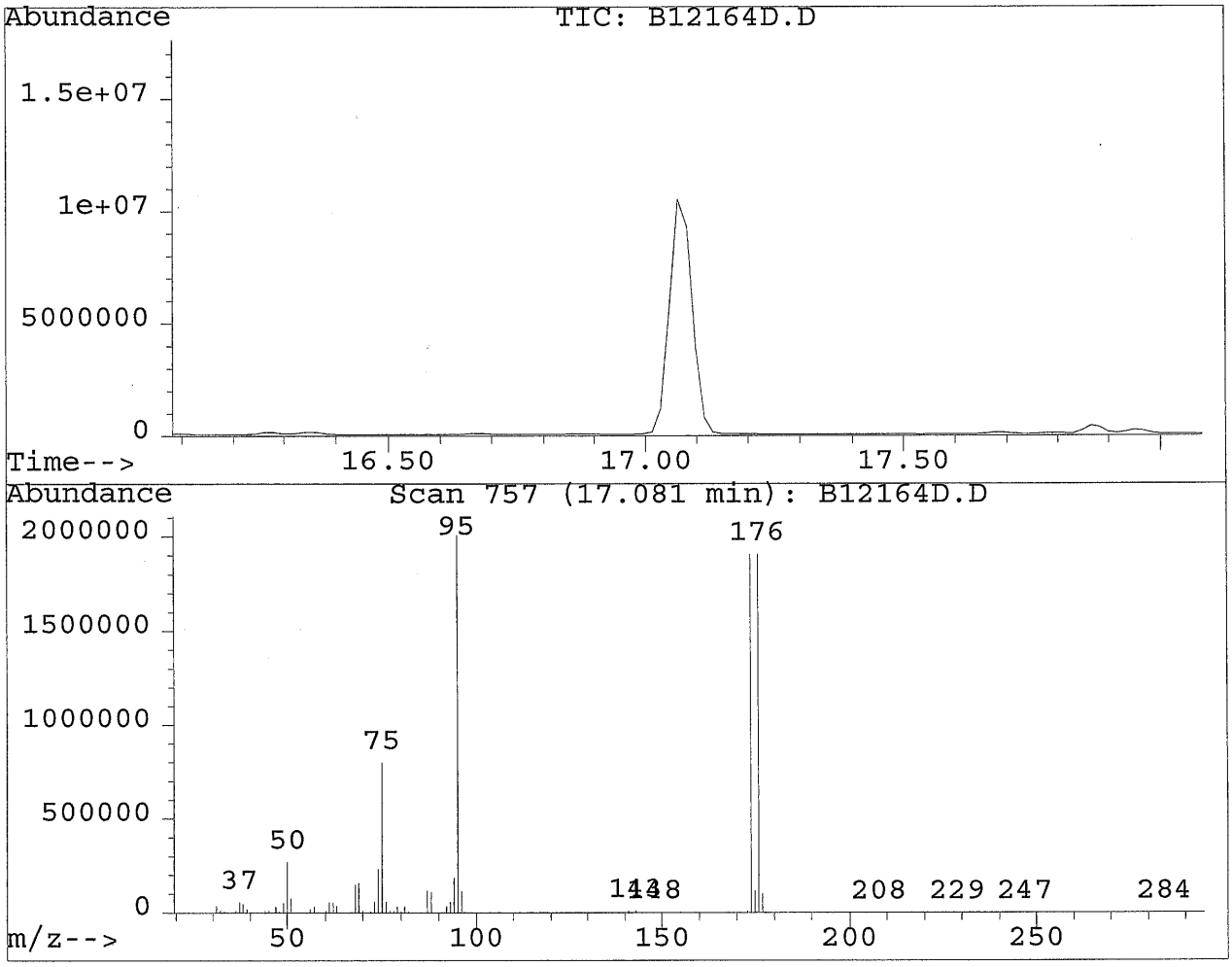
B12134D.D A15CS2_M.M Fri Dec 20 12:18:27 2024

BFB

Data File : C:\MSCHEM\1\DATA\12164A\B12164D.D
Acq Time : 16 Dec 124 3:07 pm
Sample : METHOD BLANK
Misc : 1000 ML

Operator: TR
Inst : 5970 - M
Multiplr: 1.00

Method : C:\MSCHEM\1\METHODS\A15FL_N.M
Title : EPA T0-15



Peak Apex is scan: 757

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.4	269696	PASS
75	95	30	66	39.8	799232	PASS
95	95	100	100	100.0	2007040	PASS
96	95	5	9	5.7	114192	PASS
173	174	0	2	0.5	8605	PASS
174	95	50	120	95.0	1906176	PASS
175	174	4	9	6.1	116064	PASS
176	174	93	101	100.0	1906176	PASS
177	176	5	9	5.4	103848	PASS

B12164D.D A15FL_N.M Thu Jan 09 15:00:56 2025

ENVIRONMENTAL
Analytical Service, Inc.

Data Deliverable Package

Prepared For:
C.E. Schmidt
19200 Live Oak Road
Red Bluff CA 96080

EAS SDG Number: **224435**
Project Number: 17807
Report Sent:
Sample Event Date: 1/20,11/21/2024

Client Project Manager: Chuck Schmidt
Project Name: Chiquita Canyon
Project Number: Data Package GC Premanent Gas

This is the Laboratory Data Deliverable Package for the samples in the indicated Sample Delivery Group (SDG).

INDEX TO DATA PACKAGE:

Section 1 **Project Summary**
- Laboratory Work Order
- Sample Data
- Laboratory Case Narrative and Chain of Custody

Section 2 **Quality Control**
- Project QC Criteria
- DAB QC Reports

Section 3 **Analytical Methods**
- Analytical Method Description(s)
- Analytical Reports

Section 4 **Data Package with Quant Report and Chromatogram**
- DAB Run Logs and Preparation Log
- Sample Data Package
- Blank Data Package
- Continuing Calibration Package
- Initial Calibration Package

Section 5 **Standard Certificates**

Section 6 **SDG Documentation, Notes, Correspondence**

173 Cross Street, San Luis Obispo, California, 93401 (805) 781-3585

ENVIRONMENTAL
Analytical Service, Inc.

Data Deliverable Package

Prepared For:
C.E. Schmidt
19200 Live Oak Road
Red Bluff CA 96080

Client Project Manager: Chuck Schmidt
Project Name: Chiquita Canyon
Project Number:

EAS SDG Number: **224435**
Project Number: 17807
Report Sent:
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173 Cross Street, San Luis Obispo, California, 93401 (805) 781-3585

Section 1 Project Summary

The following pages provide detailed information about the sample receipt, log-in, and sample preparation. The Laboratory Work Order provides a cross reference between the Client ID number and the EAS Lab Number as well as a list of the analytical tests preformed. The items included in this section are listed below.

Section Contents

Laboratory Work Order

Sample Data

Laboratory Case Narrative

Chain of Custody

Laboratory Work Order

SDG Number: 224435
Client: Chuck Schmidt
C.E. Schmidt

Project Number: 17807
Received: 11/21/2024

SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-401	224435 1	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-401	224435 1	ASTM D3416 Low Level Methane	11/19/2024
T-401	224435 1	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-401	224435 1	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-401	224435 1	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-402	224435 2	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-402	224435 2	ASTM D3416 Low Level Methane	11/19/2024
T-402	224435 2	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-402	224435 2	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-403	224435 3	ASTM D3416 Low Level Methane	11/19/2024
T-403	224435 3	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-403	224435 3	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-403	224435 3	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-403	224435 3	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-404	224435 4	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-404	224435 4	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-404	224435 4	ASTM D3416 Low Level Methane	11/19/2024
T-404	224435 4	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-404	224435 4	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-405	224435 5	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-405	224435 5	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-405	224435 5	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-405	224435 5	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-405	224435 5	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-406	224435 6	ASTM D3416 Low Level Methane	11/19/2024
T-406	224435 6	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-406	224435 6	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-406	224435 6	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-406	224435 6	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-407	224435 7	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-407	224435 7	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-407	224435 7	ASTM D3416 Low Level Methane	11/19/2024
T-407	224435 7	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-407	224435 7	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-408	224435 8	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-408	224435 8	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-408	224435 8	ASTM D3416 Low Level Methane	11/19/2024
T-408	224435 8	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-408	224435 8	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-409	224435 9	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-409	224435 9	ASTM D3416 Low Level Methane	11/19/2024
T-409	224435 9	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-409	224435 9	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-410	224435 10	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-410	224435 10	ASTM D3416 Low Level Methane	11/19/2024
T-410	224435 10	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-410	224435 10	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-411	224435 11	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-411	224435 11	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-411	224435 11	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-411	224435 11	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-411	224435 11	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-412	224435 12	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-412	224435 12	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-412	224435 12	ASTM D3416 Low Level Methane	11/19/2024
T-412	224435 12	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-413	224435 13	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-413	224435 13	ASTM D3416 Low Level Methane	11/19/2024
T-413	224435 13	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-413	224435 13	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-414	224435 14	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-414	224435 14	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-414	224435 14	ASTM D3416 Low Level Methane	11/19/2024
T-414	224435 14	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-414	224435 14	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-415	224435 15	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-415	224435 15	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-415	224435 15	ASTM D3416 Low Level Methane	11/19/2024
T-415	224435 15	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-416	224435 16	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-416	224435 16	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-416	224435 16	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-416	224435 16	ASTM D3416 Low Level Methane	11/19/2024
T-416	224435 16	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-417	224435 17	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-417	224435 17	ASTM D3416 Low Level Methane	11/19/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-417	224435 17	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-417	224435 17	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D1945 He Low and Hydrogen Confirmation	11/19/2024
T-418	224435 18	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/19/2024
T-418	224435 18	EPA TO-12 C2 to C12 CRYO	11/19/2024
T-418	224435 18	ASTM D1945 Permanent Gas Analysis	11/19/2024
T-418	224435 18	ASTM D3416 Low Level Methane	11/19/2024
T-501	224435 19	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-501	224435 19	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-501	224435 19	ASTM D3416 Low Level Methane	11/20/2024
T-501	224435 19	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-501	224435 19	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-502	224435 20	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-502	224435 20	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-502	224435 20	ASTM D3416 Low Level Methane	11/20/2024
T-502	224435 20	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-502	224435 20	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-503	224435 21	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-503	224435 21	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-503	224435 21	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-503	224435 21	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-504	224435 22	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-504	224435 22	ASTM D3416 Low Level Methane	11/20/2024
T-504	224435 22	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-504	224435 22	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-505	224435 23	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-505	224435 23	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-505	224435 23	ASTM D3416 Low Level Methane	11/20/2024
T-505	224435 23	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-506	224435 24	ASTM D3416 Low Level Methane	11/20/2024
T-506	224435 24	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-506	224435 24	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-506	224435 24	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-507	224435 25	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-507	224435 25	ASTM D3416 Low Level Methane	11/20/2024
T-507	224435 25	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-507	224435 25	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-508	224435 26	ASTM D3416 Low Level Methane	11/20/2024
T-508	224435 26	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-508	224435 26	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-508	224435 26	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-508	224435 26	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-509	224435 27	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-509	224435 27	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-509	224435 27	ASTM D3416 Low Level Methane	11/20/2024
T-509	224435 27	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-509	224435 27	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-510	224435 28	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-510	224435 28	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-510	224435 28	ASTM D3416 Low Level Methane	11/20/2024
T-510	224435 28	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-510	224435 28	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-511	224435 29	ASTM D3416 Low Level Methane	11/20/2024
T-511	224435 29	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-511	224435 29	ASTM D1945 Permanent Gas Analysis	11/20/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-511	224435 29	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-511	224435 29	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-512	224435 30	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-512	224435 30	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-512	224435 30	ASTM D3416 Low Level Methane	11/20/2024
T-512	224435 30	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-512	224435 30	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-513	224435 31	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-513	224435 31	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-513	224435 31	ASTM D3416 Low Level Methane	11/20/2024
T-513	224435 31	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-513	224435 31	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D1945 Permanent Gas Analysis	11/20/2024
T-514	224435 32	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/20/2024
T-514	224435 32	ASTM D3416 Low Level Methane	11/20/2024
T-514	224435 32	ASTM D1945 He Low and Hydrogen Confirmation	11/20/2024
T-514	224435 32	EPA TO-12 C2 to C12 CRYO	11/20/2024
T-601	224435 33	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-601	224435 33	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-601	224435 33	ASTM D3416 Low Level Methane	11/21/2024
T-601	224435 33	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-601	224435 33	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-602	224435 34	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-602	224435 34	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-602	224435 34	ASTM D3416 Low Level Methane	11/21/2024
T-602	224435 34	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-602	224435 34	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-603	224435 35	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-603	224435 35	ASTM D3416 Low Level Methane	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-603	224435 35	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-603	224435 35	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-604	224435 36	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-604	224435 36	ASTM D3416 Low Level Methane	11/21/2024
T-604	224435 36	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-604	224435 36	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-605	224435 37	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-605	224435 37	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-605	224435 37	ASTM D3416 Low Level Methane	11/21/2024
T-605	224435 37	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-605	224435 37	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-606	224435 38	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-606	224435 38	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-606	224435 38	ASTM D3416 Low Level Methane	11/21/2024
T-606	224435 38	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-607	224435 39	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-607	224435 39	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-607	224435 39	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-607	224435 39	ASTM D3416 Low Level Methane	11/21/2024
T-607	224435 39	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-608	224435 40	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-608	224435 40	ASTM D3416 Low Level Methane	11/21/2024
T-608	224435 40	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-608	224435 40	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-609	224435 41	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-609	224435 41	EPA TO-12 C2 to C12 CRYO	11/21/2024

Client Sample ID	EAS Lab No.	Analysis Requested	Date Sampled
T-609	224435 41	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-609	224435 41	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-610	224435 42	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-610	224435 42	ASTM D3416 Low Level Methane	11/21/2024
T-610	224435 42	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-610	224435 42	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-611	224435 43	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-611	224435 43	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-611	224435 43	ASTM D3416 Low Level Methane	11/21/2024
T-611	224435 43	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-611	224435 43	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-612	224435 44	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-612	224435 44	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-612	224435 44	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-612	224435 44	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-613	224435 45	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-613	224435 45	ASTM D3416 Low Level Methane	11/21/2024
T-613	224435 45	EPA TO-12 C2 to C12 CRYO	11/21/2024
T-613	224435 45	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	EPA TO-15 Full List 95 + Acrolein + TIC 10	11/21/2024
T-614	224435 46	ASTM D1945 He Low and Hydrogen Confirmation	11/21/2024
T-614	224435 46	ASTM D1945 Permanent Gas Analysis	11/21/2024
T-614	224435 46	ASTM D3416 Low Level Methane	11/21/2024
T-614	224435 46	EPA TO-12 C2 to C12 CRYO	11/21/2024

Project Sample Media

SDG Number: 224435

The following sample media was used for this Sample Delivery Group (SDG). The Sample Media column identifies the type of media. For canisters, the Sample Media Batch gives the canister number followed by the cleaning batch number, which is a unique identification. The initial pressure of the canister when it is received is recorded. If the canister is not pressurized, the final pressure will be the same as the initial pressure. If the canister is pessurized the final pressure will be recorded, and the canister dilution factor is calculated as the ratio of the final to initial pressure. The results are adjusted for the can dilution factor.

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	1	T-401	636		737	921	1.25
224435	2	T-402	703		739	922	1.25
224435	3	T-403	547		727	920	1.27
224435	4	T-404	749		740	920	1.24
224435	5	T-405	837		720	921	1.28
224435	6	T-406	626		735	924	1.26
224435	7	T-407	740		698	922	1.32
224435	8	T-408	805		699	917	1.31
224435	9	T-409	631		675	919	1.36
224435	10	T-410	714		678	921	1.36
224435	11	T-411	551		722	922	1.28
224435	12	T-412	881		704	930	1.32
224435	13	T-413	766		690	924	1.34
224435	14	T-414	725		699	923	1.32
224435	15	T-415	896		704	919	1.31
224435	16	T-416	659		651	922	1.42
224435	17	T-417	899		709	920	1.30
224435	18	T-418	522		739	927	1.25
224435	19	T-501	664		721	923	1.28
224435	20	T-502	716		690	920	1.33
224435	21	T-503	751		717	921	1.28
224435	22	T-504	644		719	920	1.28
224435	23	T-505	883		684	921	1.35
224435	24	T-506	784		679	921	1.36
224435	25	T-507	712		670	924	1.38

SDG	Lab ID	Client Sample No.	Sample Media	Batch	Pressure, torr Initial	Final	Can Factor
224435	26	T-508	549		669	920	1.38
224435	27	T-509	882		661	924	1.40
224435	28	T-510	860		649	921	1.42
224435	29	T-511	627		674	921	1.37
224435	30	T-512	417		676	916	1.36
224435	31	T-513	781		681	925	1.36
224435	32	T-514	506		669	926	1.38
224435	33	T-601	700		712	929	1.30
224435	34	T-602	673		714	913	1.28
224435	35	T-603	550		736	916	1.24
224435	36	T-604	738		691	922	1.33
224435	37	T-605	892		703	920	1.31
224435	38	T-606	608		666	922	1.38
224435	39	T-607	771		703	920	1.31
224435	40	T-608	531		685	925	1.35
224435	41	T-609	668		707	926	1.31
224435	42	T-610	730		674	921	1.37
224435	43	T-611	701		680	920	1.35
224435	44	T-612	514		666	927	1.39
224435	45	T-613	694		663	924	1.39
224435	46	T-614	880		668	925	1.38

Laboratory Case Narrative

EAS SDG Number: 224435 **Project Number:** 17807

Client: C.E. Schmidt

The Laboratory Case Narrative for the SDG is below. The Chain of Custody form(s) follow the Laboratory Case Narrative.

Sample Control Narrative

The samples were all received in good condition and with proper preservation.

Analytical Methods

The methods used for sample analysis are listed on the Analytyical Report header, and have been modified as described in the EAS Quality Manual..

Case Narrative

QC Narrative

All analyses met EAS method criteria as defined in the Quality Manual, except as noted in the report or QC reports with data qualifiers.

Subcontract Narrative

No sample analysis was subcontracted for this project

Laboratory Certification

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition(s) noted above. The Laboratory Report is property of EAS and its client. The entire report has been reviewed and approved.

Date Approved:

Steven D. Hoyt, Ph.D.
Environmental Analytical Service
Laboratory Director

Section 2 Quality Control

This section contains the QC Reports for each Daily Analytical Batch (DAB) which make up the Sample Delivery Group (SDG). It also contains either the EAS or Project QC criteria that was used for the DAB. The methods used for this project have been modified from the original method. The modifications include modifications to the QC for the method. This is either because the method did not specify certain aspects of the QC, the method was originally designed for a different matrix, or additional compounds were added to the target list of the method which required modified QC. The QC modifications used by EAS follows those used by other air testing laboratories.

The Daily Analytical Batch data was checked against the QC criteria for the method. Any deviations from the QC criteria are listed on the QC Reports for each DAB, which are summarized in this section and are given in more detail in Section 4 which has the Quantitation Reports and Calculations for the Samples, Method Blank, Lab Control Spikes, as well as the Initial Calibration and Continuing Calibration. This section contains the following:

Section Contents

Project QC Critera

DAB Quality Control Reports

- Method Blank
- Laboratory Control Spike
- Laboratory Control Duplicate
- Continuing Calibration

Quality Control Report

EAS SDG Number: 224435

Project Number: 17807

QC Narrative

Samples were anlayzed in a daily analytical batch (DAB) designated by a QC batch number, and were analyzed using EAS standard laboratory QC specified in the EAS Quality Manual which may be different then the referrenced agency method. Any deviations from the EAS QC criteria are flagged in the Laboratory Control Reports or in the sample Analytical Reports.

Standard Laboratory QC Report

Unless project specific QC was requested, this Section containing the standard laboratory QC (Level 2) supplied with the Analytical Reports. Each sample is analyzed in a Daily Analytical Batch (DAB) which includes the method blank, a laboratory control spike (LCS) and a laboratory control duplicate (LCD). A Daily Analytical Batch QC report is supplied for each method requested.

Method Blank

The method blank is a laboratory generated sample which assesses the degree to which laboratory operations cause a false positive. The target analytes in the analytical reports for a daily analytical batch are "B" flagged if their concentrations are present in the Method Blank above the RL, unless the result is greater then ten times the blank value..

Laboratory Control Spike

A laboratory control spike is a well characterized matrix similar to the sample which is spiked and run in duplicate with each Daily Analytical Batch. The laboratory control spike results are reported as a percent recovery. The QC Criteria for the control spike is listed in the Laboratory Control Report. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report. The control spike contains an abbreviated list of compounds in the method, and may contain compounds not on the target list for the specified report.

Laboratory Control Duplicate

The laboratory control duplicate is a duplicate analysis of the laboratory control spike, a standard, or a sample depending on the method. The results are reported as a relative percent difference (RPD). The criteria for the duplicate is in the Laboratory Control Report for the Daily Analytical Batch. Any results outside the control limits are flagged with a "Q" on the Laboratory Control Report.

METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: LABQC
Laboratory Number: B12094B

File Name: B12094B
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 120924-GCO

Date Sampled:
Time:
Date Analyzed: 12/09/24
Time: 12:47
Can Dilution Factor: 1.00

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.030	0.090	ND	300	900	ND	ND
7782-44-7	Oxygen	0.050	0.150	ND	500	1,500	ND	ND
74-82-8	Methane	0.010	0.030	ND	100	300	ND	ND
630-08-0	Carbon Monoxide	0.010	0.030	ND	100	300	ND	ND
124-38-9	Carbon Dioxide	0.010	0.030	ND	100	300	ND	ND

QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

ASTM D 1945 GC/TCD
Analytical Method: D1945

Date: 12/09/24
QC_Batch: 120924-GCO

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
7782-44-7	Oxygen	109		113		70	130	4	25	
7727-37-9	Nitrogen	114		126		70	130	11	25	
74-82-8	Methane	110		109		70	130	1	25	
630-08-0	Carbon Monoxide	109		110		70	130	1	25	
124-38-9	Carbon Dioxide	93		100		70	130	7	25	

Section 3 Analytical Methods

This section has information on the analytial methods and a copy of the analytical reports for the Sample Delivery Group (SDG) listed below. The reports are organized in order of the EAS Laboratory Number.

Section Contents

Analytical Method Description(s)

Analytical Reports

Analytical Reports

EAS SDG Number: 224435

Project Number: 17807

The following pages contain the certified Analytical Reports for the samples submitted in the Sample Delivery Group (SDG) and are in order of the EAS Lab ID number. All of the analytical methods used are modifications of the published methods. Procedural method modifications, QC modifications, QC Criteria modifications, target lists, definitions of detection limits, and flags are all explained in detail in the EAS Quality Manual. The Analytical Report has columns for the method detection limit (MDL), the reporting limit (RL), and the Amount. The Amount is the concentration of the compound in the sample. The report usually has the results reported with two commonly used units. The MDL, RL, and Amount are adjusted for the canister dilution factor and any dilution caused by sample matrix effects.

NELAC CERTIFICATION

EAS is accredited by the National Environmental Laboratory Accreditation (NELAC) with the Florida Department of Health, one of the NELAC certifying states. EAS is certified for the EPA TO-15, EPA TO-11 and EPA TO-4 methods. A list of accredited compounds is available on request.

DETECTION LIMITS

MDL: The MDL is lowest concentration that can be measured to be statistically above the noise level and is determined using the EPA 2016 method which uses the standard deviation of replicate measurements made over time. The method also incorporates systematic instrumentation blank levels. See Quality Manual for detailed explanation.

RL: The reporting limit (RL) is the lowest concentration that can be reliably reported for each compound that meets the QC Criteria for the method, background levels, or project specific considerations. The QC criteria level for the method blank is to be less then the RL See Quality Manual for more information.

DATA FLAGS

In the standard report, if a compound is not detected above the method detection limit, a "ND" is in the Amount column. The flag column is used for both the not detect flag and for any data flags.

B - This compound was detected in the batch method blank above the reporting limit and is greater then one tenth the amount in the sample.

E - This compound exceeds the calibration range for this sample volume.

J - The amount reported is estimated because it was below the RL and could be below the lowest calibration point, have higher uncertainty, or could be the result of system background

SIGNIFICANT FIGURES

Based on the uncertainty in the methods, the numbers on the Analytical Reports should be used with only two significant digits. Additional significant figures are reported for ease of use and to avoid rounding errors when used in further calculations.

UNITS

PPBV or PPMV: Parts-per-billion (or million) by volume is a mole (volume) ratio of the moles of analyte divided by the moles of air (gas). This is the primary unit used to report air or gas concentrations and is independent of temperature and pressure.

UG/M3 OR MG/M3: The reported result was calculated based on 1 atm pressure and a temperature of 25C. The conversion from PPBV is: UG/M3 = PPBV x MW/24.46 where 24.26 is the gas constant and MW is the Compounds Molecular Weight (sometimes called Formula Weight)

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 01

File Name: 2443501A
Description: T-401
Can/Tube#: 636
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 12/09/24 **Time:** 13:04
Can Dilution Factor: 1.25

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	375	1,125	ND	ND
7782-44-7	Oxygen	0.063	0.189	15.79	625	1,875	157,856	
630-08-0	Carbon Monoxide	0.013	0.039	ND	125	375	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	1.54	125	375	15,351	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 02

File Name: 2443502A
Description: T-402
Can/Tube#: 703
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 12/09/24 **Time:** 13:09
Can Dilution Factor: 1.25

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	375	1,125	ND	ND
7782-44-7	Oxygen	0.063	0.189	16.64	625	1,875	166,418	
630-08-0	Carbon Monoxide	0.013	0.039	ND	125	375	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.20	125	375	1,957	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 03

File Name: 2443503A
Description: T-403
Can/Tube#: 547
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 12/09/24 **Time:** 13:13
Can Dilution Factor: 1.27

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	381	1,143	ND	ND
7782-44-7	Oxygen	0.064	0.192	17.00	635	1,905	169,973	
630-08-0	Carbon Monoxide	0.013	0.039	ND	127	381	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	127	381	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 04

File Name: 2443504A
Description: T-404
Can/Tube#: 749
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:24
Date Analyzed: 12/09/24 **Time:** 13:18
Can Dilution Factor: 1.24

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.037	0.111	ND	372	1,116	ND	ND
7782-44-7	Oxygen	0.062	0.186	16.05	620	1,860	160,498	
630-08-0	Carbon Monoxide	0.012	0.036	ND	124	372	ND	ND
124-38-9	Carbon Dioxide	0.012	0.036	0.34	124	372	3,370	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 05

File Name: 2443505A
Description: T-405
Can/Tube#: 837
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:20
Date Analyzed: 12/09/24 **Time:** 13:22
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	17.09	640	1,920	170,901	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 06

File Name: 2443506A
Description: T-406
Can/Tube#: 626
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:06
Date Analyzed: 12/09/24 **Time:** 13:28
Can Dilution Factor: 1.26

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	378	1,134	ND	ND
7782-44-7	Oxygen	0.063	0.189	17.07	630	1,890	170,657	
630-08-0	Carbon Monoxide	0.013	0.039	ND	126	378	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	126	378	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 07

File Name: 2443507A
Description: T-407
Can/Tube#: 740
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 12/09/24 **Time:** 13:32
Can Dilution Factor: 1.32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	396	1,188	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.75	660	1,980	167,463	
630-08-0	Carbon Monoxide	0.013	0.039	ND	132	396	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	132	396	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Can/Tube#: 805
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 12/09/24 **Time:** 13:36
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.98	655	1,965	169,849	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	131	393	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Can/Tube#: 631
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/09/24 **Time:** 13:41
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	17.33	680	2,040	173,340	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Can/Tube#: 714
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/09/24 **Time:** 13:46
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	15.13	680	2,040	151,323	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	2.49	136	408	24,897	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 11

File Name: 2443511A
Description: T-411
Can/Tube#: 551
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 12/09/24 **Time:** 13:50
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.48	640	1,920	164,804	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.07	128	384	705	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Can/Tube#: 881
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 12/09/24 **Time:** 13:55
Can Dilution Factor: 1.32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	396	1,188	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.72	660	1,980	167,160	
630-08-0	Carbon Monoxide	0.013	0.039	ND	132	396	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.22	132	396	2,182	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 13

File Name: 2443513A
Description: T-413
Can/Tube#: 766
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/09/24 **Time:** 14:01
Can Dilution Factor: 1.34

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	402	1,206	ND	ND
7782-44-7	Oxygen	0.067	0.201	16.74	670	2,010	167,402	
630-08-0	Carbon Monoxide	0.013	0.039	ND	134	402	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	134	402	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Can/Tube#: 725
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/09/24 **Time:** 14:06
Can Dilution Factor: 1.32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	396	1,188	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.14	660	1,980	161,411	
630-08-0	Carbon Monoxide	0.013	0.039	ND	132	396	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	132	396	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 15

File Name: 2443515A
Description: T-415
Can/Tube#: 896
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 12/09/24 **Time:** 14:10
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	15.99	655	1,965	159,853	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	131	393	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Can/Tube#: 659
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/09/24 **Time:** 14:14
Can Dilution Factor: 1.42

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.043	0.129	ND	426	1,278	ND	ND
7782-44-7	Oxygen	0.071	0.213	16.75	710	2,130	167,492	
630-08-0	Carbon Monoxide	0.014	0.042	ND	142	426	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	142	426	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 17

File Name: 2443517A
Description: T-417
Can/Tube#: 659
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/09/24 **Time:** 14:19
Can Dilution Factor: 1.30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	390	1,170	ND	ND
7782-44-7	Oxygen	0.065	0.195	16.67	650	1,950	166,680	
630-08-0	Carbon Monoxide	0.013	0.039	ND	130	390	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	130	390	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Can/Tube#: 522
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/09/24 **Time:** 14:23
Can Dilution Factor: 1.25

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	375	1,125	ND	ND
7782-44-7	Oxygen	0.063	0.189	15.70	625	1,875	157,027	
630-08-0	Carbon Monoxide	0.013	0.039	ND	125	375	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	125	375	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 19

File Name: 2443519A
Description: T-501
Can/Tube#: 664
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 12/09/24 **Time:** 14:28
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.48	640	1,920	164,771	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 20

File Name: 2443520A
Description: T-502
Can/Tube#: 716
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 12/09/24 **Time:** 14:32
Can Dilution Factor: 1.33

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	399	1,197	ND	ND
7782-44-7	Oxygen	0.067	0.201	15.99	665	1,995	159,859	
630-08-0	Carbon Monoxide	0.013	0.039	ND	133	399	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	133	399	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 21

File Name: 2443521A
Description: T-503
Can/Tube#: 751
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 12/09/24 **Time:** 14:38
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	15.92	640	1,920	159,207	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Can/Tube#: 644
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 12/09/24 **Time:** 14:43
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.05	640	1,920	160,523	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 23

File Name: 2443523A
Description: T-505
Can/Tube#: 883
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/09/24 **Time:** 14:47
Can Dilution Factor: 1.35

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	405	1,215	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.49	675	2,025	164,945	
630-08-0	Carbon Monoxide	0.014	0.042	ND	135	405	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	135	405	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 24

File Name: 2443524A
Description: T-506
Can/Tube#: 784
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:11
Date Analyzed: 12/09/24 **Time:** 14:51
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	0.55	408	1,224	5,467	
7782-44-7	Oxygen	0.068	0.204	16.12	680	2,040	161,187	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 25

File Name: 2443525A
Description: T-507
Can/Tube#: 712
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/09/24 **Time:** 14:55
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.06	690	2,070	160,571	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Can/Tube#: 549
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/09/24 **Time:** 15:00
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	15.94	690	2,070	159,373	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 27

File Name: 2443527A
Description: T-509
Can/Tube#: 882
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/09/24 **Time:** 15:04
Can Dilution Factor: 1.40

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.042	0.126	ND	420	1,260	ND	ND
7782-44-7	Oxygen	0.070	0.210	16.13	700	2,100	161,282	
630-08-0	Carbon Monoxide	0.014	0.042	ND	140	420	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	140	420	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 28

File Name: 2443528A
Description: T-510
Can/Tube#: 860
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:18
Date Analyzed: 12/09/24 **Time:** 15:09
Can Dilution Factor: 1.42

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.043	0.129	ND	426	1,278	ND	ND
7782-44-7	Oxygen	0.071	0.213	15.95	710	2,130	159,515	
630-08-0	Carbon Monoxide	0.014	0.042	ND	142	426	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	142	426	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 29

File Name: 2443529A
Description: T-511
Can/Tube#: 627
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/09/24 **Time:** 15:23
Can Dilution Factor: 1.37

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	411	1,233	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.08	685	2,055	160,798	
630-08-0	Carbon Monoxide	0.014	0.042	ND	137	411	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	137	411	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 30

File Name: 2443530A
Description: T-512
Can/Tube#: 417
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/09/24 **Time:** 15:27
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.29	680	2,040	162,934	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 31

File Name: 2443531A
Description: T-513
Can/Tube#: 781
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/09/24 **Time:** 15:34
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.13	680	2,040	161,335	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Can/Tube#: 506
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/09/24 **Time:** 15:39
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.05	690	2,070	160,463	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Can/Tube#: 700
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 15:43
Can Dilution Factor: 1.30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	390	1,170	ND	ND
7782-44-7	Oxygen	0.065	0.195	16.66	650	1,950	166,612	
630-08-0	Carbon Monoxide	0.013	0.039	ND	130	390	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.61	130	390	6,140	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 34

File Name: 2443534A
Description: T-602
Can/Tube#: 673
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 8:29
Date Analyzed: 12/09/24 **Time:** 15:47
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.16	640	1,920	161,578	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.35	128	384	3,521	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Can/Tube#: 550
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/09/24 **Time:** 15:51
Can Dilution Factor: 1.24

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.037	0.111	ND	372	1,116	ND	ND
7782-44-7	Oxygen	0.062	0.186	16.00	620	1,860	160,009	
630-08-0	Carbon Monoxide	0.012	0.036	ND	124	372	ND	ND
124-38-9	Carbon Dioxide	0.012	0.036	0.25	124	372	2,539	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 36

File Name: 2443536A
Description: T-604
Can/Tube#: 738
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 15:56
Can Dilution Factor: 1.33

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	399	1,197	ND	ND
7782-44-7	Oxygen	0.067	0.201	16.46	665	1,995	164,647	
630-08-0	Carbon Monoxide	0.013	0.039	ND	133	399	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.10	133	399	981	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 37

File Name: 2443537A
Description: T-605
Can/Tube#: 892
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 9:41
Date Analyzed: 12/09/24 **Time:** 16:00
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	15.98	655	1,965	159,813	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	3.16	131	393	31,595	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 38

File Name: 2443538A
Description: T-606
Can/Tube#: 608
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 9:58
Date Analyzed: 12/09/24 **Time:** 16:04
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.81	690	2,070	168,113	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	0.08	138	414	840	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 39

File Name: 2443539A
Description: T-607
Can/Tube#: 771
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 9:52
Date Analyzed: 12/09/24 **Time:** 16:08
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.86	655	1,965	168,644	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.18	131	393	1,802	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 40

File Name: 2443540A
Description: T-608
Can/Tube#: 531
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 9:47
Date Analyzed: 12/09/24 **Time:** 16:12
Can Dilution Factor: 1.35

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	405	1,215	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.13	675	2,025	161,285	
630-08-0	Carbon Monoxide	0.014	0.042	ND	135	405	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	0.20	135	405	1,967	

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 41

File Name: 2443541A
Description: T-609
Can/Tube#: 668
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:38
Date Analyzed: 12/09/24 **Time:** 16:16
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.19	655	1,965	161,921	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	131	393	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 42

File Name: 2443542A
Description: T-610
Can/Tube#: 730
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/09/24 **Time:** 16:20
Can Dilution Factor: 1.37

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	411	1,233	ND	ND
7782-44-7	Oxygen	0.069	0.207	17.13	685	2,055	171,263	
630-08-0	Carbon Monoxide	0.014	0.042	ND	137	411	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	137	411	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 43

File Name: 2443543A
Description: T-611
Can/Tube#: 701
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:28
Date Analyzed: 12/09/24 **Time:** 16:24
Can Dilution Factor: 1.35

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	405	1,215	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.07	675	2,025	160,711	
630-08-0	Carbon Monoxide	0.014	0.042	ND	135	405	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	135	405	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 44

File Name: 2443544A
Description: T-612
Can/Tube#: 514
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:20
Date Analyzed: 12/09/24 **Time:** 16:29
Can Dilution Factor: 1.39

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.042	0.126	ND	417	1,251	ND	ND
7782-44-7	Oxygen	0.070	0.210	16.23	695	2,085	162,277	
630-08-0	Carbon Monoxide	0.014	0.042	ND	139	417	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	139	417	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 45

File Name: 2443545A
Description: T-613
Can/Tube#: 694
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/09/24 **Time:** 16:33
Can Dilution Factor: 1.39

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.042	0.126	ND	417	1,251	ND	ND
7782-44-7	Oxygen	0.070	0.210	16.24	695	2,085	162,367	
630-08-0	Carbon Monoxide	0.014	0.042	ND	139	417	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	139	417	ND	ND

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 46

File Name: 2443546A
Description: T-614
Can/Tube#: 880
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/09/24 **Time:** 16:37
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	15.84	690	2,070	158,368	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

CE Schmidt, Ph.D., Environmental Consultant

22435 17807

Chain of Custody Record TO- Day 1

Form Serial Number: CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name: *SCS* / *Chiquita Canyon Landfill*	**Dr. Charles E. Schmidt**
Project Manager: *Pat Sullivan*	19200 Live Oak Road, Red Bluff, CA 96080
Requested Completion Date	530-529-4256 Cell: 530-200-2473
	E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: *3900 Kilroy Airport Way, Suite 100* / *Long Beach, CA 90806 562-743-7895*

Laboratory Name: *EAS*

Laboratory Address: *173 Cross Street* / *San Luis Obispo, CA 93401*

Laboratory Phone: *805-781-3585*

Laboratory Contact: *Dr. Steve Hoyt* / *stevehoyt@easlab.com*

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Can	Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)	Can Pressure In (inches Hg)	Can Pressure Out (inches)	Remarks
	11/19/2024	851		x	T - 401	636	1		x		x	x	x	x	-29	0	01
	11/19/2024	835		x	T - 402	703	1		x		x	x	x	x	-29	0	02
	11/19/2024	812		x	T - 403	547	1		x		x	x	x	x	-29	0	03
	11/19/2024	824		x	T - 404	749	1		x		x	x	x	x	-29	0	04
	11/19/2024	1020		x	T - 405	837	1		x		x	x	x	x	-29	0	05
	11/19/2024	1006		x	T - 406	926	1		x		x	x	x	x	-29	0	06
	11/19/2024	1005		x	T - 407	760	1		x		x	x	x	x	-29	0	07
	11/19/2024	1029		x	T - 408	808	1		x		x	x	x	x	-29	0	08
	11/19/2024	1145		x	T - 409	631	1		x		x	x	x	x	-29	0	09
	11/19/2024	1159		x	T - 410	714	1		x		x	x	x	x	-29	0	10
	11/19/2024	1151		x	T - 411	551	1		x		x	x	x	x	-29	0	11
	11/19/2024	1206		x	T - 412	829	1		x		x	x	x	x	-29	0	12
	11/19/2024	1337		x	T - 413	706	1		x		x	x	x	x	-29		13
	11/19/2024	1324		x	T - 414	702	1		x		x	x	x	x	-29		14
	11/19/2024	1338		x	T - 415	816	1		x		x	x	x	x	-29		15
	11/19/2024	1324		x	T - 416	654	1		x		x	x	x	x	-29		16
	11/19/2024	1329		x	T - 417	841	1		x		x	x	x	x	-29		17
	11/19/2024			x	T - 418	552	1		x		x	x	x	x	-29		18

67 of 503

Sampler: CE Schmidt	Date/Time: 11/21/24 1204	Relinquished by: CE Schmidt	Date/Time: 11/21/24 1204
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: [illegible] 11/21/2024	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:5[illegible]	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D1

3713

CE Schmidt, Ph.., Environmental Consultant

224435 17807

TO: Day 2

Chain of Custody Record

Form Serial Number CES F1-02106	For Information Regarding These Samples Please Contact:
Client Name SCS *Chiquita Canyon Landfill*	**Dr. Charles E. Schmidt** 19200 Live Oak Road, Red Bluff, CA 96080 530-529-4256 Cell: 530-200-2473 E-Mail: SCHMIDTCE@aol.com
Project Manager *Pat Sullivan*	
Requested Completion Date	

Client Address and Phone Number
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806 562-743-7895

Laboratory Name
EAS

Laboratory Address
173 Cross Street
San Luis Obispo, CA 93401

Laboratory Phone
805-781-3585

Laboratory Contact
Dr. Steve Hoyt
stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container: Vial	Sample Container: Can	Sample Container: Tube	Analysis Requested: TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (inches Hg)	Can Pressure Out (inches	Remarks
	11/20/2024	0830		x	T - 501	1064	1		x		x	x	x	x		-29	0	19
	11/20/2024	0837		x	T - 502	716	1		x		x	x	x	x		-29	0	20
	11/20/2024	0852		x	T - 503	751	1		x		x	x	x	x		-29	0	21
	11/20/2024	0911		x	T - 504	643	1		x		x	x	x	x		-29	0	22
	11/20/2024	1055		x	T - 505	883	1		x		x	x	x	x		-29	0	23
	11/20/2024	1041		x	T - 506	764	1		x		x	x	x	x		-29	0	24
	11/20/2024	1056		x	T - 507	711	1		x		x	x	x	x		-29	0	25
	11/20/2024	1040		x	T - 508	539	1		x		x	x	x	x		-29	0	26
	11/20/2024	1220		x	T - 509	882	1		x		x	x	x	x		-29	0	27
	11/20/2024	1218		x	T - 510	860	1		x		x	x	x	x		-29	0	28
	11/20/2024	123		x	T - 511	627	1		x		x	x	x	x		-29	0	29
	11/20/2024	124		x	T - 512	747	1		x		x	x	x	x		-29		30
	11/20/2024	1228		x	T - 513	821	1		x		x	x	x	x		-27		31
	11/20/2024	1245		x	T - 514	506	1		x		x	x	x	x		-29	0	32

68 of 503

Sampler: CESCHMIDT	Date/Time: 11/21/24 1204	Relinquished by: CESCHMIDT	Date/Time: 11/21/24 1204
Recieved by: EAS	Date/Time	Relinquished by	Date/Time
Recieved by	Date/Time	Relinquished by	Date/Time
Recieved by Laboratory: [illegible] 11/21/2024	Date/Time	Sample Shipped Via: UPS FEDEX BUS Other	
Remarks: 13:30	**Do Not Pressurize with Helium**		

HAZWRAP/NEESA Y N
QC Level 1 2 3
COC
Ana Req
Cust Seal
Sample Condition

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D2

3714

CE Schmidt, Ph.., Environmental Consultant

Chain of Custody Record

224435

17807

TO- Day 3

Form Serial Number: CES F1-02106

Client Name: SCS

Chiquita Canyon Landfill

Project Manager: Pat Sullivan

Requested Completion Date:

For Information Regarding These Samples Please Contact:

Dr. Charles E. Schmidt
19200 Live Oak Road, Red Bluff, CA 96080
530-529-4256 Cell: 530-200-2473
E-Mail: SCHMIDTCE@aol.com

Client Address and Phone Number: 3900 Kilroy Airport Way, Suite 100, Long Beach, CA 90806 562-743-7895

Laboratory Name: EAS

Laboratory Address: 173 Cross Street, San Luis Obispo, CA 93401

Laboratory Phone: 805-781-3585

Laboratory Contact: Dr. Steve Hoyt, stevehoyt@easlab.com

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	# OF CONTAINERS	Sample Container Vial	Sample Container Can	Sample Container Tube	TO-12 FID (TNMHC)	TO-14 FID (See back)	TO-15 (List on back)	Fixed gases (List on back)		Can Pressure In (Inches Hg)	Can Pressure Out (Inches	Remarks
	11/21/2024	810		x	T - 601	700	1		x		x	x	x	x		-29	0	33
	11/21/2024	829		x	T - 602	673	1		x		x	x	x	x		-29	0	34
	11/21/2024	831		x	T - 603	550	1		x		x	x	x	x		-29	0	35
	11/21/2024	818		x	T - 604	738	1		x		x	x	x	x		-29	0	36
	11/21/2024	941		x	T - 605	892	1		x		x	x	x	x		-29	0	37
	11/21/2024	958		x	T - 606	608	1		x		x	x	x	x		-29	0	38
	11/21/2024	952		x	T - 607	771	1		x		x	x	x	x		-29	0	39
	11/21/2024	947		x	T - 608	531	1		x		x	x	x	x		-29	0	40
	11/21/2024	1138		x	T - 609	668	1		x		x	x	x	x		-29		41
	11/21/2024	1111		x	T - 610	730	1		x		x	x	x	x		-29		42
1128	11/21/2024	1133		x	T - 611	701	1		x		x	x	x	x		-29		43
	11/21/2024	1120		x	T - 612	514	1		x		x	x	x	x		-29		44
	11/21/2024	1125		x	T - 613	614	1		x		x	x	x	x		-29		45
	11/21/2024	1136		x	T - 614	880	1		x		x	x	x	x		-29		46

Sampler: CE Schmidt — Date/Time: 11/21/24 1204

Received by: EAS — Date/Time:

Received by: — Date/Time:

Received by Laboratory: [signature] 11/21/2024 — Date/Time:

Remarks: 13:30

Relinquished by: CE Schmidt — Date/Time: 11/21/24 1204

Relinquished by: — Date/Time:

Relinquished by: — Date/Time:

Sample Shipped Via: UPS FEDEX BUS Other

HAZWRAP/NEESA Y N

QC Level 1 2 3

COC

Ana Req

Cust Seal

Sample Condition

Do Not Pressurize with Helium

File: Chiquita Cyn Forms TO-15.xlsb Form: COC TO-15 D3

Section 4 Data Package

This section contains the Data Packages for the samples, blanks, and calibration. Each package has the analytical report, quantitation report, calculation sheet, instrument quantation report, and chromatograms.

Items provided in Data Package:

DAB Run Logs and Preparation Logs

Sample Packages

Blank Package for each Daily Analytical Batch

Quality Control Reports, LCS,LCD for each Daily Analytical Batch

Continuing Calibration Package for Each Daily Analytical Batch

Initial Calibration Data

Tune Data (if required)

DAB Run Logs and Preparation Logs

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
This section contains the DAB Log Sheets and Preparation Logs.

Index

DAB Run Logs
Preparation Logs
Other Log Sheets

DAILY ANALYTICAL BATCH FORM

DAB 120924 - GCO

ANALYST REPORT

Method ASTM1946 Chemist

	NA	Passed	Out
Instrument Tune	☑	☐	☐
GC/MS BFBTune	☑	☐	☐
Continuing Calibration	☐	☑	☐
Instrument Blank	☐	☑	☐
LCS	☐	☑	☐
LCD	☐	☑	☐

PASSING DAB NOTES:

OUT Narrative:

Analyst Certification

Out of Limits QC Approval

DATA PROCESSING

SDG 274435

Lab ID 1-46

	Processed
Continuing Calibration	☑
Method Blank	☑
Samples	☑
LCS/LCD	☑

Data Processing Chemist Certification

☑ Ready for Review

DATA REVIEW

Data Review Chemist Certification

☐ Reviewed

Daily Analytical Batch

DAB: 120924-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120924-GCO	01	GCO	STD			C12094A		ST63400		0.5	DA		ASTM194			
120924-GCO	02	GCO	STD			C12094B		ST63400		0.5	DA		ASTM194			
120924-GCO	03	GCO	STD			C12094C		ST63400		0.5	DA		ASTM194			
120924-GCO	04	GCO	SPK			QC12094A		ST61561		0.5	DA		ASTM194			
120924-GCO	05	GCO	SPK			QC12094B		ST61561		0.5	DA		ASTM194			
120924-GCO	06	GCO	SPK			QC12094C		ST61561		0.5	DA		ASTM194			
120924-GCO	07	GCO	BLK			B12094A		METHOD BLANK		0.5	DA		ASTM194			
120924-GCO	08	GCO	BLK			B12094B		METHOD BLANK		0.5	DA		ASTM194			
120924-GCO	09	GCO	SA	224435	01	2443501A	636	T-401	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	10	GCO	SA	224435	02	2443502A	703	T-402	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	11	GCO	SA	224435	03	2443503A	547	T-403	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	12	GCO	SA	224435	04	2443504A	749	T-404	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	13	GCO	SA	224435	05	2443505A	837	T-405	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	13	GCO	SA	224435	06	2443506A	626	T-406	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	14	GCO	SA	224435	07	2443507A	740	T-407	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	15	GCO	SA	224435	08	2443508A	805	T-408	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	16	GCO	SA	224435	09	2443509A	631	T-409	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	17	GCO	SA	224435	10	2443510A	714	T-410	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	18	GCO	SA	224435	11	2443511A	551	T-411	SCHMIDT	0.5	DA		ASTM194			

REVIEWED

Daily Analytical Batch

DAB: 120924-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120924-GCO	19	GCO	SA	224435	12	2443512A	881	T-412	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	20	GCO	SA	224435	13	2443513A	766	T-413	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	21	GCO	SA	224435	14	2443514A	725	T-413	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	22	GCO	SA	224435	15	2443515A	896	T-415	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	23	GCO	SA	224435	16	2443516A	659	T-416	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	24	GCO	SA	224435	17	2443517A	899	T-417	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	25	GCO	SA	224435	18	2443518A	552	T-418	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	26	GCO	SA	224435	19	2443519A	664	T-501	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	27	GCO	SA	224435	20	2443520A	716	T-502	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	28	GCO	SA	224435	21	2443521A	751	T-503	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	29	GCO	SA	224435	22	2443522A	644	T-504	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	30	GCO	SA	224435	23	2443523A	883	T-505	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	31	GCO	SA	224435	24	2443524A	784	T-506	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	32	GCO	SA	224435	25	2443525A	712	T-507	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	33	GCO	SA	224435	26	2443526A	548	T-508	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	34	GCO	SA	224435	27	2443527A	882	T-509	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	35	GCO	SA	224435	28	2443528A	860	T-510	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	36	GCO	SA	224435	29	2443529A	627	T-511	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	37	GCO	SA	224435	30	2443530A	417	T-512	SCHMIDT	0.5	DA		ASTM194			

REVIEWED

Daily Analytical Batch

DAB: 120924-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit	Proc:
120924-GCO	38	GCO	SA	224435	31	2443531A	781	T-513	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	39	GCO	SA	224435	32	2443532A	506	T-514	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	40	GCO	SA	224435	33	2443533A	700	T-601	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	41	GCO	SA	224435	34	2443534A	673	T-602	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	42	GCO	SA	224435	35	2443535A	550	T-603	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	43	GCO	SA	224435	36	2443536A	738	T-604	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	44	GCO	SA	224435	37	2443537A	892	T-605	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	45	GCO	SA	224435	38	2443538A	608	T-606	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	46	GCO	SA	224435	39	2443539A	771	T-607	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	47	GCO	SA	224435	40	2443540A	531	T-608	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	48	GCO	SA	224435	41	2443541A	668	T-609	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	49	GCO	SA	224435	42	2443542A	730	T-610	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	50	GCO	SA	224435	43	2443543A	701	T-611	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	51	GCO	SA	224435	44	2443544A	514	T-612	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	52	GCO	SA	224435	45	2443545A	694	T-613	SCHMIDT	0.5	DA		ASTM194			
120924-GCO	53	GCO	SA	224435	46	2443546A	880	T-614	SCHMIDT	0.5	DA		ASTM194			

REVIEWED

Sample Data Packages

SDG Number 224435

Lab Id Number 1

Client ID T-401

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 1

Client: C.E. Schmidt
Client ID: T-401
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 636
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:51
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

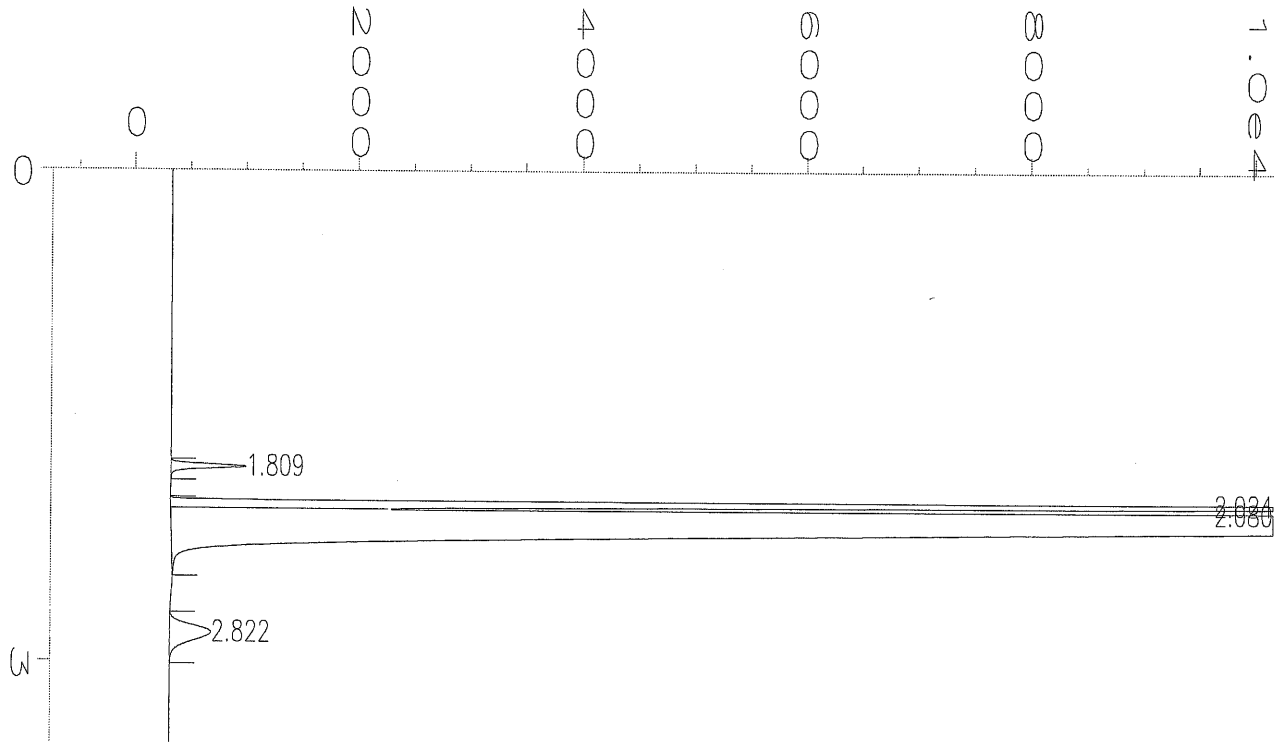
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443501MA.D
Operator : DA
Instrument : GCL
Sample Name : T-401
Run Time Bar Code:
Acquired on : 09 Dec 24 01:04 PM
Report Created on: 09 Dec 24 01:07 PM
Sample Info : SCHMIDT

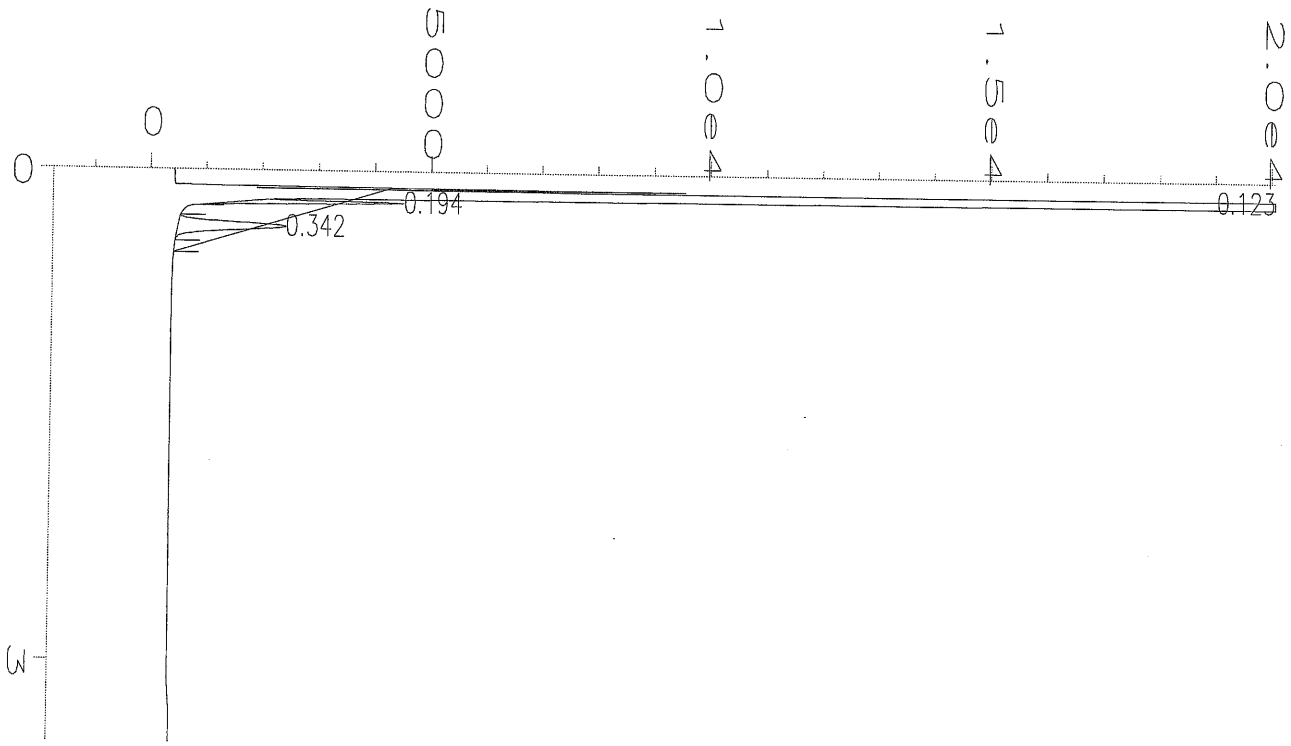
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443501MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.809	1226	672	BB	0.028	0.6009
2	2.024	29112	17065	BV	0.028	14.2690
3	2.080	171272	29161	VB	0.081	83.9467
4	2.822	2414	367	BB	0.098	1.1834

Total area = 204025

==========



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443501PA.D
Operator : DA
Instrument : GCL
Sample Name : T-401
Run Time Bar Code:
Acquired on : 09 Dec 24 01:04 PM
Report Created on: 09 Dec 24 01:07 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443501PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	276731	248129	BB S	0.017	96.7142
2	0.194	3205	2901	BB T	0.049	1.1202
3	0.342	6196	1933	BB T	0.050	2.1656

Total area = 286133

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443501A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**01**		SF:	**2**	
Description:	**T-401**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **8:51**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:04**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**636**				
Can Factor	**1.25**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29112**
7727-37-9	Nitrogen	03	2.07	**171272**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**6196**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

File Name:	2443501A
QCBatch	120924-GCO
Can Factor	1.25
Air Volume:	0.50 ml
Base Volume	0.50 ml
Dilution Factor	1.25
Gas Constant:	24.4
Decimal Places:	2

Detect Flag: ND
Report Normalized: **No**

Temp	**25**	C
Atm P	**760.0**	torr
Gas Constant	24.4	
RL Factor	**3**	

SDG: 224435
Laboratory Number: 01

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.113	0.038	0.114	375	1,125	U
Oxygen	32.00	15.79	15.79	15.79	157,856	15.79	15.79	500	0.063	0.188	0.063	0.189	625	1,875	
Nitrogen	28.01	82.68	82.68	82.68	826,793	82.68	82.68	1000	0.125	0.375	0.125	0.375	1,250	3,750	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	125	375	U
Carbon Dioxide	44.01	1.54	1.54	1.54	15,351	1.54	1.54	100	0.013	0.038	0.013	0.039	125	375	
Sum - N2		17.32	100.00												
Sum		100.0													
Total Nitrogen		85.95													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	Y	Y
=	Y	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 01

File Name: 2443501A
Description: T-401
Can/Tube#: 636
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:51
Date Analyzed: 12/09/24 **Time:** 13:04
Can Dilution Factor: 1.25

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	375	1,125	ND	ND
7782-44-7	Oxygen	0.063	0.189	15.79	625	1,875	157,856	
630-08-0	Carbon Monoxide	0.013	0.039	ND	125	375	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	1.54	125	375	15,351	

Sample Data Packages

SDG Number 224435

Lab Id Number 2

Client ID T-402

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 2

Client: C.E. Schmidt
Client ID: T-402
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 703
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:35
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

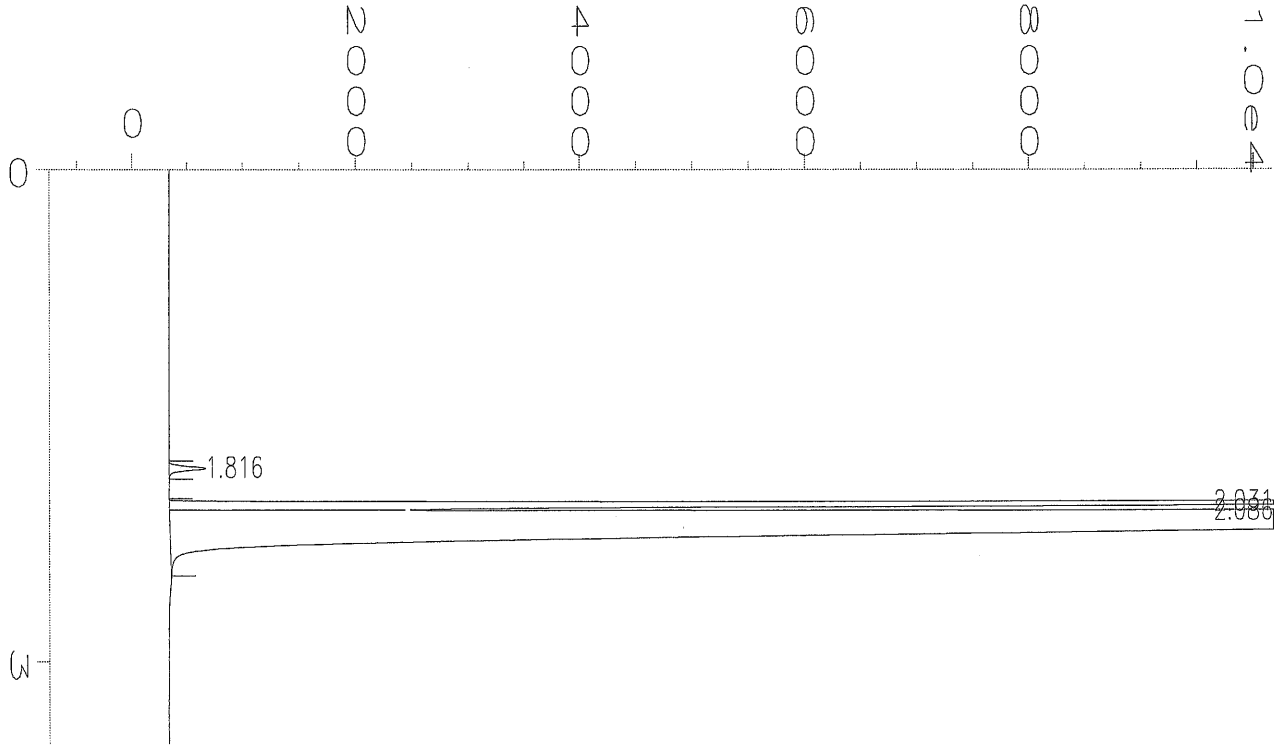
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443502MA.D
Operator : DA
Instrument : GCL
Sample Name : T-402
Run Time Bar Code:
Acquired on : 09 Dec 24 01:09 PM
Report Created on: 09 Dec 24 01:13 PM
Sample Info : SCHMIDT

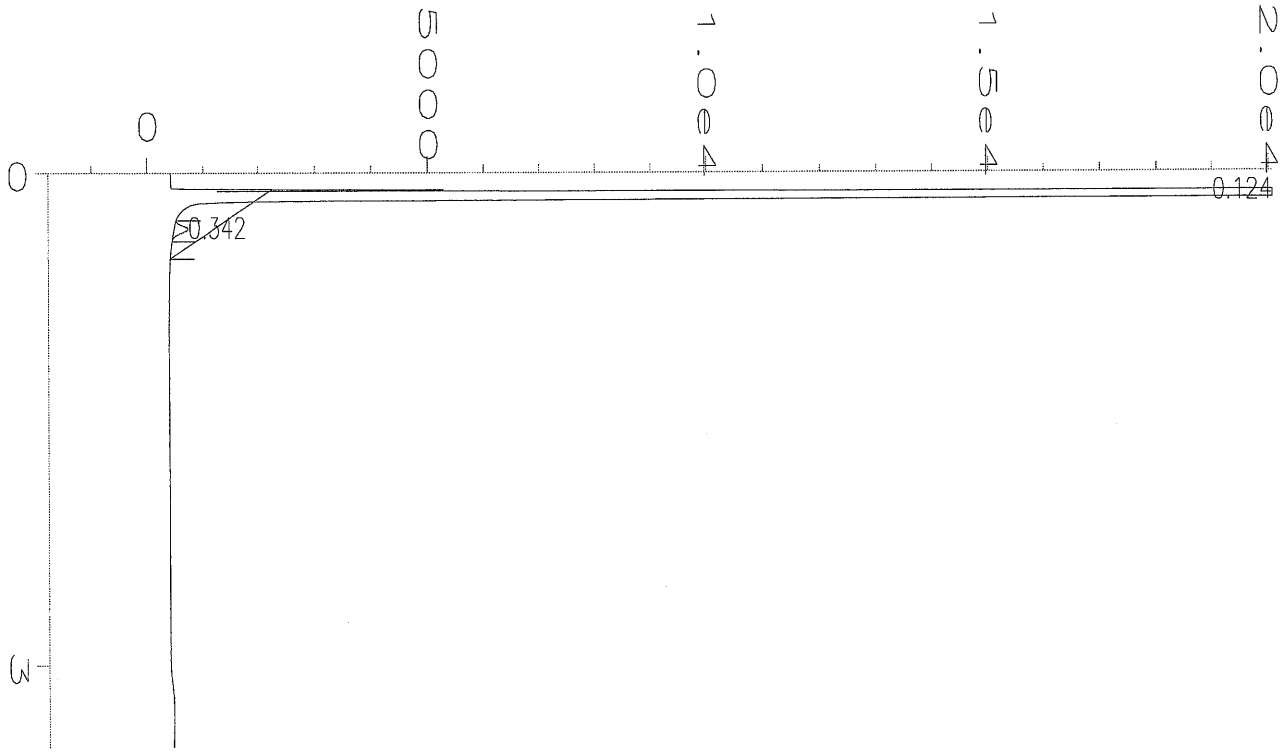
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443502MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.816	599	327	BB	0.028	0.2863
2	2.031	30691	17797	BV	0.029	14.6737
3	2.086	177865	29870	VB	0.081	85.0399

Total area = 209155

==========



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443502PA.D
Operator : DA
Instrument : GCL
Sample Name : T-402
Run Time Bar Code:
Acquired on : 09 Dec 24 01:09 PM
Report Created on: 09 Dec 24 01:13 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443502PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	303652	255537	BB S	0.018	99.7405
2	0.342	790	249	BB T	0.050	0.2595

Total area = 304442

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443502A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**02**		SF:	**2**	
Description:	**T-402**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **8:35**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:09**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**703**				
Can Factor	**1.25**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**30691**
7727-37-9	Nitrogen	03	2.07	**177865**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**790**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 02

File Name:	2443502A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.25				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.25		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.113	0.038	0.114	375	1,125	U
Oxygen	32.00	16.64	16.64	16.64	166,418	16.64	16.64	500	0.063	0.188	0.063	0.189	625	1,875	
Nitrogen	28.01	83.16	83.16	83.16	831,625	83.16	83.16	1000	0.125	0.375	0.125	0.375	1,250	3,750	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	125	375	U
Carbon Dioxide	44.01	0.20	0.20	0.20	1,957	0.20	0.20	100	0.013	0.038	0.013	0.039	125	375	
Sum - N2		16.84	100.00												
Sum		100.0													
Total Nitrogen		89.26													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 02

File Name: 2443502A
Description: T-402
Can/Tube#: 703
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:35
Date Analyzed: 12/09/24 **Time:** 13:09
Can Dilution Factor: 1.25

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	0.61	375	1,125	6,097	
7782-44-7	Oxygen	0.063	0.189	16.64	625	1,875	166,418	
630-08-0	Carbon Monoxide	0.013	0.039	ND	125	375	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.20	125	375	1,957	

Sample Data Packages

SDG Number 224435

Lab Id Number 3

Client ID T-403

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 3

Client: C.E. Schmidt
Client ID: T-403
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 547
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:12
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

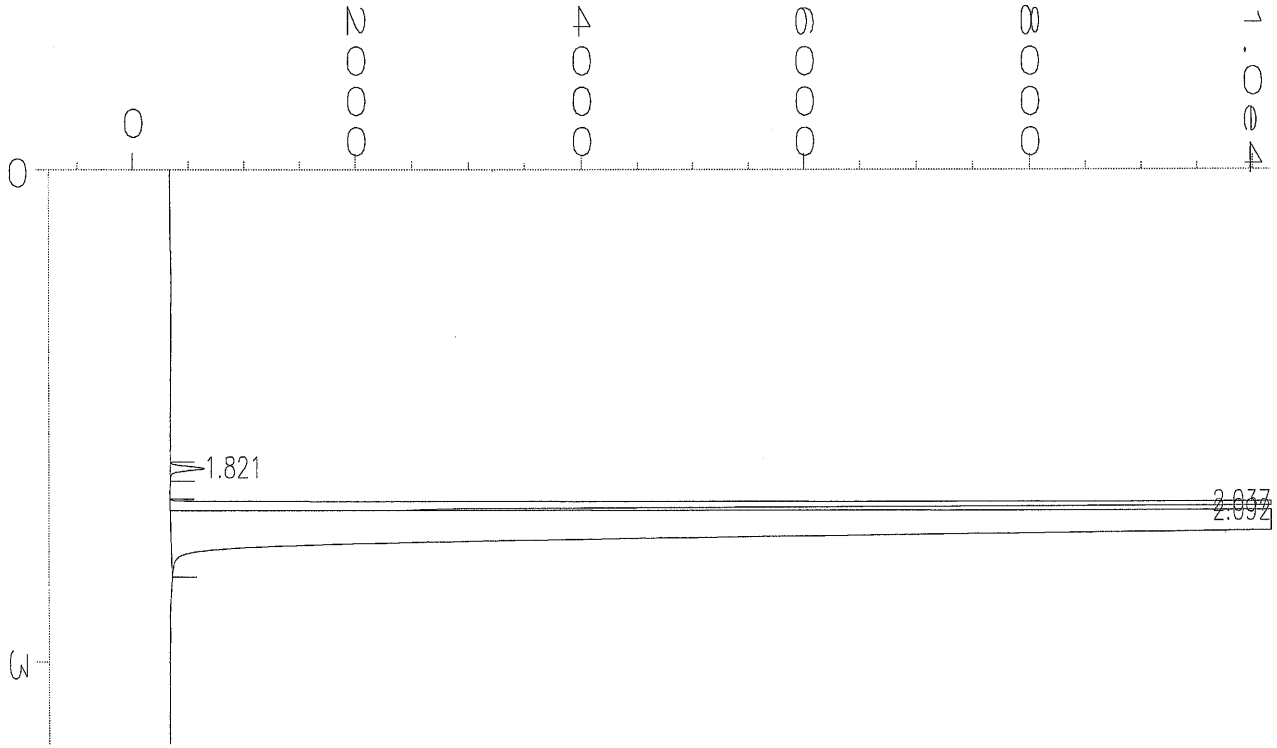
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

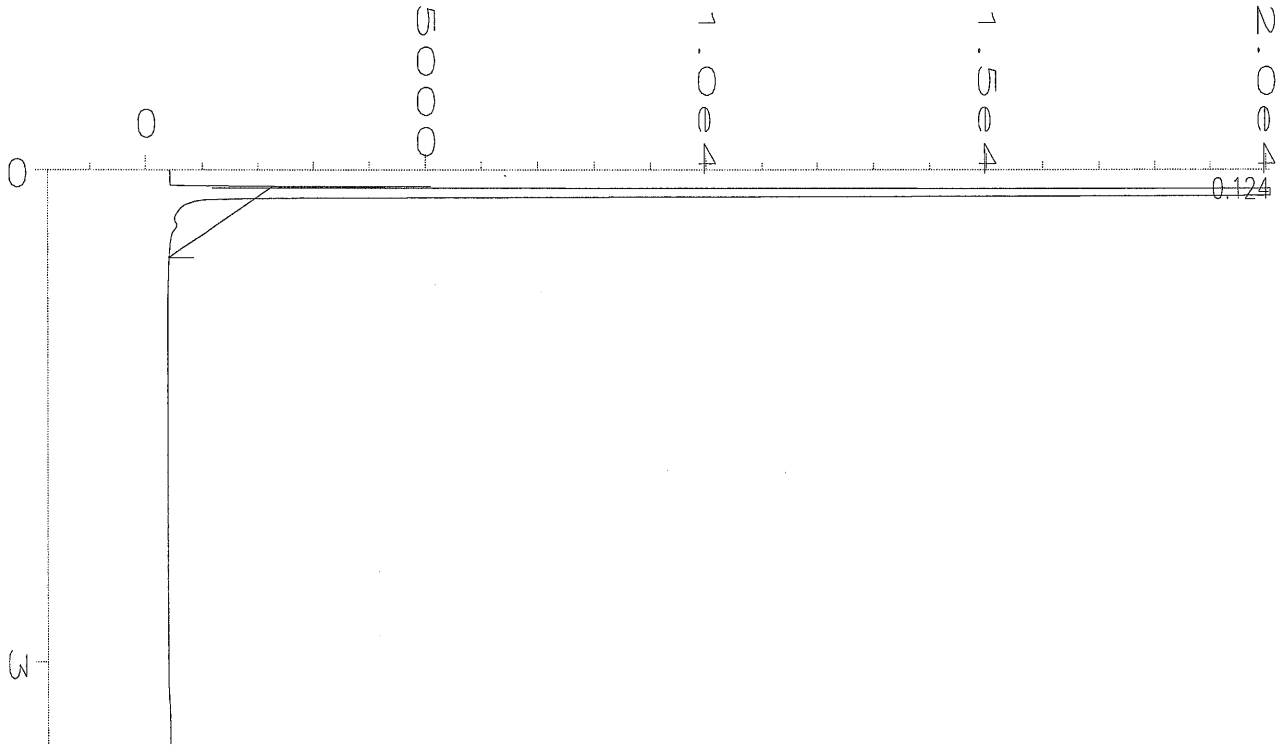
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443503MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-403
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:13 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 01:17 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443503MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.821	567	307	BB	0.029	0.2702
2	2.037	30853	17633	BV	0.029	14.6909
3	2.092	178596	30094	VB	0.080	85.0389

Total area = 210017

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443503PA.D
Operator : DA
Instrument : GCL
Sample Name : T-403
Run Time Bar Code:
Acquired on : 09 Dec 24 01:13 PM
Report Created on: 09 Dec 24 01:17 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443503PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	302776	254848	BB S	0.018	100.0000

Total area = 302776

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443503A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**03**		SF:	**2**	
Description:	**T-403**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **8:12**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:13**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**547**				
Can Factor	**1.27**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**30853**
7727-37-9	Nitrogen	03	2.07	**178596**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 03

File Name:	2443503A	Detect Flag:	ND
QCBatch	120924-GCO	Report Normalized:	**No**
Can Factor	1.27		
Air Volume:	0.50 ml	Temp	**25** C
Base Volume	0.50 ml	Atm P	**760.0** torr
Dilution Factor	1.27	Gas Constant	24.4
Gas Constant:	24.4	RL Factor	**3**
Decimal Places:	2		

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.114	0.038	0.114	381	1,143	U
Oxygen	32.00	17.00	17.00	17.00	169,973	17.00	17.00	500	0.064	0.191	0.064	0.192	635	1,905	
Nitrogen	28.01	83.00	83.00	83.00	830,027	83.00	83.00	1000	0.127	0.381	0.127	0.381	1,270	3,810	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	127	381	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	127	381	U
Sum - N2		17.00	100.00												
Sum		100.0													
Total Nitrogen		91.06													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 03

File Name: 2443503A
Description: T-403
Can/Tube#: 547
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:12
Date Analyzed: 12/09/24 **Time:** 13:13
Can Dilution Factor: 1.27

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	381	1,143	ND	ND
7782-44-7	Oxygen	0.064	0.192	17.00	635	1,905	169,973	
630-08-0	Carbon Monoxide	0.013	0.039	ND	127	381	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	127	381	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 4

Client ID T-404

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Sample Calculations
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 | 4

Client: C.E. Schmidt
Client ID: T-404
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 749
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 8:24
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

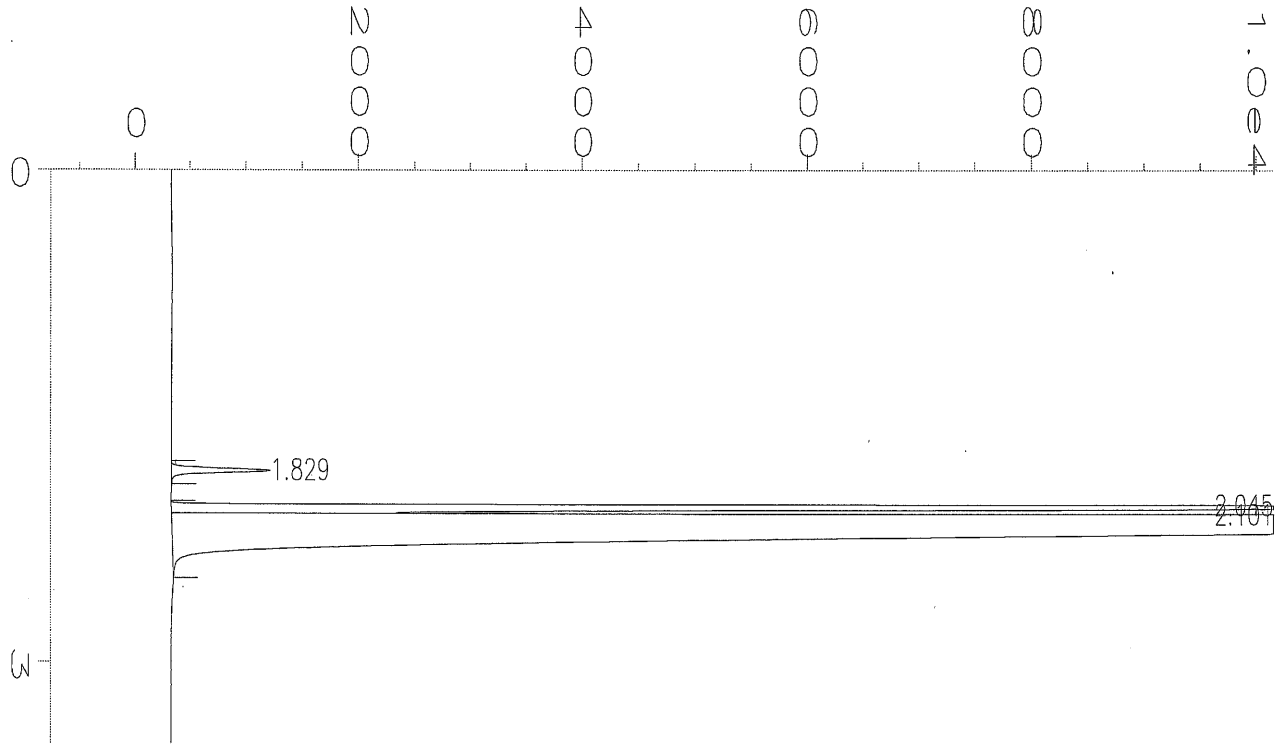
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443504MA.D
Operator : DA
Instrument : GCL
Sample Name : T-404
Run Time Bar Code:
Acquired on : 09 Dec 24 01:18 PM
Report Created on: 09 Dec 24 01:21 PM
Sample Info : SCHMIDT

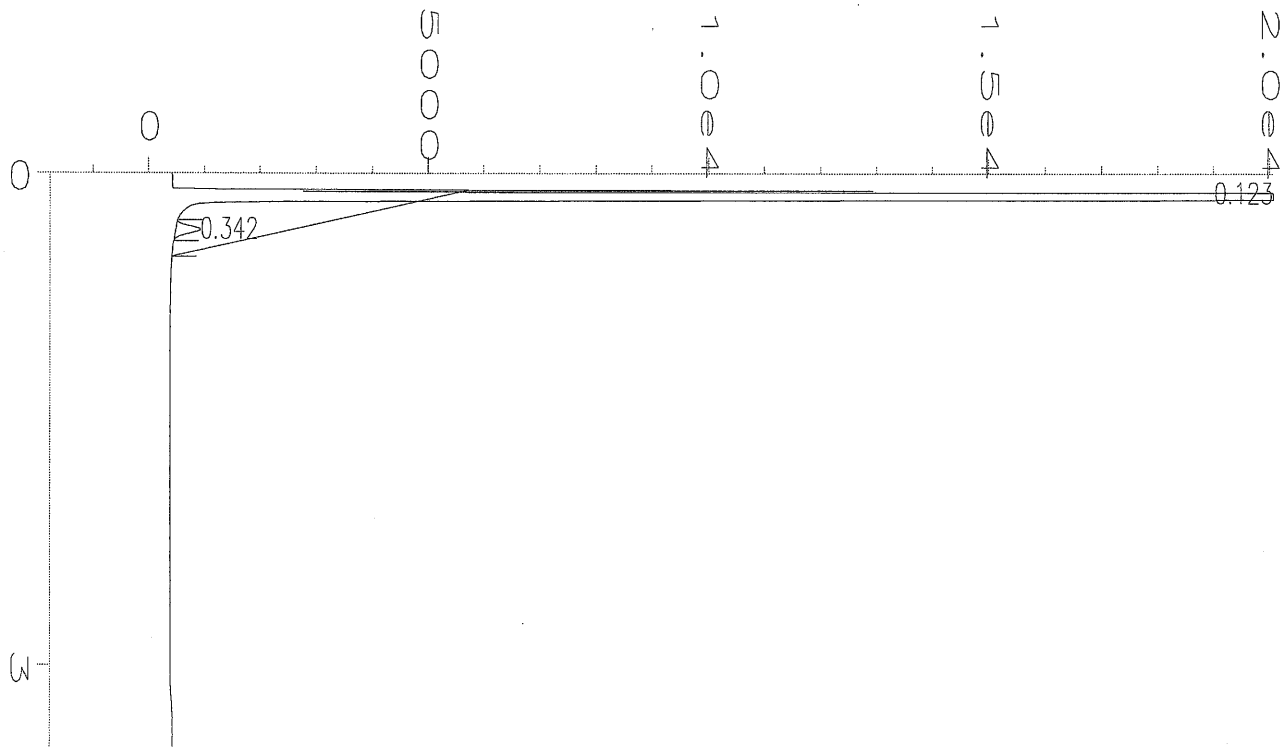
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443504MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.829	1664	897	BB	0.029	0.8191
2	2.045	29838	17259	BV	0.029	14.6896
3	2.101	171620	29125	VB	0.081	84.4913

Total area = 203121

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443504PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-404
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:18 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 01:21 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443504PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	261083	250094	BB S	0.024	99.4777
2	0.342	1371	435	BB T	0.050	0.5223

Total area = 262454

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443504A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**04**			SF:	**2**
Description:	**T-404**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**8:24**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**13:18**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**749**				
Can Factor	**1.24**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29838**
7727-37-9	Nitrogen	03	2.07	**171620**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**1371**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 04

File Name:	2443504A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.24				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.24		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.54	#REF!	0.54	5,428	0.54	0.54	300	0.037	0.112	0.037	0.111	372	1,116	
Oxygen	32.00	16.05	#REF!	16.05	160,498	16.05	16.05	500	0.062	0.186	0.062	0.186	620	1,860	
Nitrogen	28.01	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	1000	0.124	0.372	0.124	0.372	1,240	3,720	#REF!
Carbon Monoxide	28.01	0.00	#REF!	ND	ND	0.00		100	0.012	0.037	0.012	0.036	124	372	U
Carbon Dioxide	44.01	0.34	#REF!	0.34	3,370	0.34	0.34	100	0.012	0.037	0.012	0.036	124	372	
Sum - N2		#REF!	#REF!												
Sum		#REF!													
Total Nitrogen		85.44													

EPA Qual	Det Qual	Rpt
	=	Y
	=	Y
	#REF!	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 04

File Name: 2443504A
Description: T-404
Can/Tube#: 749
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 8:24
Date Analyzed: 12/09/24 **Time:** 13:18
Can Dilution Factor: 1.24

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.037	0.111	0.54	372	1,116	5,428	
7782-44-7	Oxygen	0.062	0.186	16.05	620	1,860	160,498	
630-08-0	Carbon Monoxide	0.012	0.036	ND	124	372	ND	ND
124-38-9	Carbon Dioxide	0.012	0.036	0.34	124	372	3,370	

Sample Data Packages

SDG Number 224435

Lab Id Number 5

Client ID T-405

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 5

Client: C.E. Schmidt
Client ID: T-405
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 837
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:20
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

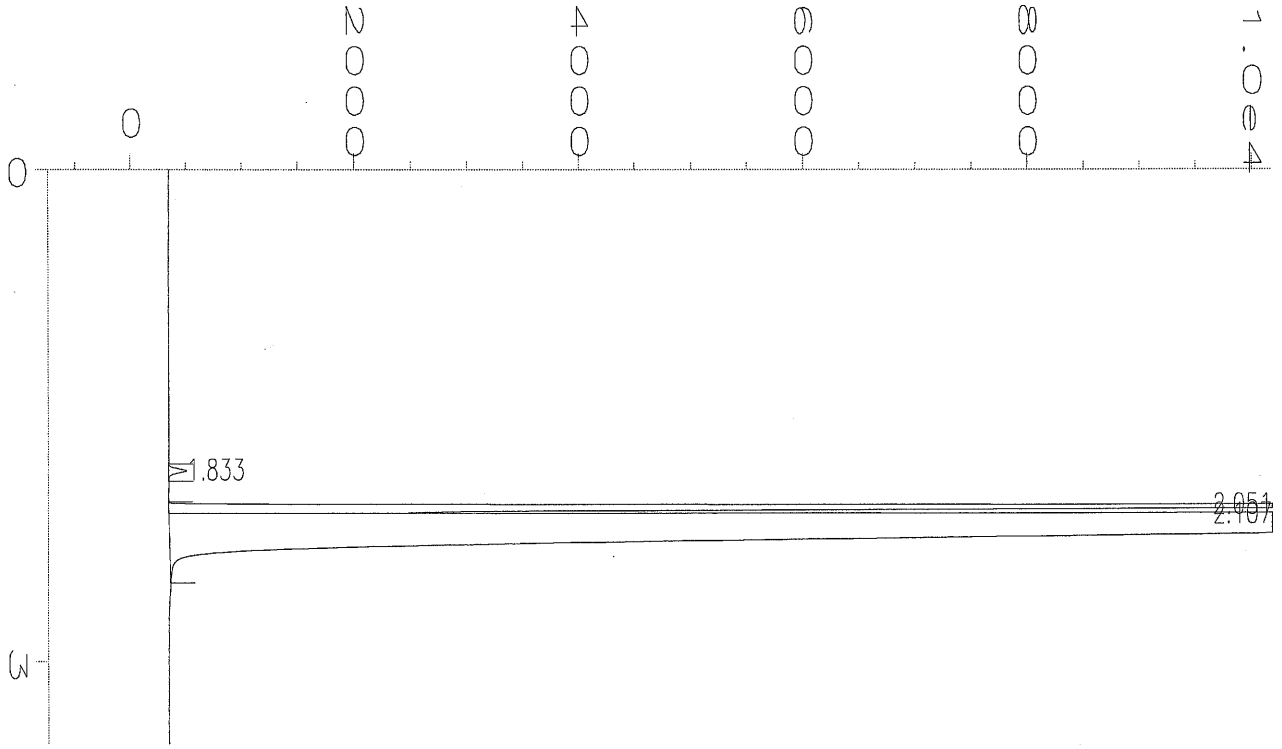
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



==========

Area Percent Report

==========

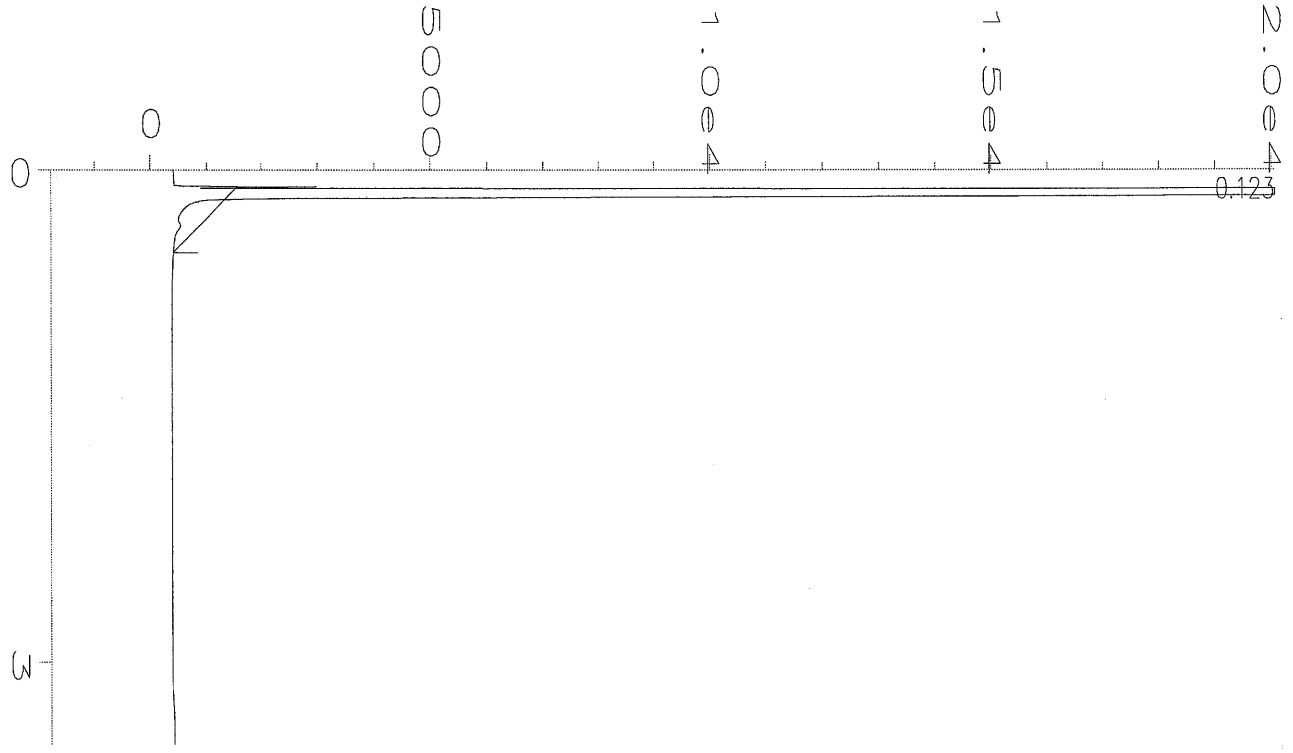
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443505MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-405
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:22 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 01:26 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443505MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.833	307	164	BB	0.029	0.1446
2	2.051	30779	17748	BV	0.028	14.5061
3	2.107	181094	29768	VB	0.084	85.3493

Total area = 212180

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443505PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-405
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:22 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 01:26 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443505PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	320338	260803	BB S	0.026	100.0000

Total area = 320338

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443505A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**05**		SF:	**2**	
Description:	**T-405**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **10:20**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:22**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**837**				
Can Factor	**1.28**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**7799**
7782-44-7	Oxygen	02	1.97	**30779**
7727-37-9	Nitrogen	03	2.07	**181094**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 05

File Name:	2443505A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.28				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.115	0.038	0.114	384	1,152	U
Oxygen	32.00	17.09	17.09	17.09	170,901	17.09	17.09	500	0.064	0.192	0.064	0.192	640	1,920	
Nitrogen	28.01	82.91	82.91	82.91	829,099	82.91	82.91	1000	0.128	0.384	0.128	0.384	1,280	3,840	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Sum - N2		17.09	100.00												
Sum		100.0													
Total Nitrogen		93.06													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 05

File Name: 2443505A
Description: T-405
Can/Tube#: 837
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:20
Date Analyzed: 12/09/24 **Time:** 13:22
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	17.09	640	1,920	170,901	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 6

Client ID T-406

Analytical Method ASTM D1945

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Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 6

Client: C.E. Schmidt
Client ID: T-406
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 626
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 10:06
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

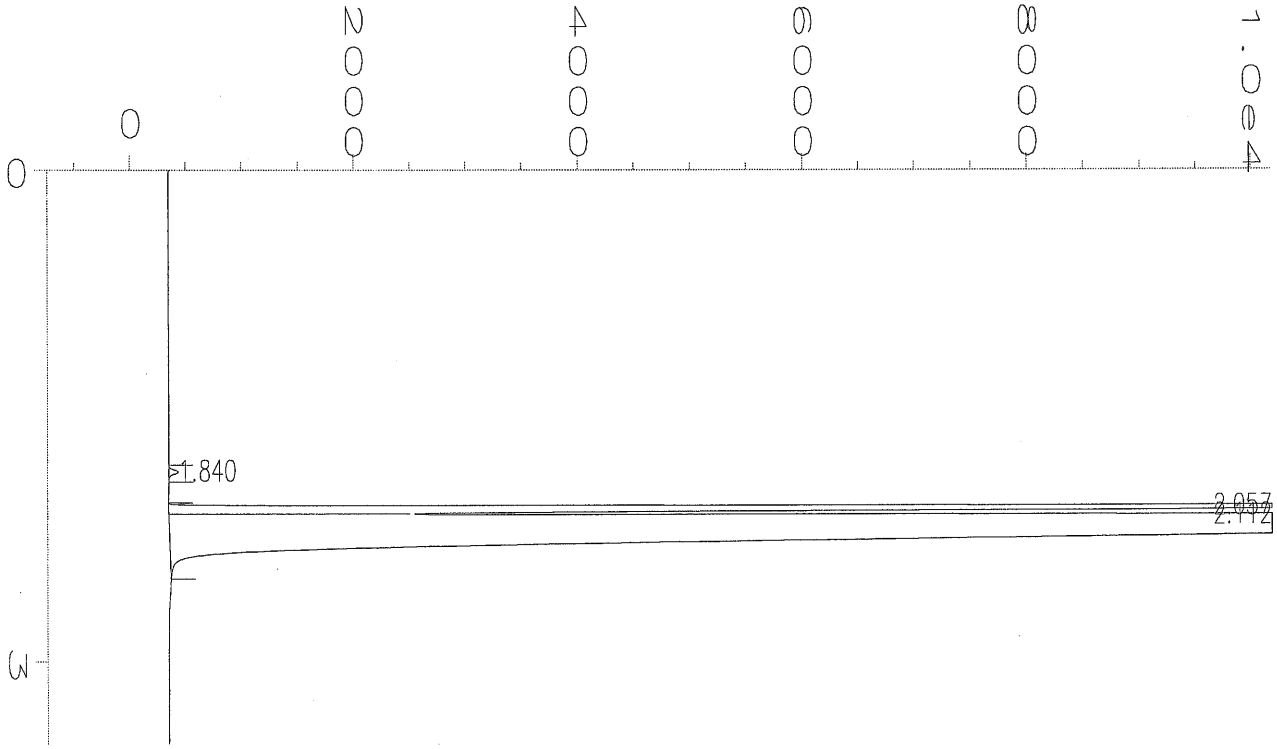
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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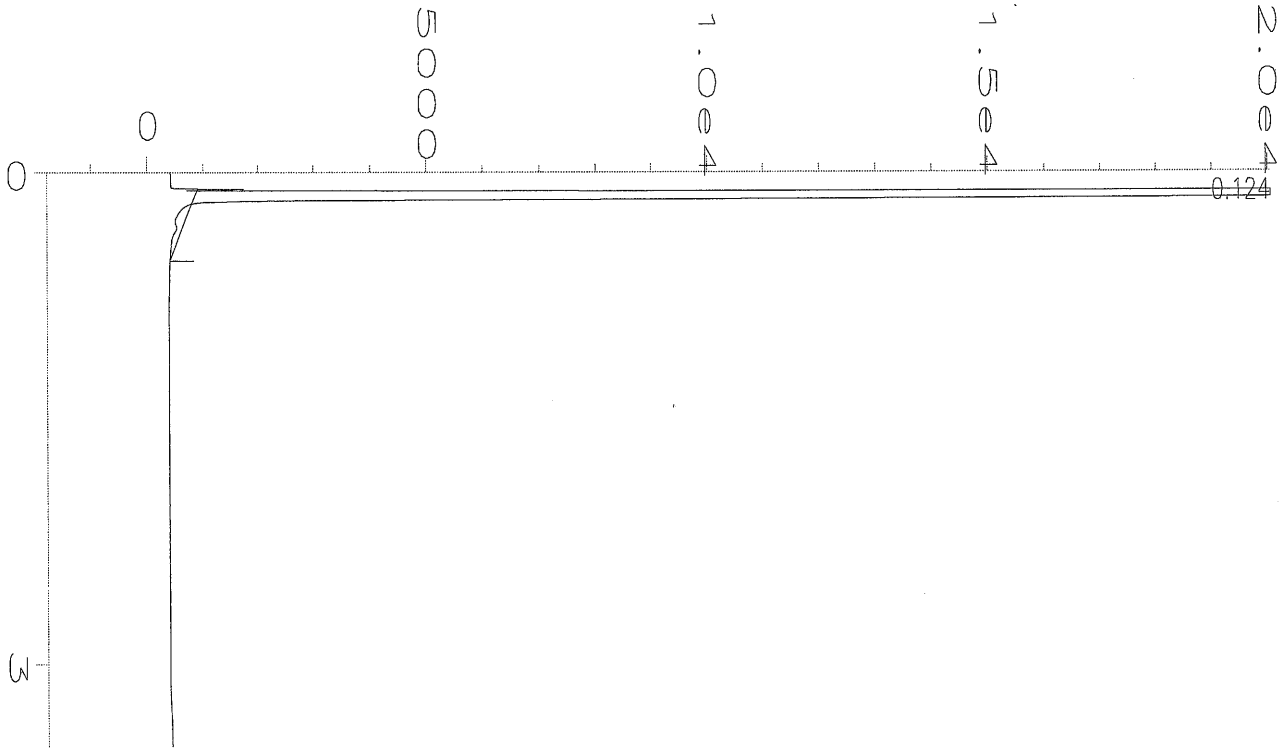
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443506MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-406
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:28 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 01:31 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443506MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.840	165	87	BB	0.030	0.0774
2	2.057	31223	17866	BV	0.029	14.6567
3	2.112	181639	29875	VB	0.081	85.2660

Total area = 213026

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443506PA.D
Operator : DA
Instrument : GCL
Sample Name : T-406
Run Time Bar Code:
Acquired on : 09 Dec 24 01:28 PM
Report Created on: 09 Dec 24 01:31 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443506PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	324985	265853	BB S	0.018	100.0000

Total area = 324985

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443506A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**06**		SF:	**2**	
Description:	**T-406**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **10:06**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:28**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**626**				
Can Factor	**1.26**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**31223**
7727-37-9	Nitrogen	03	2.07	**181639**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

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The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443506A	Detect Flag:	ND	**Laboratory Number: 06**
QCBatch	120924-GCO	Report Normalized:	**No**	
Can Factor	1.26			
Air Volume:	0.50 ml	Temp	**25** C	
Base Volume	0.50 ml	Atm P	**760.0** torr	
Dilution Factor	1.26	Gas Constant	24.4	
Gas Constant:	24.4	RL Factor	**3**	
Decimal Places:	2			

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.113	0.038	0.114	378	1,134	U
Oxygen	32.00	17.07	17.07	17.07	170,657	17.07	17.07	500	0.063	0.189	0.063	0.189	630	1,890	
Nitrogen	28.01	82.93	82.93	82.93	829,343	82.93	82.93	1000	0.126	0.378	0.126	0.378	1,260	3,780	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	126	378	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	126	378	U
Sum - N2		17.07	100.00												
Sum		100.0													
Total Nitrogen		91.88													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945 **Laboratory Number:** 06

File Name: 2443506A **Date Sampled:** 11/19/24 **Time:** 10:06
Description: T-406 **Date Analyzed:** 12/09/24 **Time:** 13:28
Can/Tube#: 626 **Can Dilution Factor:** 1.26
QC_Batch: 120924-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	378	1,134	ND	ND
7782-44-7	Oxygen	0.063	0.189	17.07	630	1,890	170,657	
630-08-0	Carbon Monoxide	0.013	0.039	ND	126	378	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	126	378	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 7

Client ID T-407

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 7

Client: C.E. Schmidt
Client ID: T-407
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 740
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:05
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

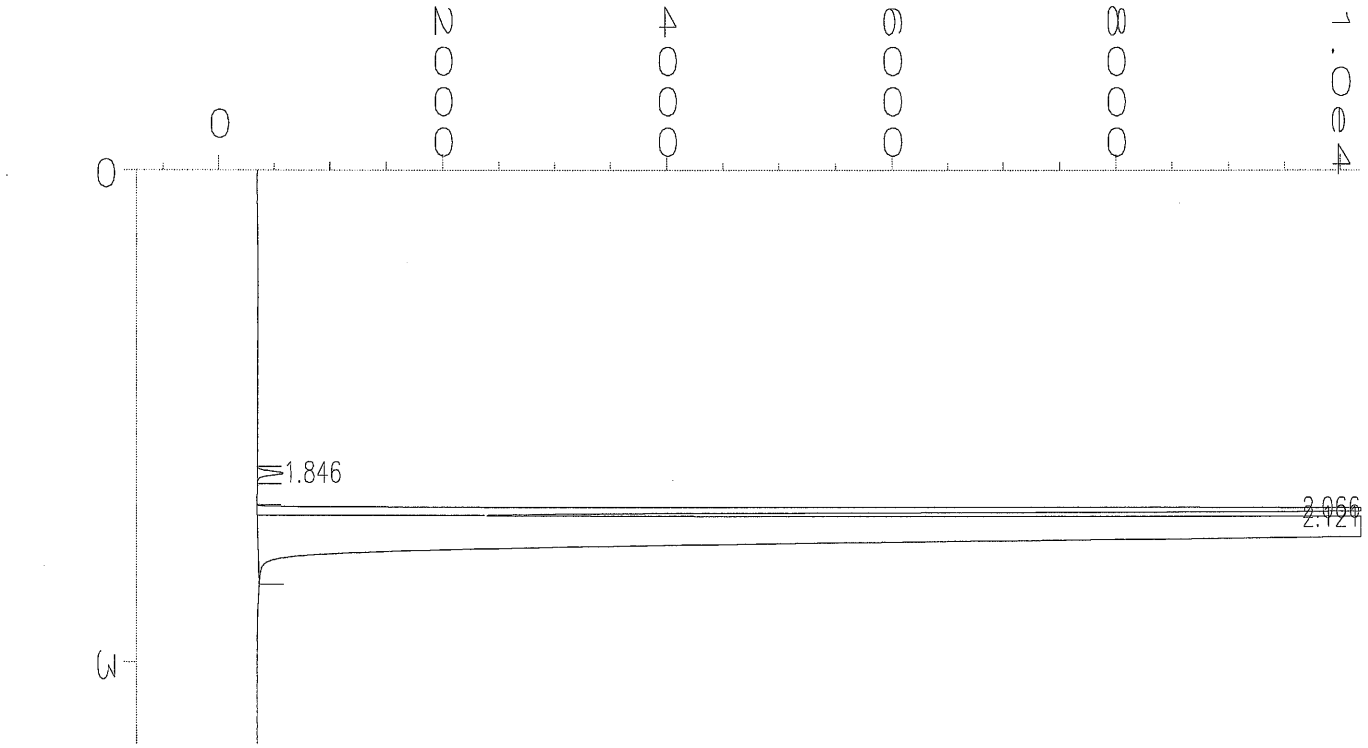
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443507MA.D
Operator : DA
Instrument : GCL
Sample Name : T-407
Run Time Bar Code:
Acquired on : 09 Dec 24 01:32 PM
Report Created on: 09 Dec 24 01:35 PM
Sample Info : SCHMIDT

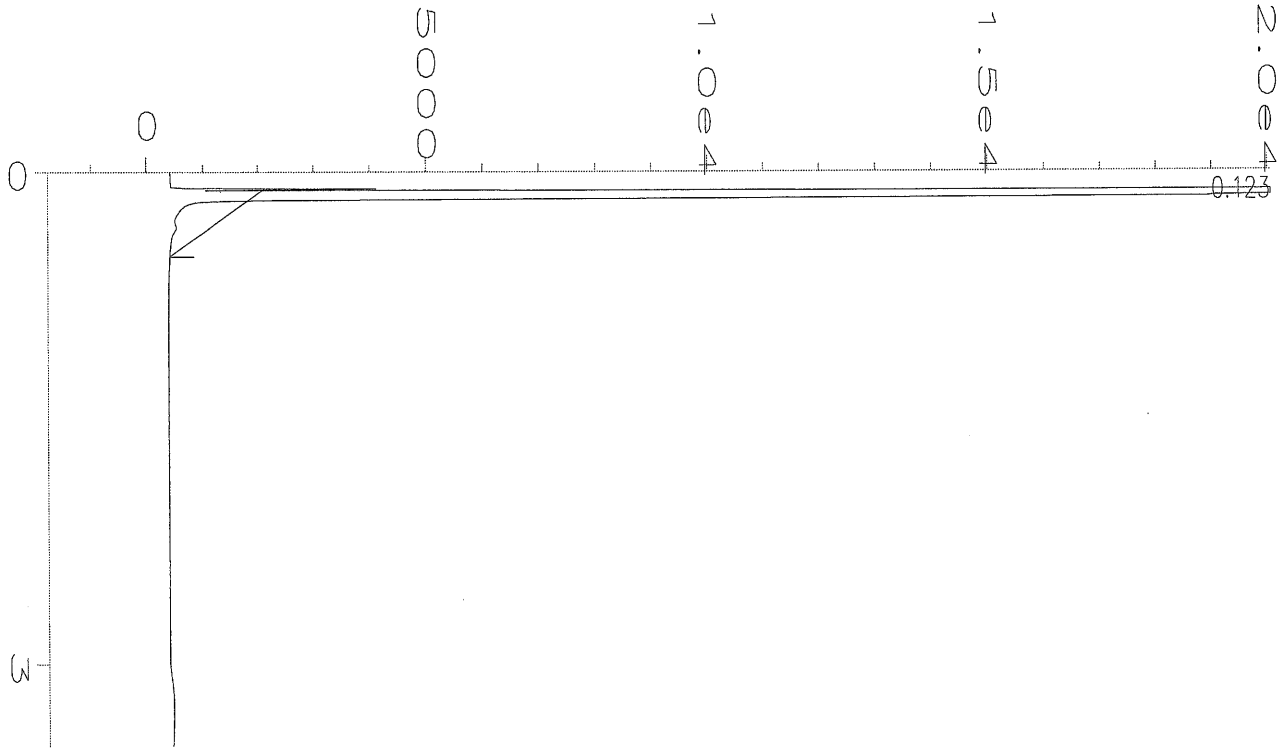
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443507MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.846	437	233	BB	0.029	0.2076
2	2.066	29246	17090	BV	0.028	13.8850
3	2.121	180944	29822	VB	0.080	85.9074

Total area = 210627

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443507PA.D
Operator : DA
Instrument : GCL
Sample Name : T-407
Run Time Bar Code:
Acquired on : 09 Dec 24 01:32 PM
Report Created on: 09 Dec 24 01:35 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443507PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	308947	258116	BB S	0.026	100.0000

Total area = 308947

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443507A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**07**		SF:	**2**	
Description:	**T-407**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **10:05**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:32**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**740**				
Can Factor	**1.32**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29246**
7727-37-9	Nitrogen	03	2.07	**180944**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443507A	Detect Flag:	ND	**Laboratory Number: 07**
QCBatch	120924-GCO	Report Normalized:	**No**	
Can Factor	1.32			
Air Volume:	0.50 ml	Temp	**25** C	
Base Volume	0.50 ml	Atm P	**760.0** torr	
Dilution Factor	1.32	Gas Constant	24.4	
Gas Constant:	24.4	RL Factor	**3**	
Decimal Places:	2			

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.040	0.119	0.040	0.120	396	1,188	U
Oxygen	32.00	16.75	16.75	16.75	167,463	16.75	16.75	500	0.066	0.198	0.066	0.198	660	1,980	
Nitrogen	28.01	83.25	83.25	83.25	832,537	83.25	83.25	1000	0.132	0.396	0.132	0.396	1,320	3,960	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	132	396	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	132	396	U
Sum - N2		16.75	100.00												
Sum		100.0													
Total Nitrogen		95.89													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 07

File Name: 2443507A
Description: T-407
Can/Tube#: 740
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:05
Date Analyzed: 12/09/24 **Time:** 13:32
Can Dilution Factor: 1.32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	396	1,188	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.75	660	1,980	167,463	
630-08-0	Carbon Monoxide	0.013	0.039	ND	132	396	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	132	396	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 8

Client ID T-408

Analytical Method ASTM D1945

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 8

Client: C.E. Schmidt
Client ID: T-408
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 805
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 10:19
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

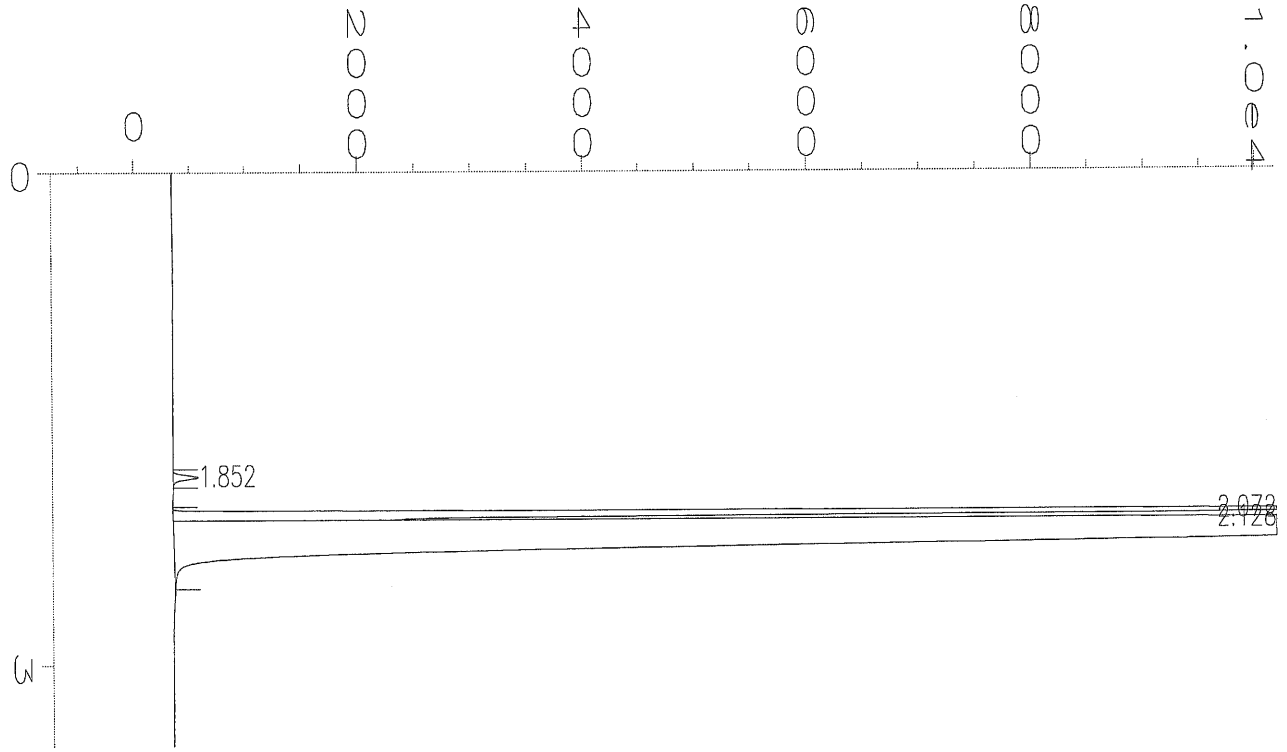
Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443508MA.D
Operator : DA
Instrument : GCL
Sample Name : T-408
Run Time Bar Code:
Acquired on : 09 Dec 24 01:36 PM
Report Created on: 09 Dec 24 01:40 PM
Sample Info : SCHMIDT

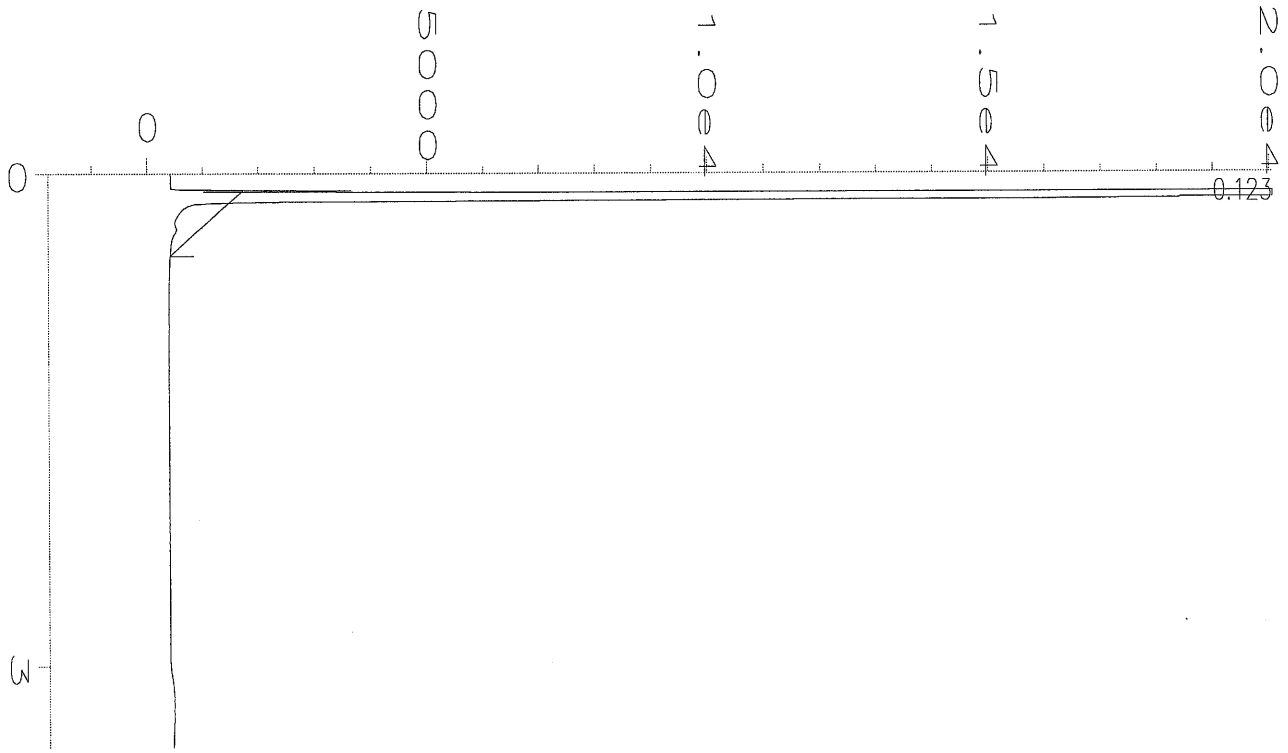
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443508MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.852	419	224	BB	0.029	0.1981
2	2.072	29889	17082	BV	0.029	14.1457
3	2.128	180986	29625	VB	0.085	85.6561

Total area = 211293

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443508PA.D
Operator : DA
Instrument : GCL
Sample Name : T-408
Run Time Bar Code:
Acquired on : 09 Dec 24 01:36 PM
Report Created on: 09 Dec 24 01:40 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443508PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	310356	258400	BB S	0.018	100.0000

Total area = 310356

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443508A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**08**			SF:	**2**
Description:	**T-408**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**10:19**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**13:36**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**805**				
Can Factor	**1.31**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29889**
7727-37-9	Nitrogen	03	2.07	**180986**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443508A	Detect Flag:	ND	**Laboratory Number: 08**	
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.31				
Air Volume:	0.50 ml	Temp	**25**	C	
Base Volume	0.50 ml	Atm P	**760.0**	torr	
Dilution Factor	1.31	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.118	0.039	0.117	393	1,179	U
Oxygen	32.00	16.98	16.98	16.98	169,849	16.98	16.98	500	0.066	0.197	0.066	0.198	655	1,965	
Nitrogen	28.01	83.02	83.02	83.02	830,151	83.02	83.02	1000	0.131	0.393	0.131	0.393	1,310	3,930	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Sum - N2		16.98	100.00												
Sum		100.0													
Total Nitrogen		95.19													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 08

File Name: 2443508A
Description: T-408
Can/Tube#: 805
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 10:19
Date Analyzed: 12/09/24 **Time:** 13:36
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.98	655	1,965	169,849	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	131	393	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 9

Client ID T-409

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 9

Client: C.E. Schmidt
Client ID: T-409
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 631
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 11:45
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

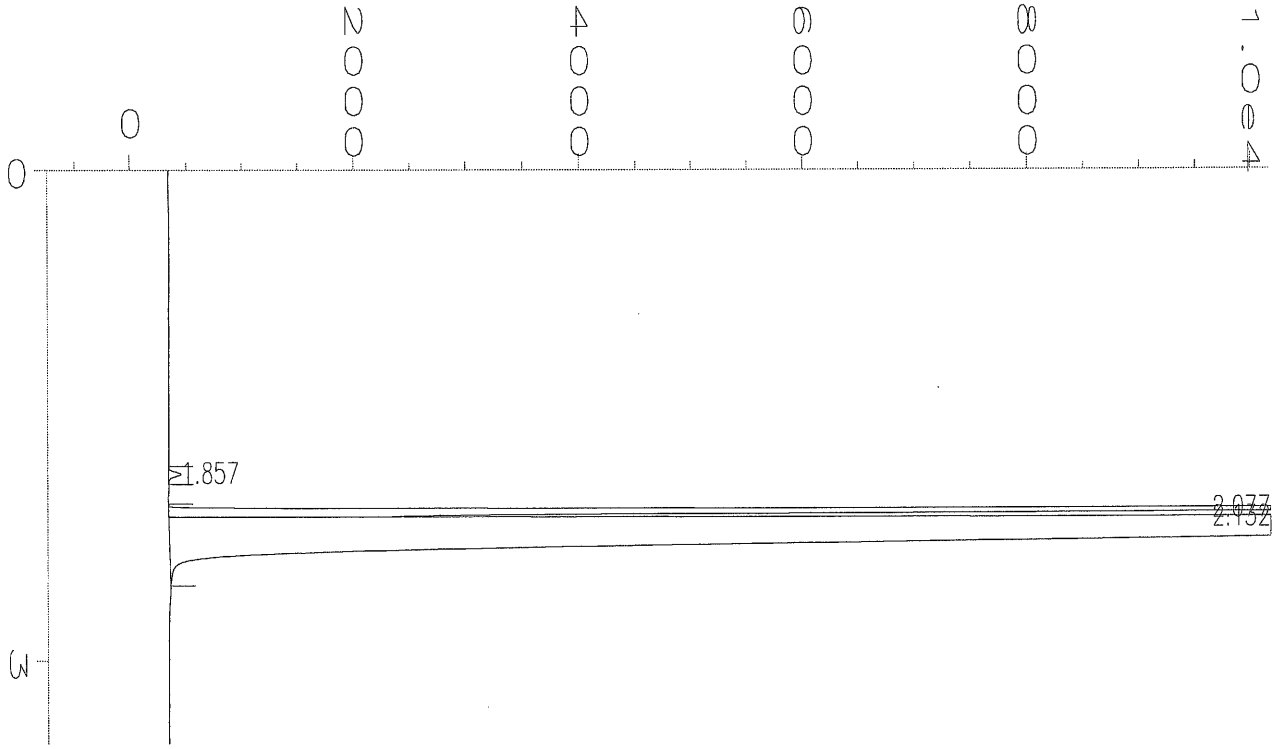
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443509MA.D
Operator : DA
Instrument : GCL
Sample Name : T-409
Run Time Bar Code:
Acquired on : 09 Dec 24 01:41 PM
Report Created on: 09 Dec 24 01:44 PM
Sample Info : SCHMIDT

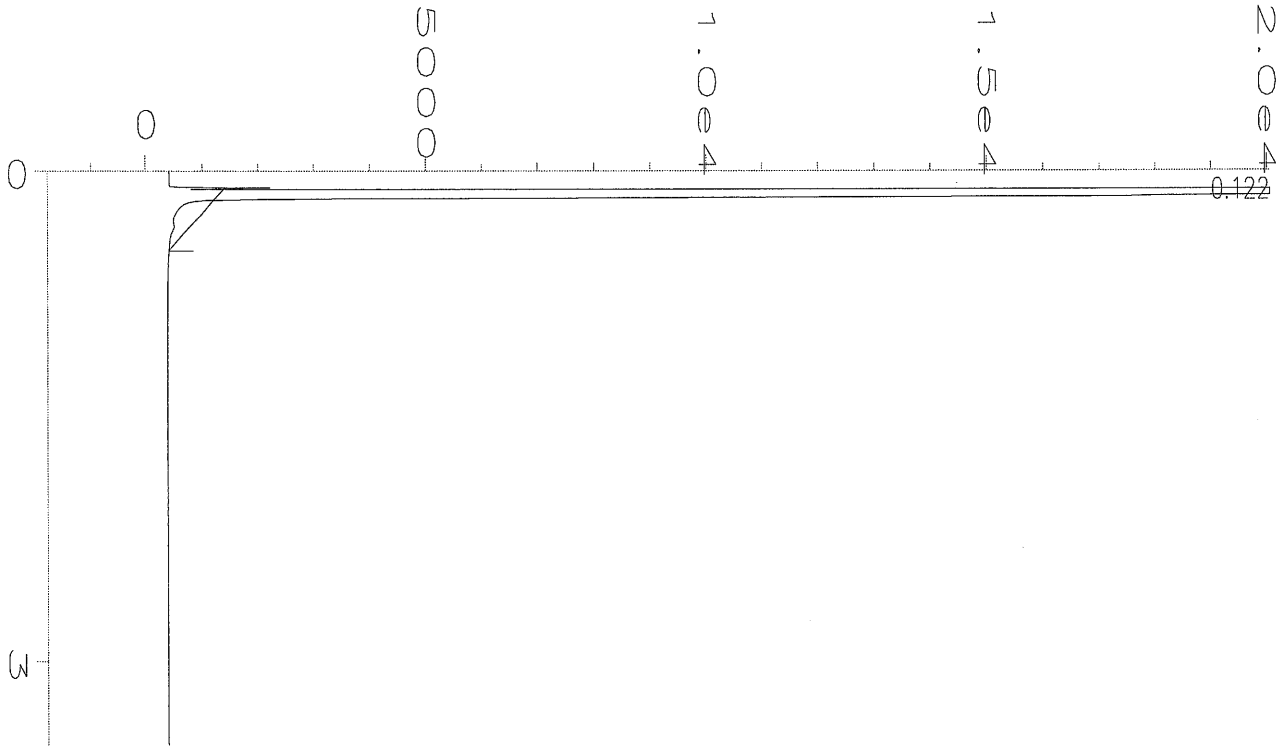
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443509MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.857	215	110	BB	0.030	0.1003
2	2.077	29382	17252	BV	0.028	13.7170
3	2.132	184603	30186	VB	0.081	86.1827

Total area = 214199

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443509PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-409
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 01:41 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 01:44 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443509PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.122	319297	254457	BB S	0.027	100.0000

Total area = 319297

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443509A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**09**			SF:	**2**
Description:	**T-409**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**11:45**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**13:41**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**631**				
Can Factor	**1.36**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29382**
7727-37-9	Nitrogen	03	2.07	**184603**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443509A		Detect Flag:	ND	**Laboratory Number: 09**
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.36				
Air Volume:	0.50 ml		Temp	**25**	C
Base Volume	0.50 ml		Atm P	**760.0**	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	408	1,224	U
Oxygen	32.00	17.33	17.33	17.33	173,340	17.33	17.33	500	0.068	0.204	0.068	0.204	680	2,040	
Nitrogen	28.01	82.67	82.67	82.67	826,660	82.67	82.67	1000	0.136	0.408	0.136	0.408	1,360	4,080	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Sum - N2		17.33	100.00												
Sum		100.0													
Total Nitrogen		100.79													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 09

File Name: 2443509A
Description: T-409
Can/Tube#: 631
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 11:45
Date Analyzed: 12/09/24 **Time:** 13:41
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	17.33	680	2,040	173,340	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 10

Client ID T-410

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 10

Client: C.E. Schmidt
Client ID: T-410
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 714
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 11:59
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

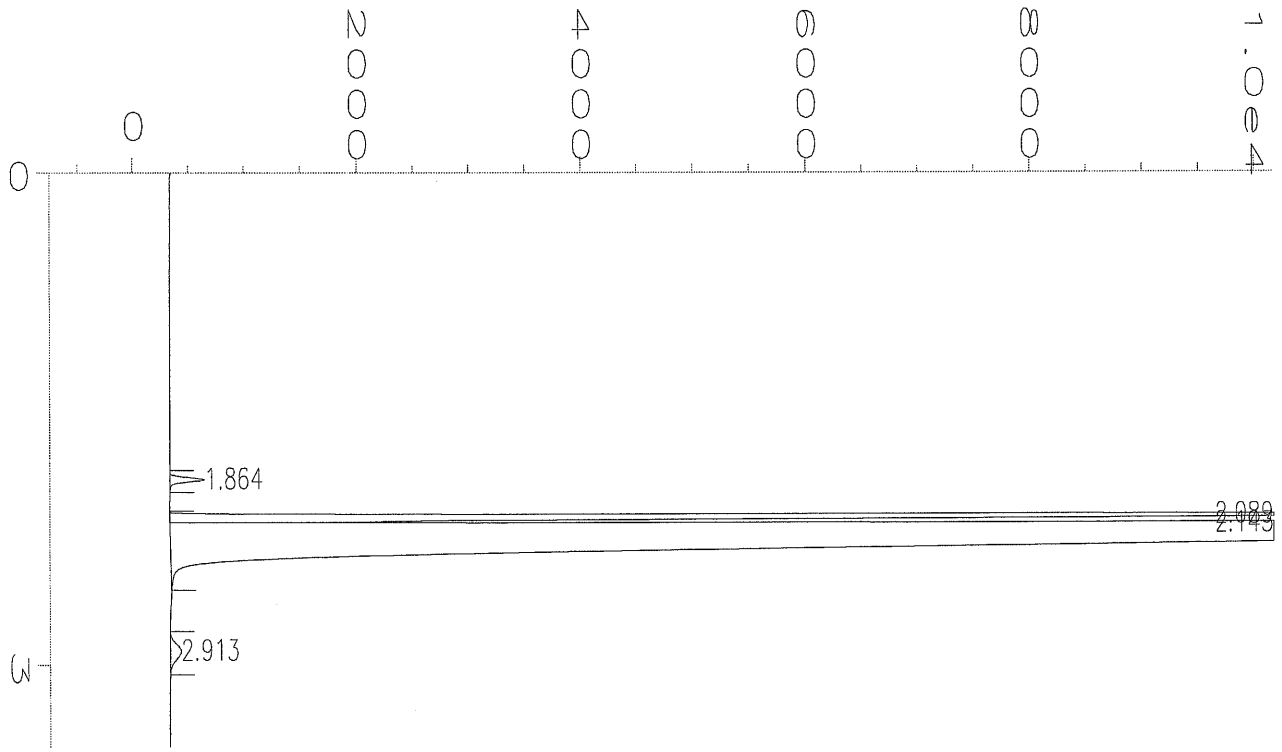
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443510MA.D
Operator : DA
Instrument : GCL
Sample Name : T-410
Run Time Bar Code:
Acquired on : 09 Dec 24 01:46 PM
Report Created on: 09 Dec 24 01:49 PM
Sample Info : SCHMIDT

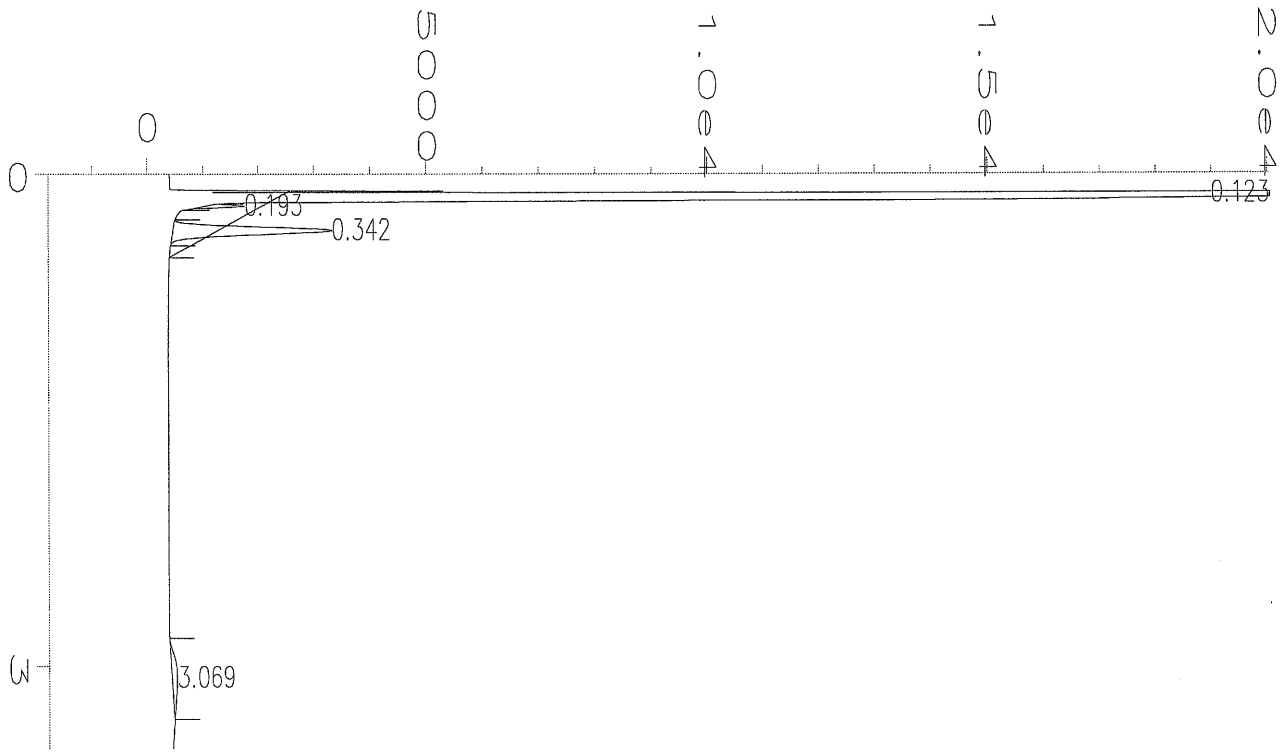
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443510MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.864	592	309	BB	0.030	0.2883
2	2.089	25650	15588	BV	0.027	12.5010
3	2.143	178296	29207	VB	0.081	86.8948
4	2.913	648	97	BB	0.092	0.3159

Total area = 205186

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443510PA.D
Operator : DA
Instrument : GCL
Sample Name : T-410
Run Time Bar Code:
Acquired on : 09 Dec 24 01:46 PM
Report Created on: 09 Dec 24 01:49 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443510PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	291243	253885	BB S	0.025	96.1705
2	0.193	751	706	BB T	0.017	0.2479
3	0.342	9236	2867	BB T	0.051	3.0497
4	3.069	1611	92	BB	0.266	0.5319

Total area = 302840

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443510A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**10**		SF:	**2**	
Description:	**T-410**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **11:59**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:46**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**714**				
Can Factor	**1.36**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**25650**
7727-37-9	Nitrogen	03	2.07	**178296**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**9236**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 10

File Name:	2443510A	Detect Flag:	ND
QCBatch	120924-GCO	Report Normalized:	**No**
Can Factor	1.36		
Air Volume:	0.50 ml	Temp	**25** C
Base Volume	0.50 ml	Atm P	**760.0** torr
Dilution Factor	1.36	Gas Constant	24.4
Gas Constant:	24.4	RL Factor	**3**
Decimal Places:	2		

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	408	1,224	U
Oxygen	32.00	15.13	15.13	15.13	151,323	15.13	15.13	500	0.068	0.204	0.068	0.204	680	2,040	
Nitrogen	28.01	82.38	82.38	82.38	823,780	82.38	82.38	1000	0.136	0.408	0.136	0.408	1,360	4,080	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Carbon Dioxide	44.01	2.49	2.49	2.49	24,897	2.49	2.49	100	0.014	0.041	0.014	0.042	136	408	
Sum - N2		17.62	100.00												
Sum		100.0													
Total Nitrogen		97.35													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 10

File Name: 2443510A
Description: T-410
Can/Tube#: 714
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 11:59
Date Analyzed: 12/09/24 **Time:** 13:46
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	15.13	680	2,040	151,323	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	2.49	136	408	24,897	

Sample Data Packages

SDG Number 224435

Lab Id Number 11

Client ID T-411

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 11

Client: C.E. Schmidt
Client ID: T-411
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 551
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 11:51
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

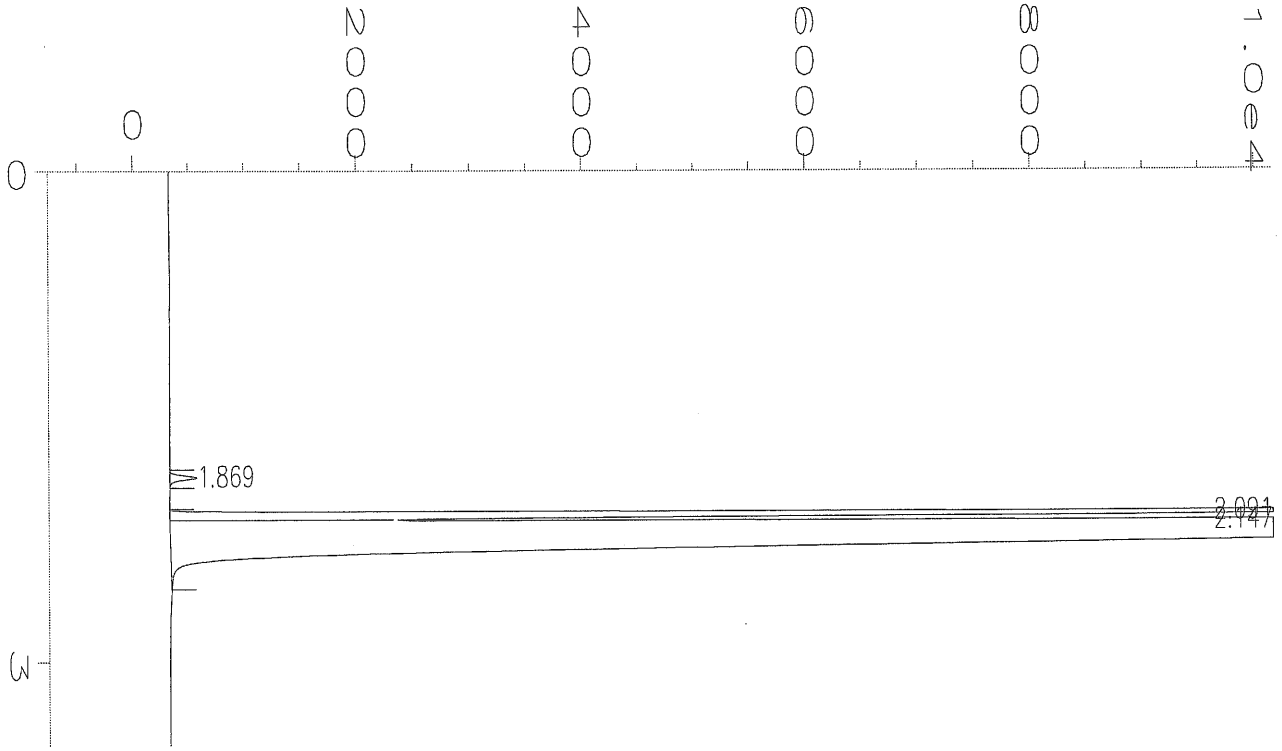
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443511MA.D
Operator : DA
Instrument : GCL
Sample Name : T-411
Run Time Bar Code:
Acquired on : 09 Dec 24 01:50 PM
Report Created on: 09 Dec 24 01:54 PM
Sample Info : SCHMIDT

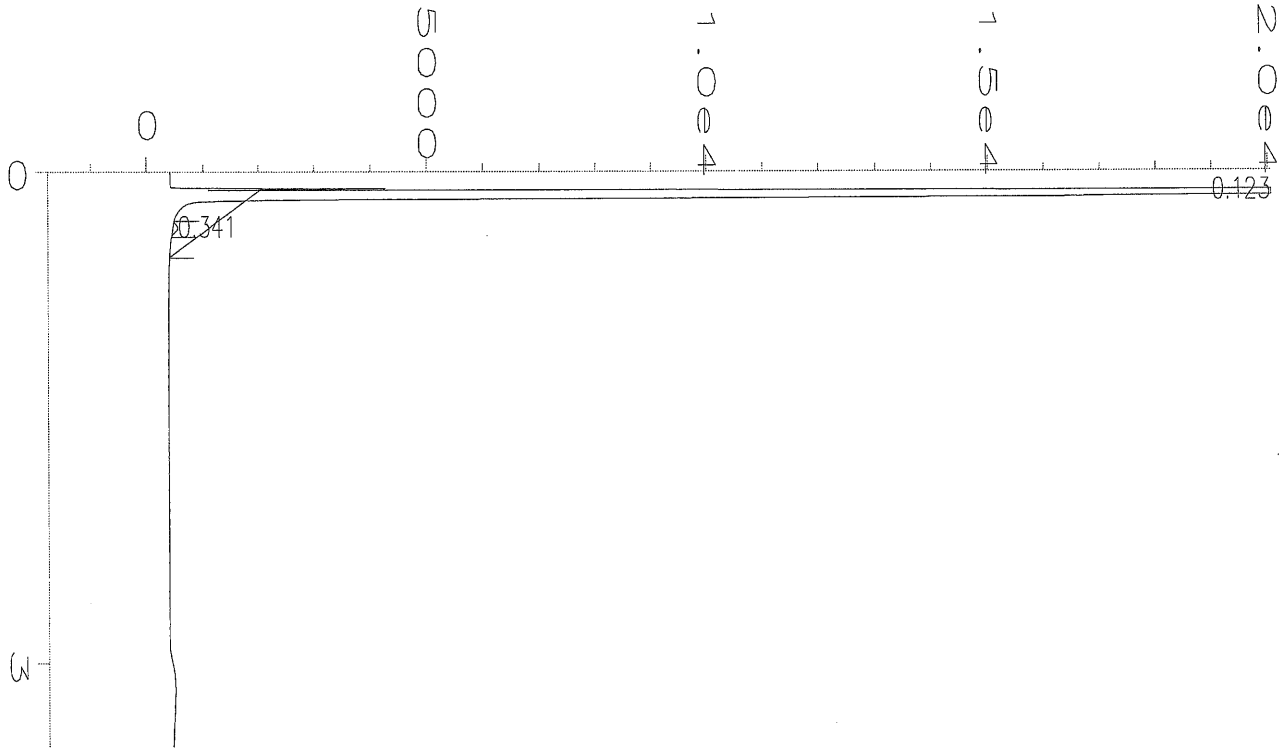
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443511MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.869	463	243	BB	0.030	0.2208
2	2.091	29681	17187	BV	0.029	14.1471
3	2.147	179656	29335	VB	0.079	85.6321

Total area = 209799

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443511PA.D
Operator : DA
Instrument : GCL
Sample Name : T-411
Run Time Bar Code:
Acquired on : 09 Dec 24 01:50 PM
Report Created on: 09 Dec 24 01:54 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443511PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	303951	258616	BB S	0.026	99.9085
2	0.341	278	92	BV T	0.051	0.0915

Total area = 304230

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443511A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**11**		SF:	**2**	
Description:	**T-411**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **11:51**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:50**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**551**				
Can Factor	**1.28**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29681**
7727-37-9	Nitrogen	03	2.07	**178296**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**278**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443511A		Detect Flag:	ND	**Laboratory Number: 11**
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.28				
Air Volume:	0.50 ml		Temp	**25** C	
Base Volume	0.50 ml		Atm P	**760.0** torr	
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.115	0.038	0.114	384	1,152	U
Oxygen	32.00	16.48	16.48	16.48	164,804	16.48	16.48	500	0.064	0.192	0.064	0.192	640	1,920	
Nitrogen	28.01	83.45	83.45	83.45	834,491	83.45	83.45	1000	0.128	0.384	0.128	0.384	1,280	3,840	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Carbon Dioxide	44.01	0.07	0.07	0.07	705	0.07	0.07	100	0.013	0.038	0.013	0.039	128	384	
Sum - N2		16.55	100.00												
Sum		100.0													
Total Nitrogen		91.62													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 11

File Name: 2443511A
Description: T-411
Can/Tube#: 551
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 11:51
Date Analyzed: 12/09/24 **Time:** 13:50
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.48	640	1,920	164,804	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.07	128	384	705	

Sample Data Packages

SDG Number 224435

Lab Id Number 12

Client ID T-412

Analytical Method ASTM D1945

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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 12

Client: C.E. Schmidt
Client ID: T-412
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 881
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 12:06
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

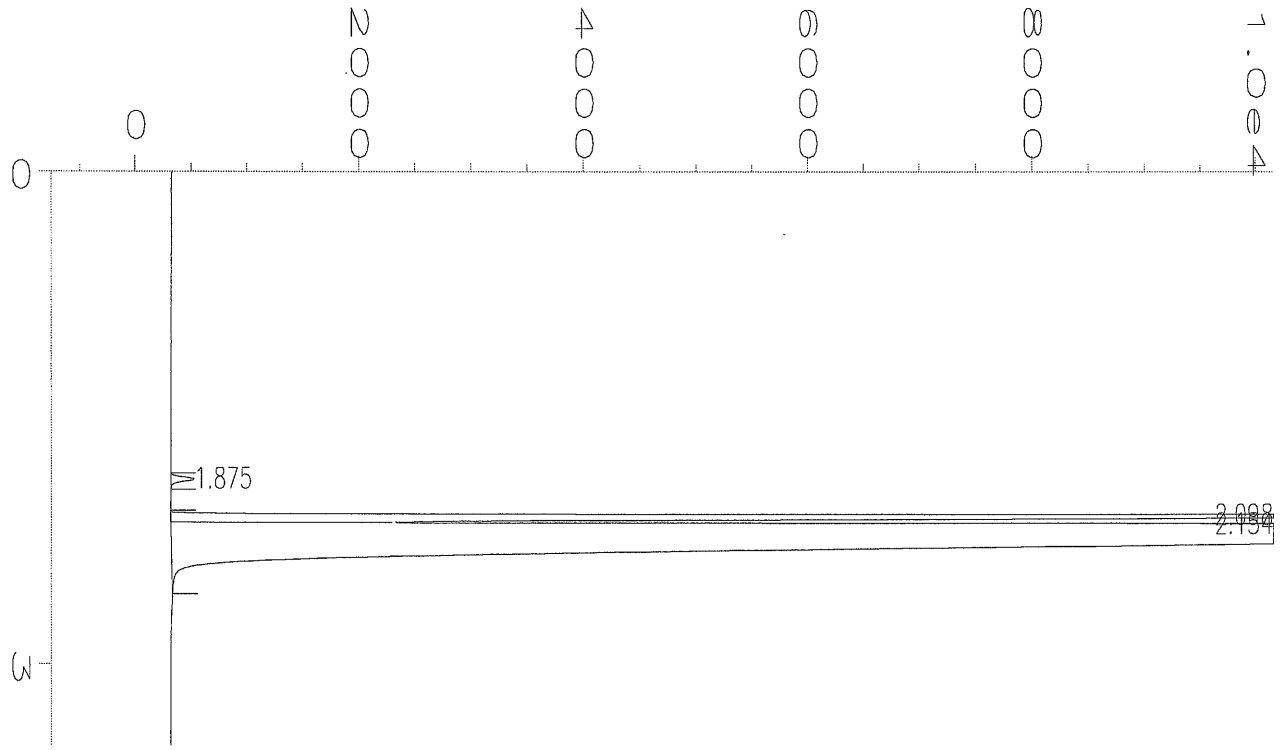
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443512MA.D
Operator : DA
Instrument : GCL
Sample Name : T-412
Run Time Bar Code:
Acquired on : 09 Dec 24 01:55 PM
Report Created on: 09 Dec 24 01:59 PM
Sample Info : SCHMIDT

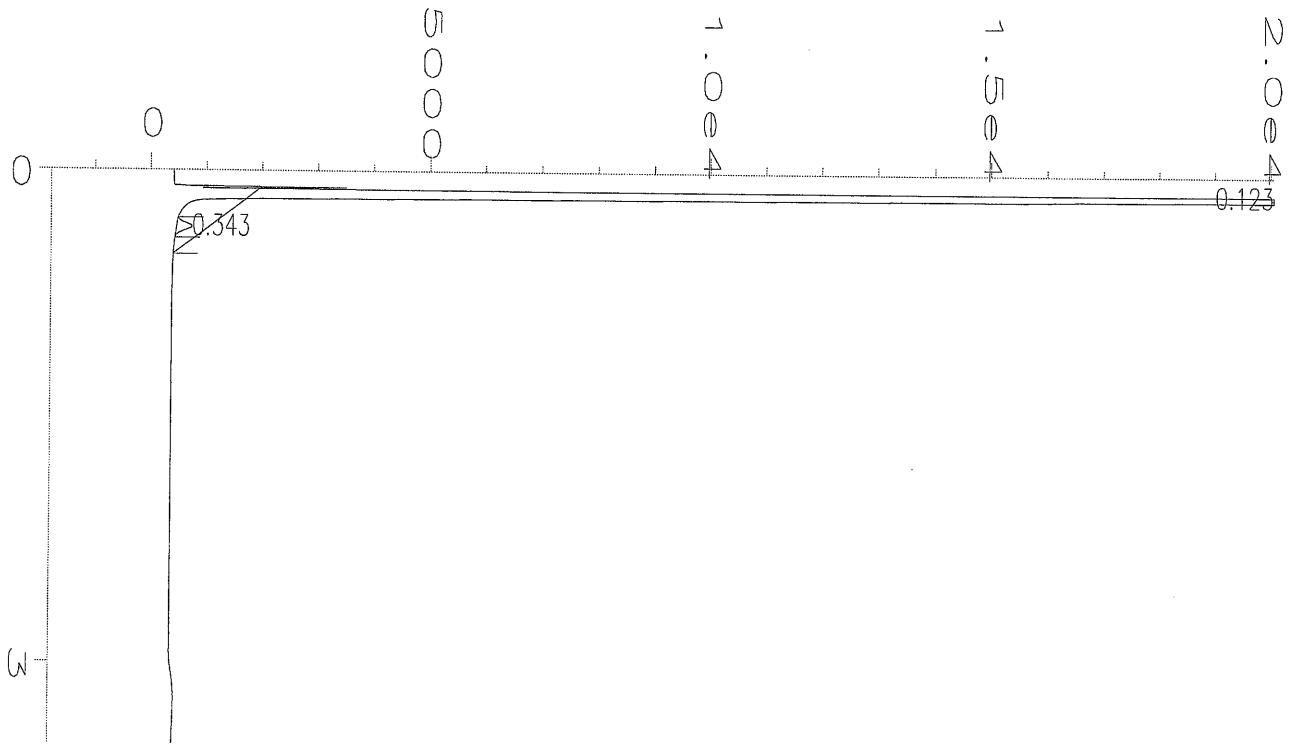
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443512MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.875	388	202	BB	0.030	0.1837
2	2.098	29193	17204	BV	0.028	13.8326
3	2.154	181462	29365	VB	0.086	85.9837

Total area = 211043

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443512PA.D
Operator : DA
Instrument : GCL
Sample Name : T-412
Run Time Bar Code:
Acquired on : 09 Dec 24 01:55 PM
Report Created on: 09 Dec 24 01:59 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443512PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	305279	257113	BB S	0.026	99.7276
2	0.343	834	265	BB T	0.049	0.2724

Total area = 306113

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443512A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**12**		SF:	**2**	
Description:	**T-412**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **12:06**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **13:55**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**881**				
Can Factor	**1.32**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29193**
7727-37-9	Nitrogen	03	2.07	**181462**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**834**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 12

File Name:	2443512A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.32				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.32		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.040	0.119	0.040	0.120	396	1,188	U
Oxygen	32.00	16.72	16.72	16.72	167,160	16.72	16.72	500	0.066	0.198	0.066	0.198	660	1,980	
Nitrogen	28.01	83.07	83.07	83.07	830,658	83.07	83.07	1000	0.132	0.396	0.132	0.396	1,320	3,960	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	132	396	U
Carbon Dioxide	44.01	0.22	0.22	0.22	2,182	0.22	0.22	100	0.013	0.040	0.013	0.039	132	396	
Sum - N2		16.93	100.00												
Sum		100.0													
Total Nitrogen		96.17													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 12

File Name: 2443512A
Description: T-412
Can/Tube#: 881
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 12:06
Date Analyzed: 12/09/24 **Time:** 13:55
Can Dilution Factor: 1.32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	396	1,188	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.72	660	1,980	167,160	
630-08-0	Carbon Monoxide	0.013	0.039	ND	132	396	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.22	132	396	2,182	

Sample Data Packages

SDG Number 224435
Lab Id Number 13

Client ID T-413

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 13

Client: C.E. Schmidt
Client ID: T-413
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 766
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

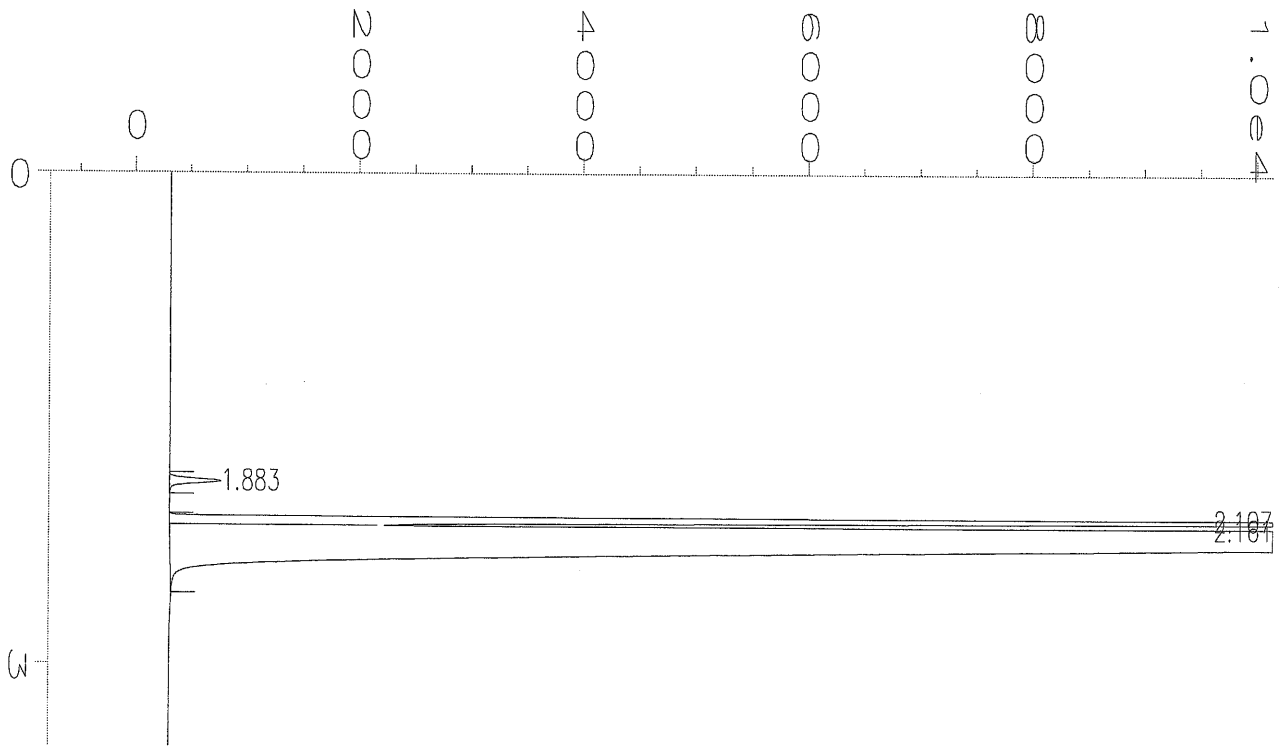
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443513MA.D
Operator : DA
Instrument : GCL
Sample Name : T-413
Run Time Bar Code:
Acquired on : 09 Dec 24 02:01 PM
Report Created on: 09 Dec 24 02:05 PM
Sample Info : SCHMIDT

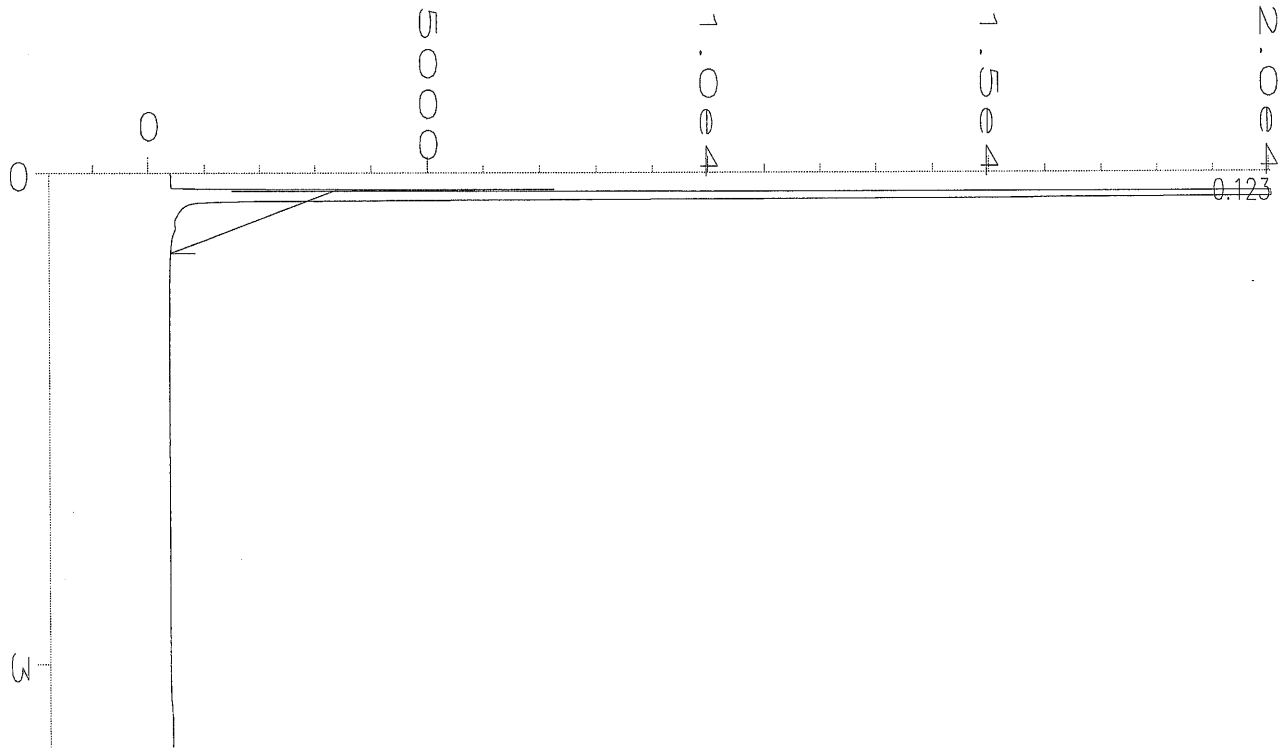
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443513MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.883	903	465	BB	0.030	0.4301
2	2.107	28799	16673	BV	0.028	13.7230
3	2.161	180161	29368	VB	0.080	85.8469

Total area = 209863

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443513PA.D
Operator : DA
Instrument : GCL
Sample Name : T-413
Run Time Bar Code:
Acquired on : 09 Dec 24 02:01 PM
Report Created on: 09 Dec 24 02:05 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443513PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	283771	251864	BB S	0.017	100.0000

Total area = 283771

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443513A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**13**		SF:	**2**	
Description:	**T-413**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **13:37**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:01**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**766**				
Can Factor	**1.34**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28799**
7727-37-9	Nitrogen	03	2.07	**181462**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443513A	Detect Flag:	ND	**Laboratory Number: 13**	
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.34				
Air Volume:	0.50 ml	Temp	**25**	C	
Base Volume	0.50 ml	Atm P	**760.0**	torr	
Dilution Factor	1.34	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.040	0.121	0.040	0.120	402	1,206	U
Oxygen	32.00	16.74	16.74	16.74	167,402	16.74	16.74	500	0.067	0.201	0.067	0.201	670	2,010	
Nitrogen	28.01	83.26	83.26	83.26	832,598	83.26	83.26	1000	0.134	0.402	0.134	0.402	1,340	4,020	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	134	402	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	134	402	U
Sum - N2		16.74	100.00												
Sum		100.0													
Total Nitrogen		97.62													

12/7/2012

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 13

File Name: 2443513A
Description: T-413
Can/Tube#: 766
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/09/24 **Time:** 14:01
Can Dilution Factor: 1.34

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	402	1,206	ND	ND
7782-44-7	Oxygen	0.067	0.201	16.74	670	2,010	167,402	
630-08-0	Carbon Monoxide	0.013	0.039	ND	134	402	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	134	402	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 14

Client ID T-414

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 14

Client: C.E. Schmidt
Client ID: T-414
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 725
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:37
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

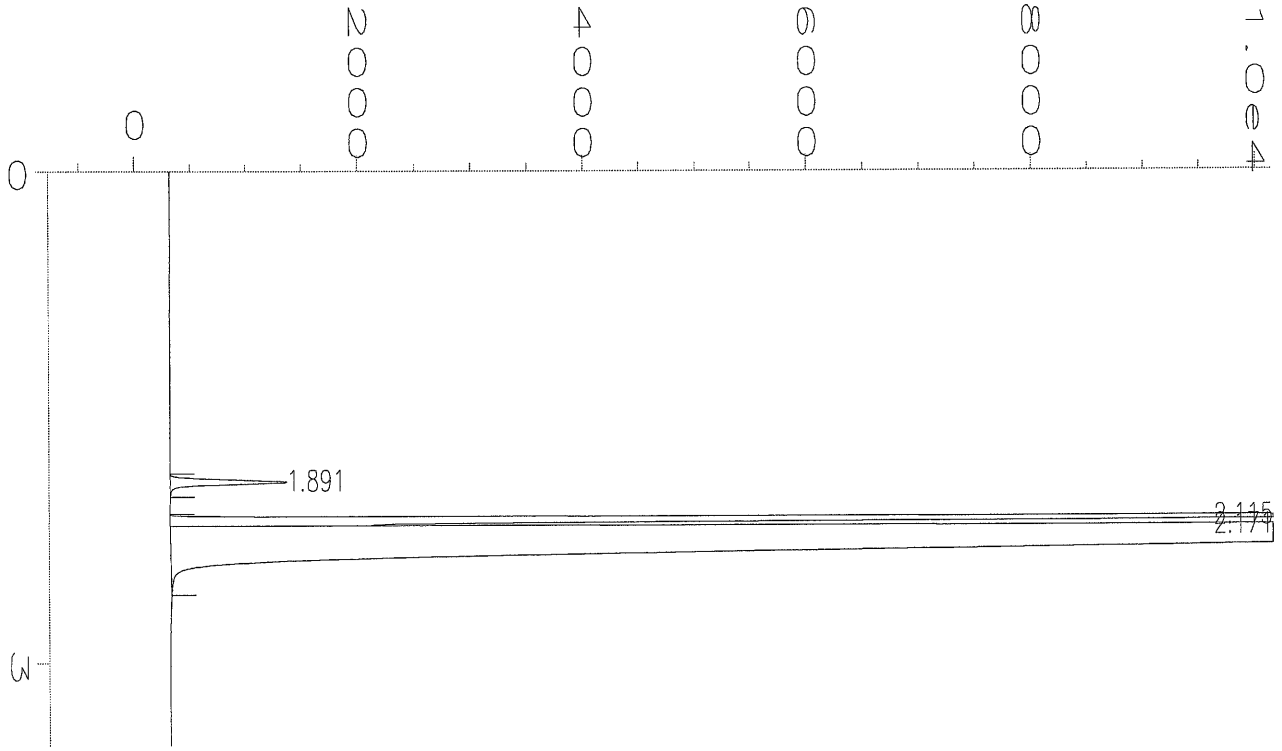
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443514MA.D
Operator : DA
Instrument : GCL
Sample Name : T-414
Run Time Bar Code:
Acquired on : 09 Dec 24 02:06 PM
Report Created on: 09 Dec 24 02:10 PM
Sample Info : SCHMIDT

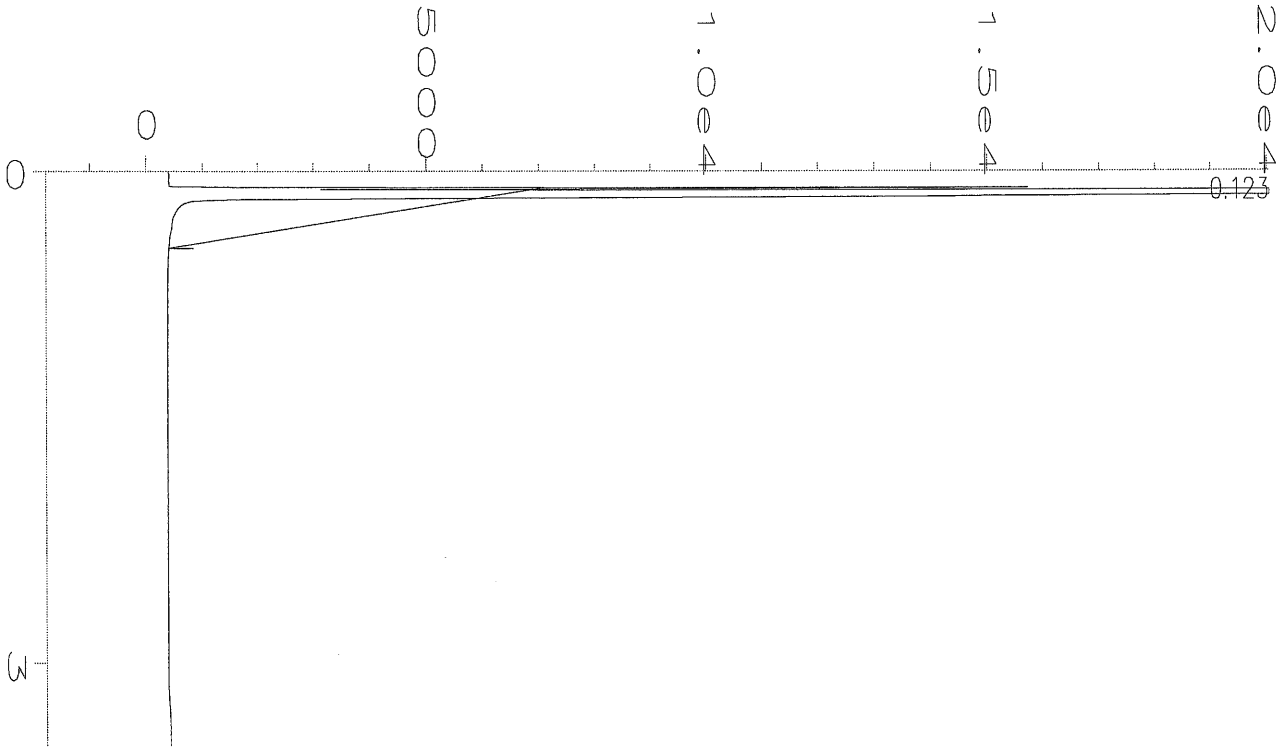
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443514MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.891	2060	1055	BB	0.030	1.0149
2	2.115	28189	16206	BV	0.029	13.8908
3	2.171	172685	28461	VB	0.084	85.0942

Total area = 202934

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443514PA.D
Operator : DA
Instrument : GCL
Sample Name : T-414
Run Time Bar Code:
Acquired on : 09 Dec 24 02:06 PM
Report Created on: 09 Dec 24 02:10 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443514PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	240641	245076	BB S	0.023	100.0000

Total area = 240641

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443514A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**14**			SF:	**2**
Description:	**T-414**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**13:37**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**14:06**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**725**				
Can Factor	**1.32**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28189**
7727-37-9	Nitrogen	03	2.07	**172685**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443514A	Detect Flag:	ND	**Laboratory Number:**	**14**
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.32				
Air Volume:	0.50 ml	Temp	**25** C		
Base Volume	0.50 ml	Atm P	**760.0** torr		
Dilution Factor	1.32	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.040	0.119	0.040	0.120	396	1,188	U
Oxygen	32.00	16.14	16.14	16.14	161,411	16.14	16.14	500	0.066	0.198	0.066	0.198	660	1,980	
Nitrogen	28.01	83.86	83.86	83.86	838,589	83.86	83.86	1000	0.132	0.396	0.132	0.396	1,320	3,960	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	132	396	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	132	396	U
Sum - N2		16.14	100.00												
Sum		100.0													
Total Nitrogen		91.51													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 14

File Name: 2443514A
Description: T-414
Can/Tube#: 725
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:37
Date Analyzed: 12/09/24 **Time:** 14:06
Can Dilution Factor: 1.32

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	396	1,188	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.14	660	1,980	161,411	
630-08-0	Carbon Monoxide	0.013	0.039	ND	132	396	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	132	396	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **15**

Client ID T-415

Analytical Method ASTM D1945

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Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/19/2024 | 224435 | 15

Client: C.E. Schmidt
Client ID: T-415
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 896
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:38
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

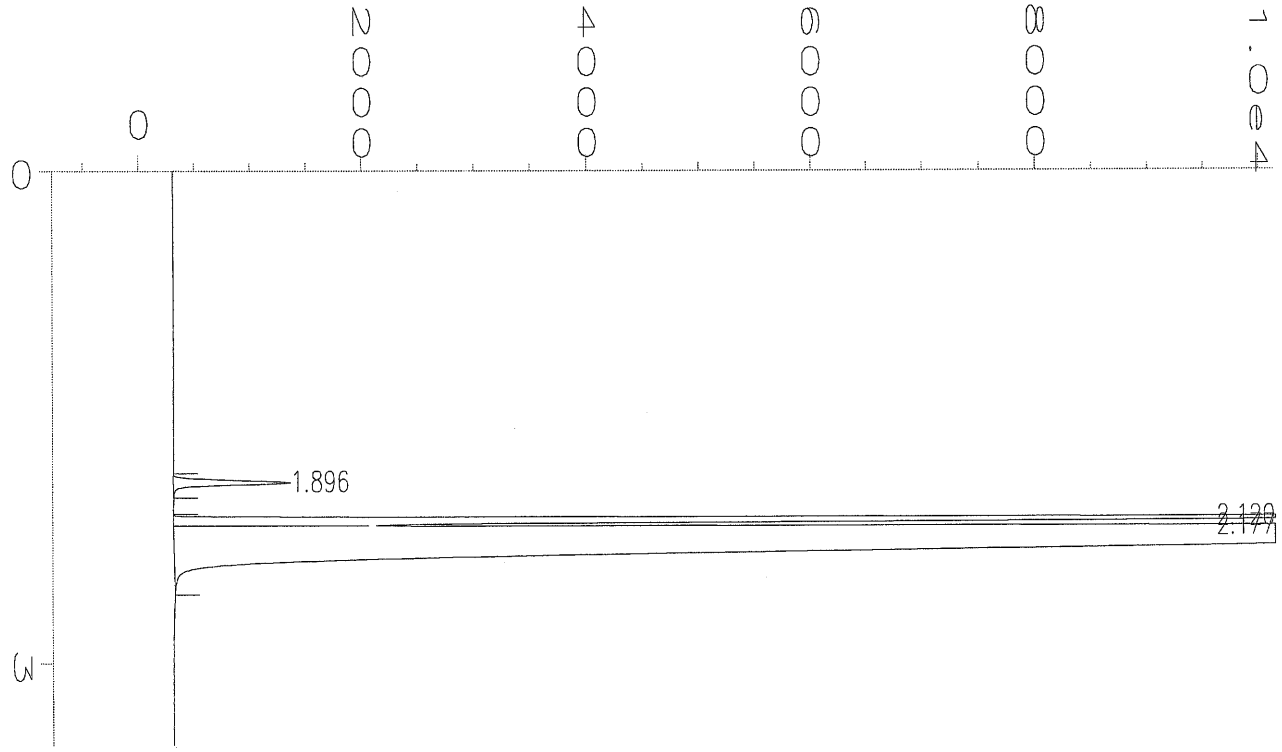
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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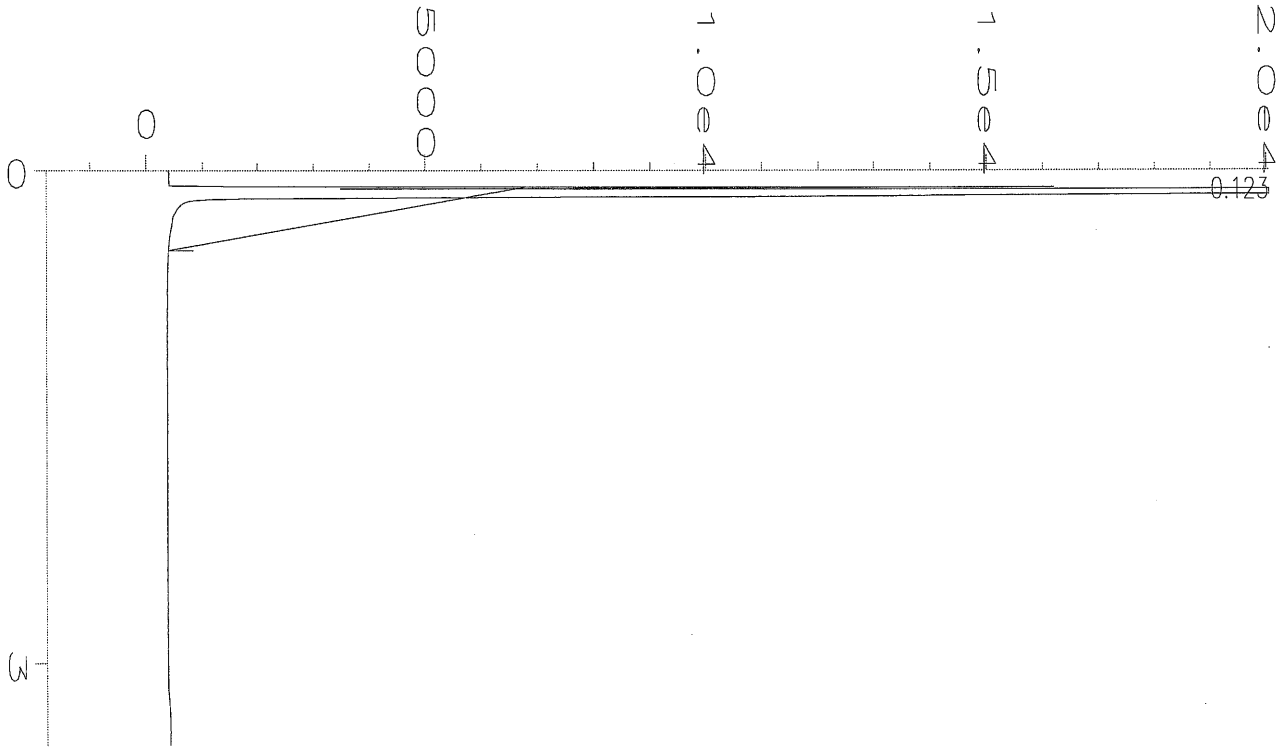
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443515MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-415
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:10 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:14 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443515MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.896	2085	1060	BB	0.031	1.0278
2	2.120	28130	16023	BV	0.029	13.8657
3	2.177	172658	28265	VB	0.081	85.1065

Total area = 202873

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443515PA.D
Operator : DA
Instrument : GCL
Sample Name : T-415
Run Time Bar Code:
Acquired on : 09 Dec 24 02:10 PM
Report Created on: 09 Dec 24 02:14 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443515PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	239705	245692	BB S	0.023	100.0000

Total area = 239705

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443515A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**15**			SF:	**2**
Description:	**T-415**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**13:38**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**14:10**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**896**				
Can Factor	**1.31**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28130**
7727-37-9	Nitrogen	03	2.07	**172658**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 15

File Name:	2443515A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.31				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.118	0.039	0.117	393	1,179	U
Oxygen	32.00	15.99	15.99	15.99	159,853	15.99	15.99	500	0.066	0.197	0.066	0.198	655	1,965	
Nitrogen	28.01	84.01	84.01	84.01	840,147	84.01	84.01	1000	0.131	0.393	0.131	0.393	1,310	3,930	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Sum - N2		15.99	100.00												
Sum		100.0													
Total Nitrogen		90.81													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 15

File Name: 2443515A
Description: T-415
Can/Tube#: 896
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:38
Date Analyzed: 12/09/24 **Time:** 14:10
Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	15.99	655	1,965	159,853	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	131	393	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 16

Client ID T-416

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 16

Client: C.E. Schmidt
Client ID: T-416
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 659
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 13:24
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

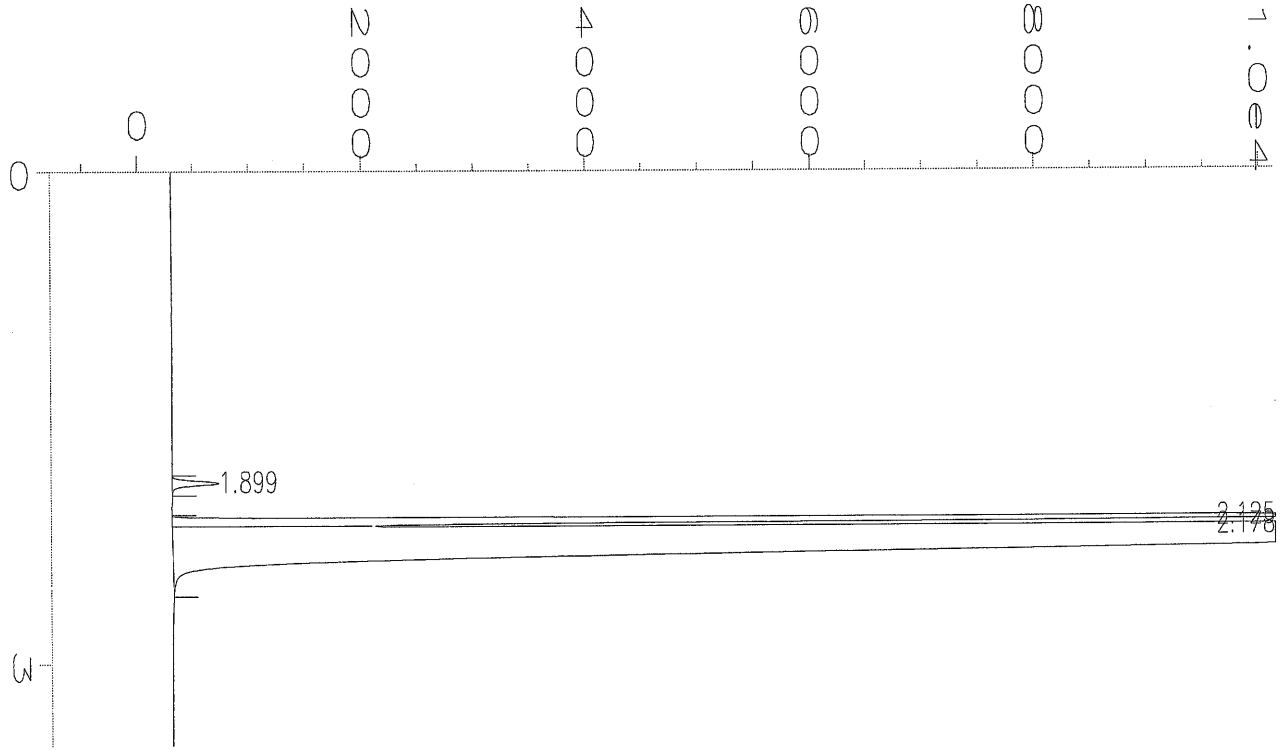
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443516MA.D
Operator : DA
Instrument : GCL
Sample Name : T-416
Run Time Bar Code:
Acquired on : 09 Dec 24 02:14 PM
Report Created on: 09 Dec 24 02:18 PM
Sample Info : SCHMIDT

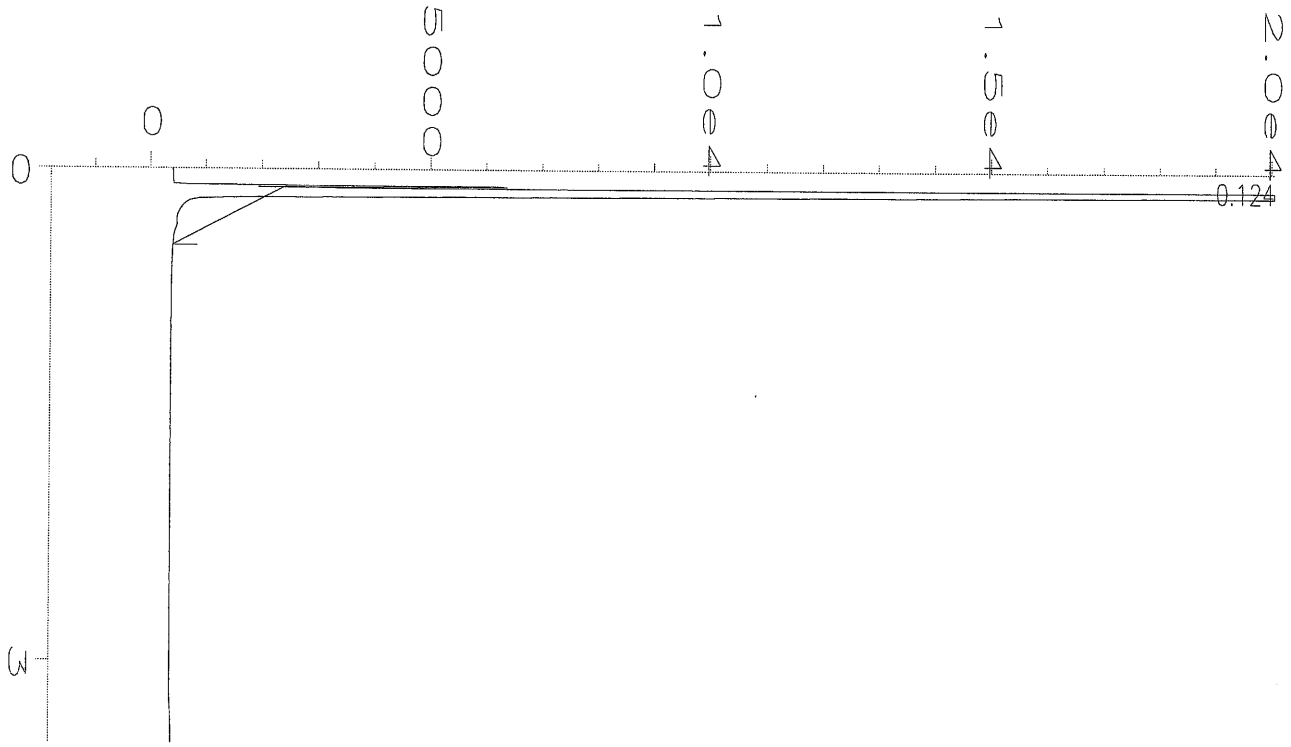
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443516MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.899	839	429	BB	0.030	0.3976
2	2.125	27191	16422	BV	0.027	12.8827
3	2.178	183034	29640	VB	0.085	86.7197

Total area = 211064

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443516PA.D
Operator : DA
Instrument : GCL
Sample Name : T-416
Run Time Bar Code:
Acquired on : 09 Dec 24 02:14 PM
Report Created on: 09 Dec 24 02:18 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443516PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	299443	260420	BB S	0.018	100.0000

Total area = 299443

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443516A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**16**			SF:	**2**
Description:	**T-416**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**13:24**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**14:14**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**659**				
Can Factor	**1.42**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27191**
7727-37-9	Nitrogen	03	2.07	**183034**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443516A	Detect Flag:	ND	**Laboratory Number:**	**16**
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.42				
Air Volume:	0.50 ml	Temp	**25**	C	
Base Volume	0.50 ml	Atm P	**760.0**	torr	
Dilution Factor	1.42	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.043	0.128	0.043	0.129	426	1,278	U
Oxygen	32.00	16.75	16.75	16.75	167,492	16.75	16.75	500	0.071	0.213	0.071	0.213	710	2,130	
Nitrogen	28.01	83.25	83.25	83.25	832,508	83.25	83.25	1000	0.142	0.426	0.142	0.426	1,420	4,260	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.043	0.014	0.042	142	426	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.043	0.014	0.042	142	426	U
Sum - N2		16.75	100.00												
Sum		100.0													
Total Nitrogen		104.35													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 16

File Name: 2443516A
Description: T-416
Can/Tube#: 659
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:24
Date Analyzed: 12/09/24 **Time:** 14:14
Can Dilution Factor: 1.42

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.043	0.129	ND	426	1,278	ND	ND
7782-44-7	Oxygen	0.071	0.213	16.75	710	2,130	167,492	
630-08-0	Carbon Monoxide	0.014	0.042	ND	142	426	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	142	426	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **17**

Client ID T-417

Analytical Method ASTM D1945

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 17

Client: C.E. Schmidt
Client ID: T-417
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 899
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/19/2024 Time: 13:29
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

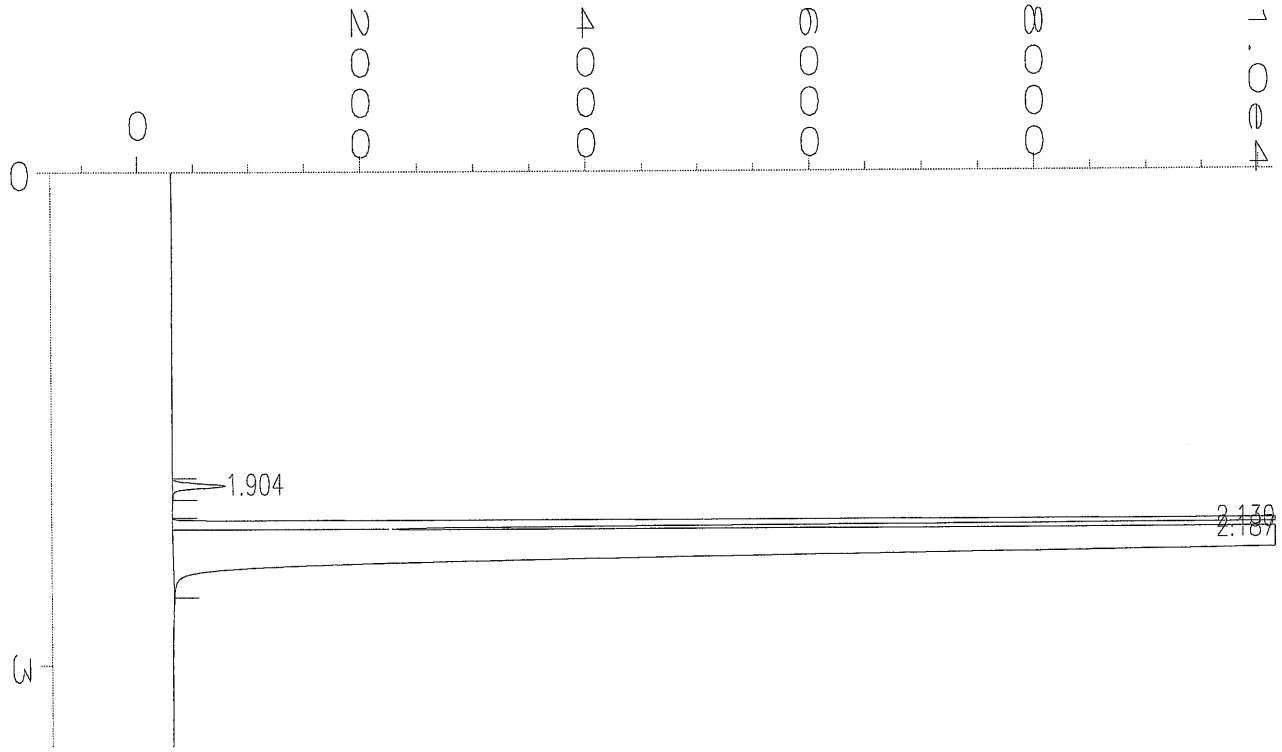
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443517MA.D
Operator : DA
Instrument : GCL
Sample Name : T-417
Run Time Bar Code:
Acquired on : 09 Dec 24 02:19 PM
Report Created on: 09 Dec 24 02:23 PM
Sample Info : SCHMIDT

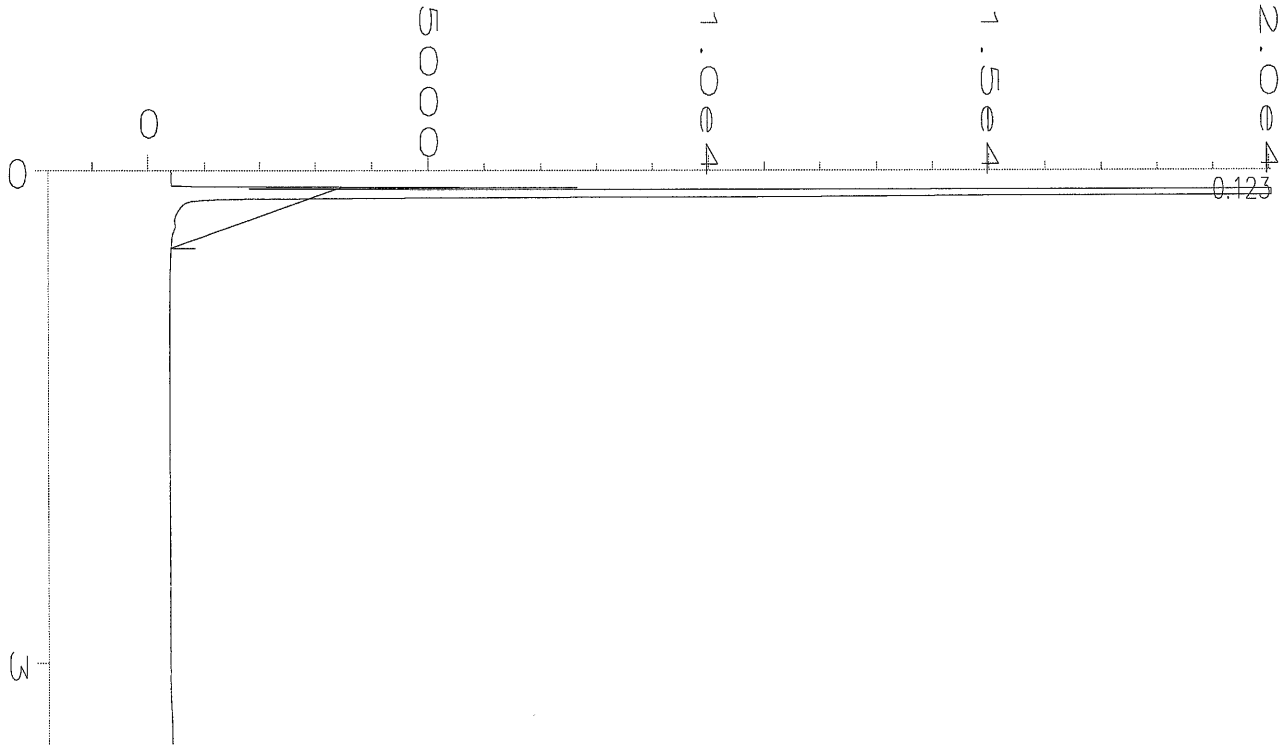
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443517MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.904	955	483	BB	0.031	0.4551
2	2.130	29557	16695	BV	0.029	14.0804
3	2.187	179402	28721	VB	0.085	85.4646

Total area = 209914

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443517PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-417
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:19 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:23 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443517PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	288269	257220	BB S	0.026	100.0000

Total area = 288269

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443517A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**17**			SF:	**2**
Description:	**T-417**			Not Detected Flag:	**ND**
Date Sampled:	**11/19/24**	Time:	**13:29**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**14:19**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**659**				
Can Factor	**1.30**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29557**
7727-37-9	Nitrogen	03	2.07	**179402**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 17

File Name:	2443517A	Detect Flag:	ND
QCBatch	120924-GCO	Report Normalized:	**No**
Can Factor	1.30		
Air Volume:	0.50 ml	Temp	**25** C
Base Volume	0.50 ml	Atm P	**760.0** torr
Dilution Factor	1.30	Gas Constant	24.4
Gas Constant:	24.4	RL Factor	**3**
Decimal Places:	2		

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.117	0.039	0.117	390	1,170	U
Oxygen	32.00	16.67	16.67	16.67	166,680	16.67	16.67	500	0.065	0.195	0.065	0.195	650	1,950	
Nitrogen	28.01	83.33	83.33	83.33	833,320	83.33	83.33	1000	0.130	0.390	0.130	0.390	1,300	3,900	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	130	390	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	130	390	U
Sum - N2		16.67	100.00												
Sum		100.0													
Total Nitrogen		93.63													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 17

File Name: 2443517A
Description: T-417
Can/Tube#: 659
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:29
Date Analyzed: 12/09/24 **Time:** 14:19
Can Dilution Factor: 1.30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	390	1,170	ND	ND
7782-44-7	Oxygen	0.065	0.195	16.67	650	1,950	166,680	
630-08-0	Carbon Monoxide	0.013	0.039	ND	130	390	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	130	390	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 18

Client ID T-418

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/19/2024

224435 18

Client: C.E. Schmidt
Client ID: T-418
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 522
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/19/2024 Time: 13:40
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

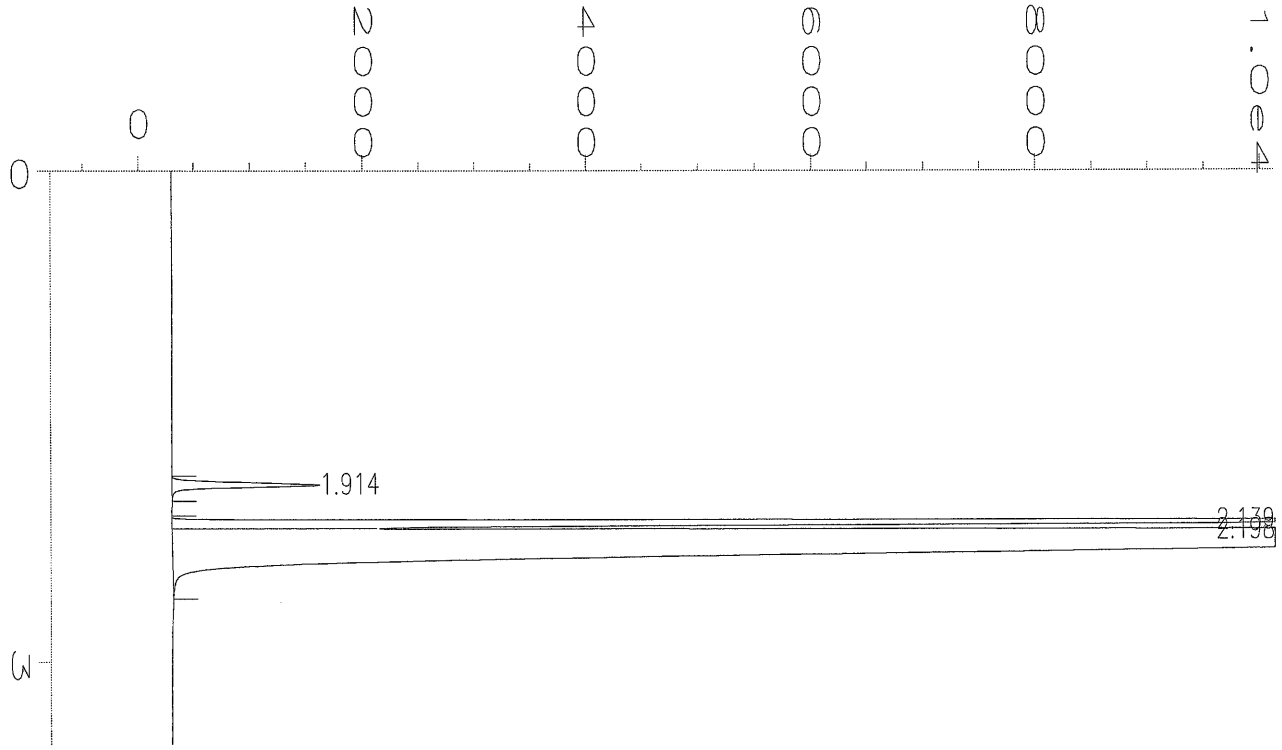
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

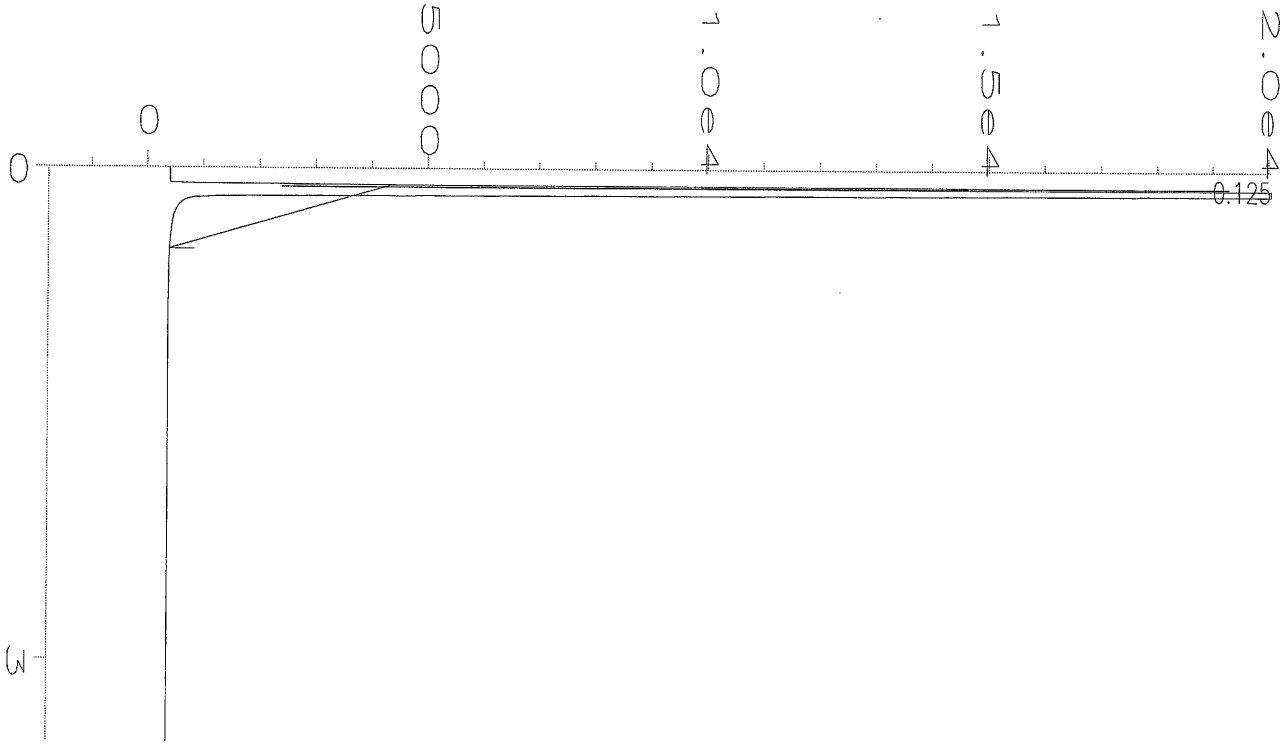
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443518MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-418
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:23 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:27 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443518MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.914	2628	1320	BB	0.031	1.3080
2	2.139	28959	15889	BV	0.030	14.4120
3	2.198	169347	27677	VB	0.083	84.2800

Total area = 200934

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443518PA.D
Operator : DA
Instrument : GCL
Sample Name : T-418
Run Time Bar Code:
Acquired on : 09 Dec 24 02:23 PM
Report Created on: 09 Dec 24 02:27 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443518PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	258991	263348	BB S	0.015	100.0000

Total area = 258991

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443518A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**18**		SF:	**2**	
Description:	**T-418**		Not Detected Flag:	**ND**	
Date Sampled:	**11/19/24**	Time: **13:40**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:23**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**522**				
Can Factor	**1.25**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28959**
7727-37-9	Nitrogen	03	2.07	**169347**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

File Name:	2443518A		
QCBatch	120924-GCO		
Can Factor	1.25		
Air Volume:	0.50	ml	
Base Volume	0.50	ml	
Dilution Factor	1.25		
Gas Constant:	24.4		
Decimal Places:	2		

Detect Flag: ND
Report Normalized: **No**

Temp	**25**	C
Atm P	**760.0**	torr
Gas Constant	24.4	
RL Factor	**3**	

SDG: 224435
Laboratory Number: 18

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.113	0.038	0.114	375	1,125	U
Oxygen	32.00	15.70	15.70	15.70	157,027	15.70	15.70	500	0.063	0.188	0.063	0.189	625	1,875	
Nitrogen	28.01	84.30	84.30	84.30	842,973	84.30	84.30	1000	0.125	0.375	0.125	0.375	1,250	3,750	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	125	375	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	125	375	U
Sum - N2		15.70	100.00												
Sum		100.0													
Total Nitrogen		84.99													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 18

File Name: 2443518A
Description: T-418
Can/Tube#: 522
QC_Batch: 120924-GCO

Date Sampled: 11/19/24 **Time:** 13:40
Date Analyzed: 12/09/24 **Time:** 14:23
Can Dilution Factor: 1.25

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	375	1,125	ND	ND
7782-44-7	Oxygen	0.063	0.189	15.70	625	1,875	157,027	
630-08-0	Carbon Monoxide	0.013	0.039	ND	125	375	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	125	375	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **19**

Client ID T-501

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 **19**

Client:	C.E. Schmidt	**MS Load Vol:**	300
Client ID:	T-501	**MS SIM Vol:**	
Description:		**GCK Load Vol:**	200
Project Name:	Chiquita Canyon	**GCP Load Vol:**	
EAS Project:	17807 **EAS PM:** David Atkinson	**Sample Volume:**	

Media:	CAN	**Can Pressurization:**		**Sampled:** 11/20/2024	**Time:** 8:30
Can Number:	664			**Received:** 11/21/2024	**Time:** 13:00
FC Number:	0		**Date:**		
TAT Working:		**Initial :**	721		
Sampling Time:		**Final:**	923		
Flow:		**Factor:**	1.28		

LABORATORY **Analytical Test:** **Sample Location:**

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions **Sample Type:**

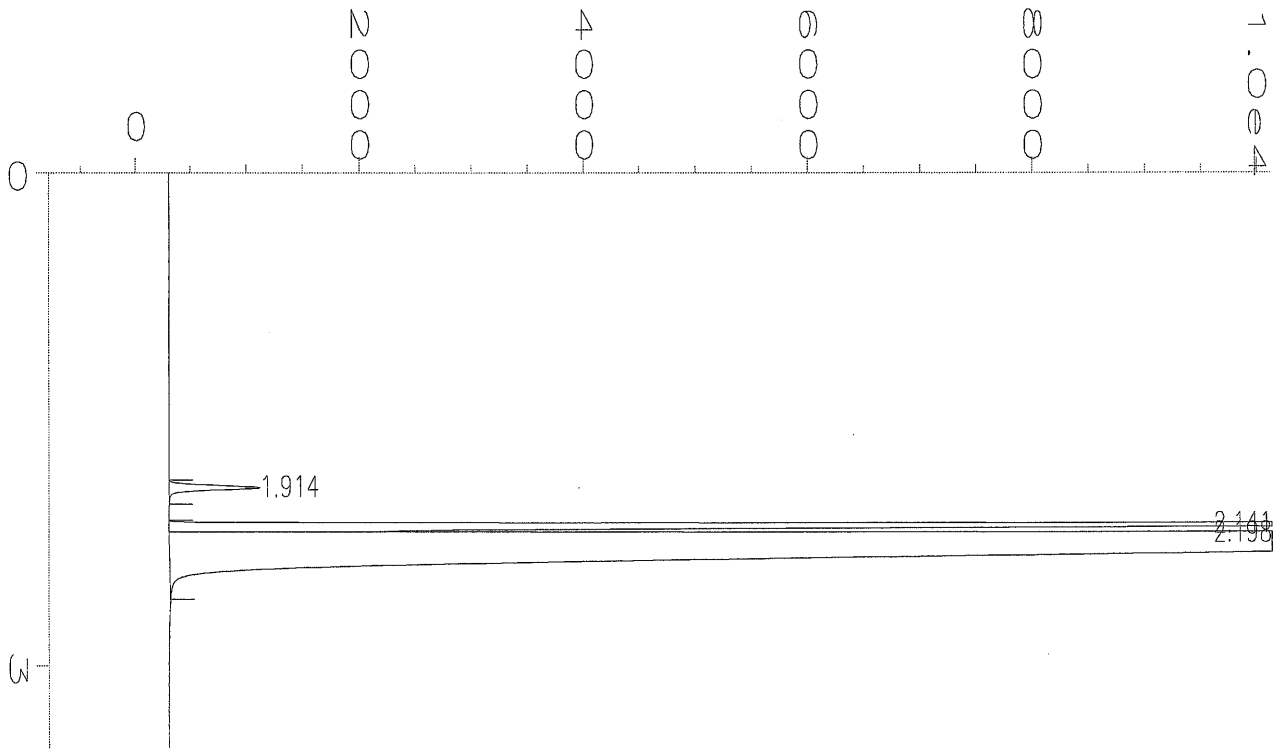
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443519MA.D
Operator : DA
Instrument : GCL
Sample Name : T-501
Run Time Bar Code:
Acquired on : 09 Dec 24 02:28 PM
Report Created on: 09 Dec 24 02:31 PM
Sample Info : SCHMIDT

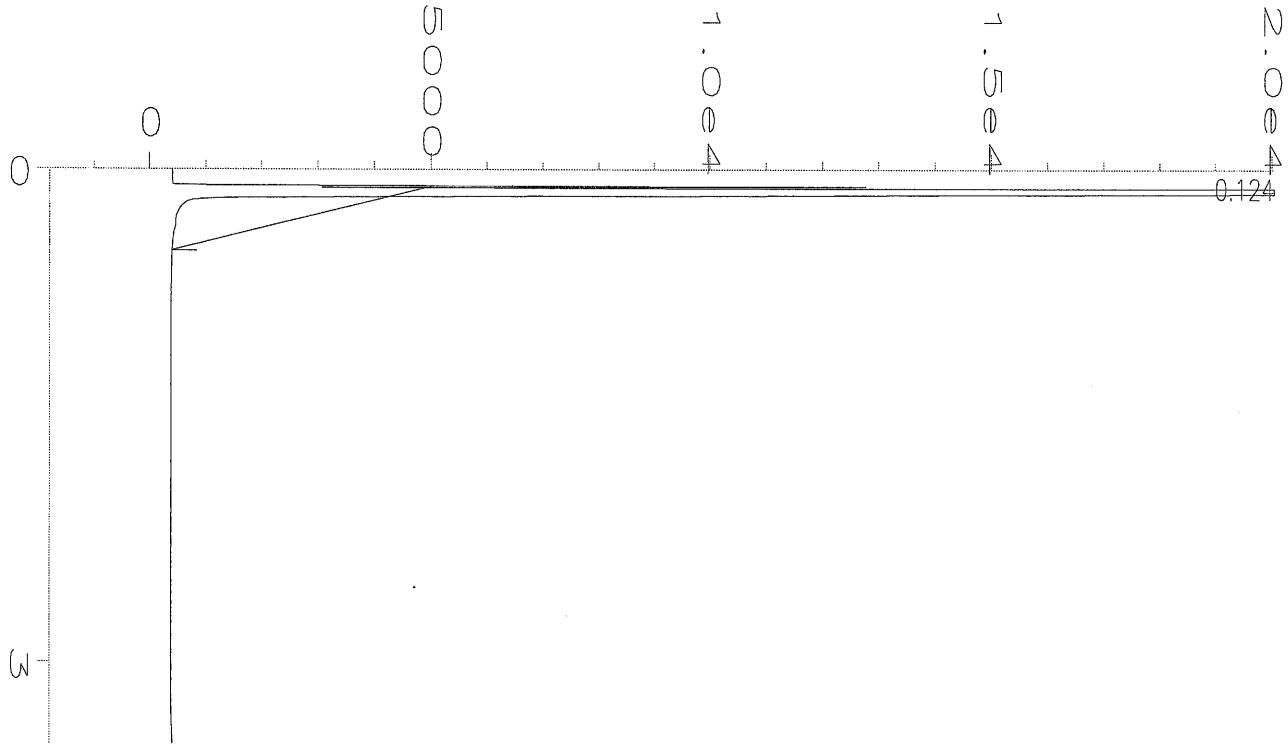
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443519MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.914	1643	822	BB	0.031	0.7958
2	2.141	29675	16385	BV	0.030	14.3731
3	2.198	175144	28411	VB	0.083	84.8311

Total area = 206462

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443519PA.D
Operator : DA
Instrument : GCL
Sample Name : T-501
Run Time Bar Code:
Acquired on : 09 Dec 24 02:28 PM
Report Created on: 09 Dec 24 02:31 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443519PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	259093	251491	BB S	0.016	100.0000

Total area = 259093

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443519A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**19**		SF:	**2**	
Description:	**T-501**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **8:30**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:28**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**664**				
Can Factor	**1.28**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29675**
7727-37-9	Nitrogen	03	2.07	**175144**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443519A	Detect Flag:	ND	**Laboratory Number:**	**19**
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.28				
Air Volume:	0.50 ml	Temp	**25**	C	
Base Volume	0.50 ml	Atm P	**760.0**	torr	
Dilution Factor	1.28	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.115	0.038	0.114	384	1,152	U
Oxygen	32.00	16.48	16.48	16.48	164,771	16.48	16.48	500	0.064	0.192	0.064	0.192	640	1,920	
Nitrogen	28.01	83.52	83.52	83.52	835,229	83.52	83.52	1000	0.128	0.384	0.128	0.384	1,280	3,840	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Sum - N2		16.48	100.00												
Sum		100.0													
Total Nitrogen		90.00													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 19

File Name: 2443519A
Description: T-501
Can/Tube#: 664
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:30
Date Analyzed: 12/09/24 **Time:** 14:28
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.48	640	1,920	164,771	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **20**

Client ID T-502

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 20

Client: C.E. Schmidt
Client ID: T-502
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 716
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:37
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

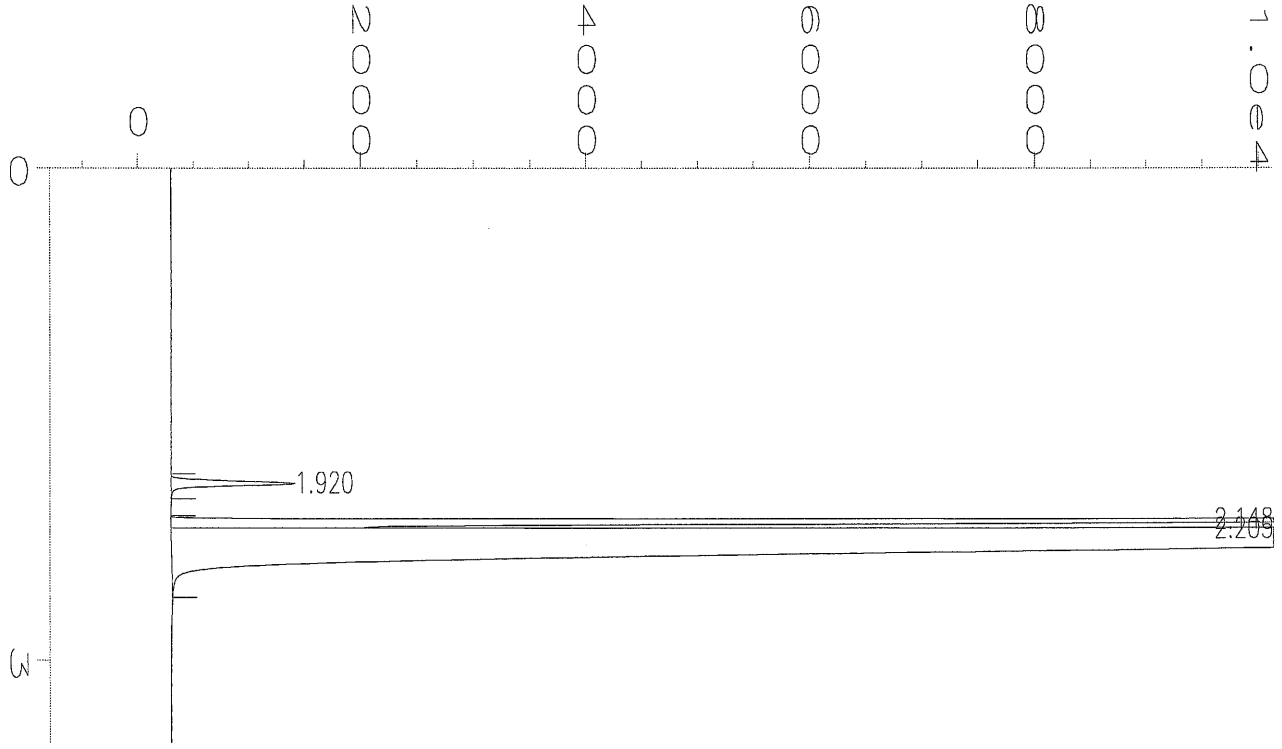
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

==========

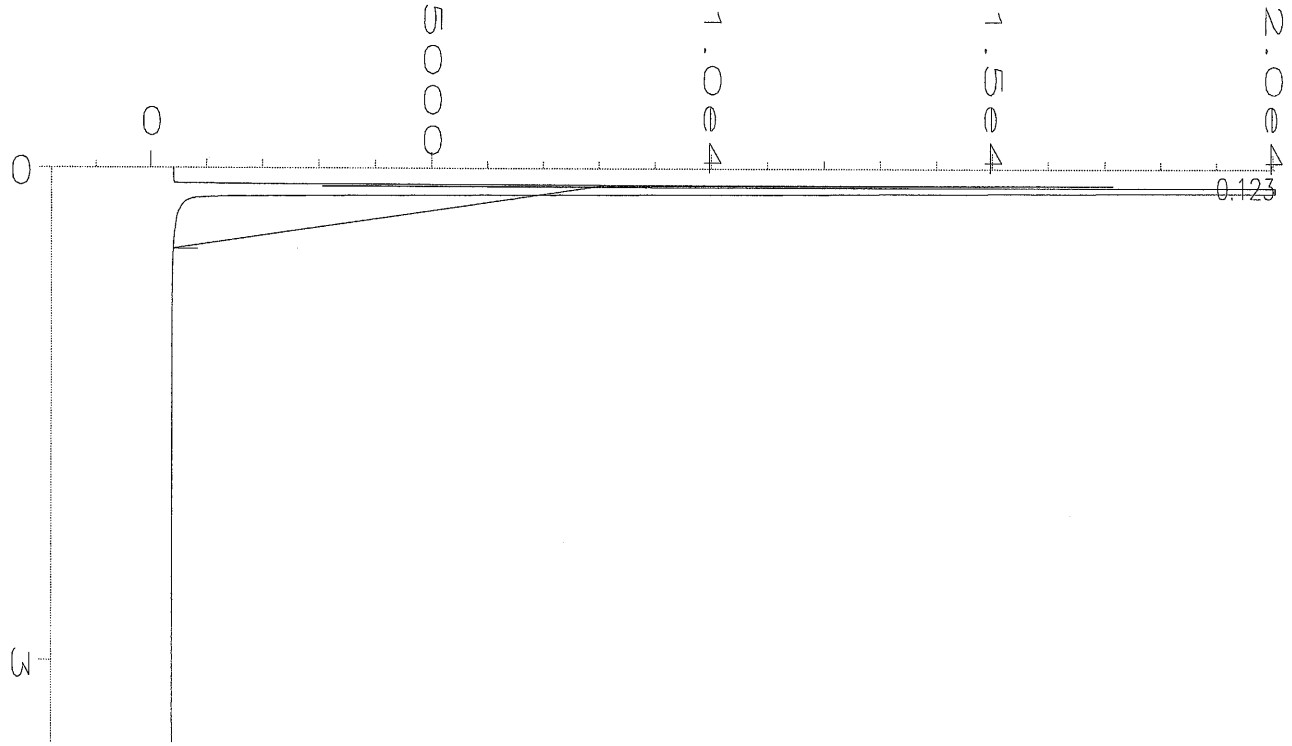
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443520MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-502
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:32 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:36 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443520MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.920	2243	1119	BB	0.031	1.1055
2	2.148	27708	15822	BV	0.029	13.6572
3	2.205	172930	28158	VB	0.083	85.2374

Total area = 202881

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443520PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-502
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:32 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:36 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443520PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	219412	241100	BB S	0.023	100.0000

Total area = 219412

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443520A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**20**		SF:	**2**	
Description:	**T-502**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **8:37**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:32**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**716**				
Can Factor	**1.33**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27708**
7727-37-9	Nitrogen	03	2.07	**172930**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443520A	Detect Flag:	ND	**Laboratory Number:**	**20**
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.33				
Air Volume:	0.50 ml	Temp	**25**	C	
Base Volume	0.50 ml	Atm P	**760.0**	torr	
Dilution Factor	1.33	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.040	0.120	0.040	0.120	399	1,197	U
Oxygen	32.00	15.99	15.99	15.99	159,859	15.99	15.99	500	0.067	0.200	0.067	0.201	665	1,995	
Nitrogen	28.01	84.01	84.01	84.01	840,141	84.01	84.01	1000	0.133	0.399	0.133	0.399	1,330	3,990	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	133	399	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	133	399	U
Sum - N2		15.99	100.00												
Sum		100.0													
Total Nitrogen		92.34													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 20

File Name: 2443520A
Description: T-502
Can/Tube#: 716
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:37
Date Analyzed: 12/09/24 **Time:** 14:32
Can Dilution Factor: 1.33

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.040	0.120	ND	399	1,197	ND	ND
7782-44-7	Oxygen	0.067	0.201	15.99	665	1,995	159,859	
630-08-0	Carbon Monoxide	0.013	0.039	ND	133	399	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	133	399	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 21

Client ID T-503

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 21

Client: C.E. Schmidt
Client ID: T-503
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 751
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:32
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

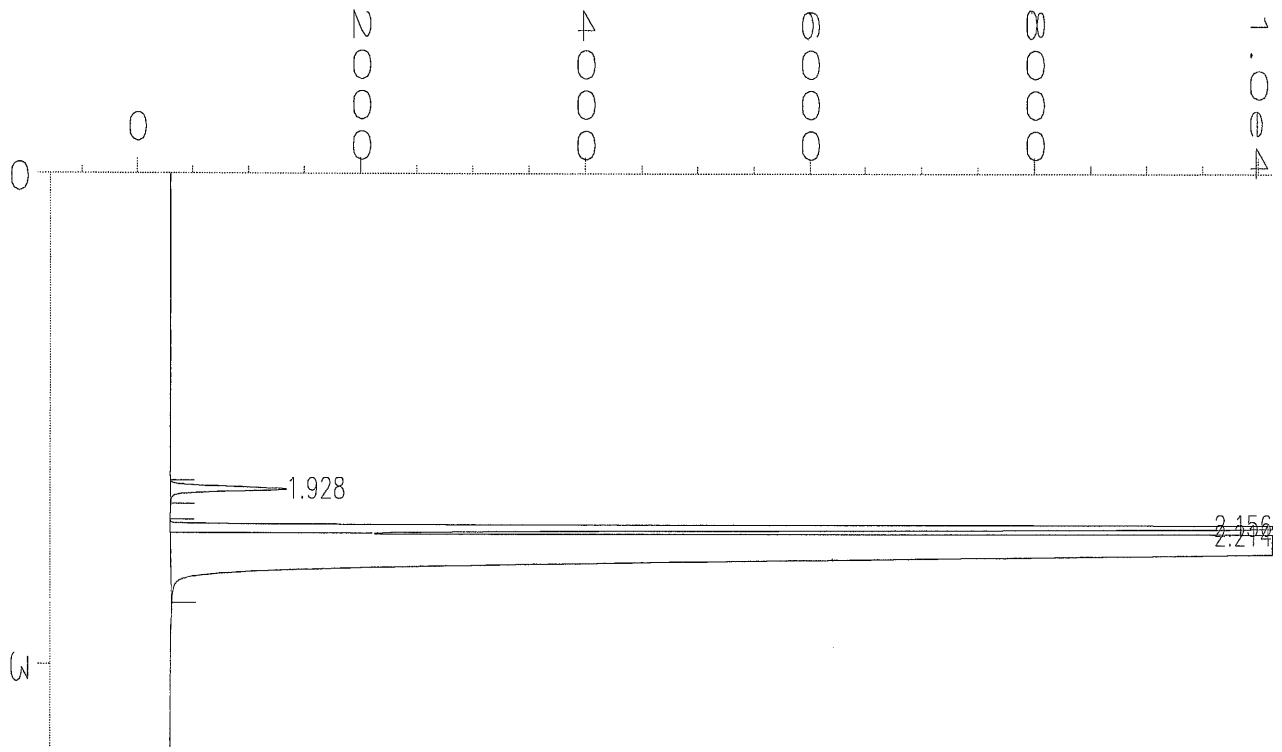
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443521MA.D
Operator : DA
Instrument : GCL
Sample Name : T-503
Run Time Bar Code:
Acquired on : 09 Dec 24 02:38 PM
Report Created on: 09 Dec 24 02:42 PM
Sample Info : SCHMIDT

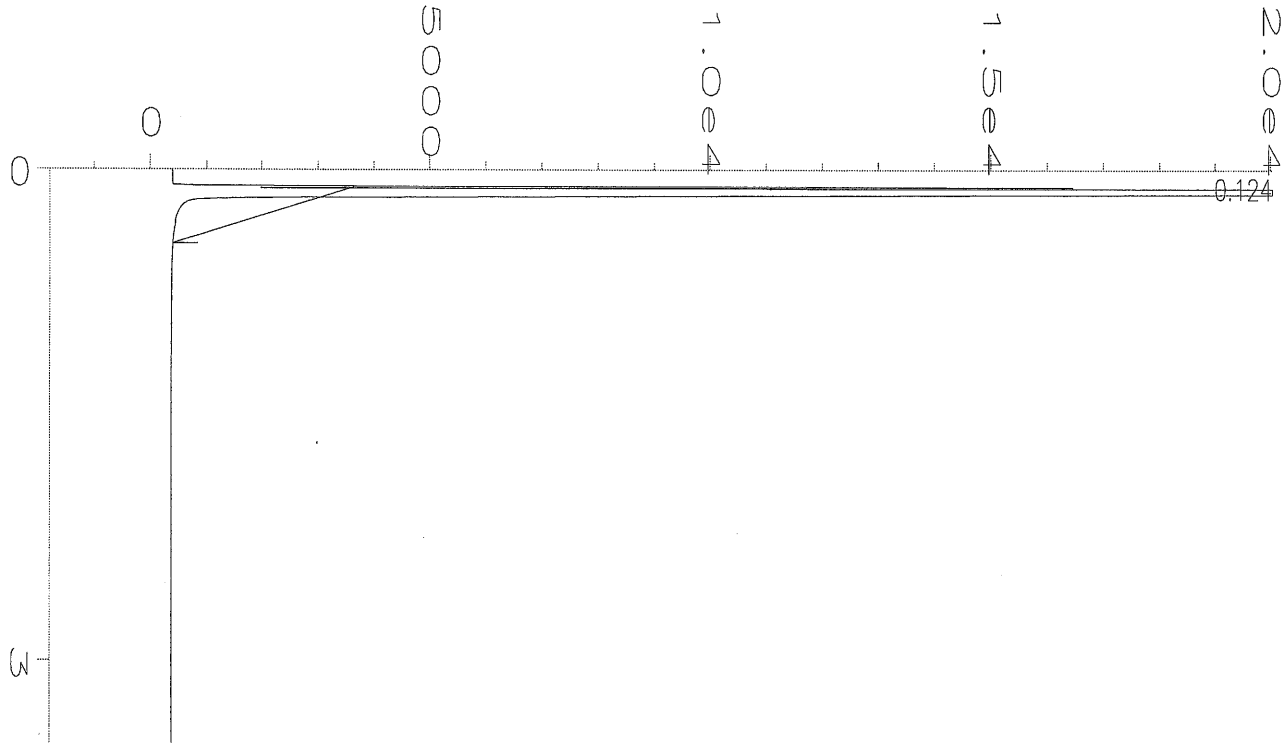
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443521MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.928	2119	1054	BB	0.031	1.0368
2	2.156	28673	15872	BV	0.030	14.0297
3	2.214	173584	27857	VB	0.085	84.9334

Total area = 204376

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443521PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-503
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:38 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:42 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443521PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	279309	261937	BB S	0.017	100.0000

Total area = 279309

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443521A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**21**		SF:	**2**	
Description:	**T-503**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **8:32**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:38**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**751**				
Can Factor	**1.28**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28673**
7727-37-9	Nitrogen	03	2.07	**173584**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

Approved for Release

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 21

File Name:	2443521A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.28				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.115	0.038	0.114	384	1,152	U
Oxygen	32.00	15.92	15.92	15.92	159,207	15.92	15.92	500	0.064	0.192	0.064	0.192	640	1,920	
Nitrogen	28.01	84.08	84.08	84.08	840,793	84.08	84.08	1000	0.128	0.384	0.128	0.384	1,280	3,840	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Sum - N2		15.92	100.00												
Sum		100.0													
Total Nitrogen		89.20													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 21

File Name: 2443521A
Description: T-503
Can/Tube#: 751
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:32
Date Analyzed: 12/09/24 **Time:** 14:38
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	15.92	640	1,920	159,207	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **22**

Client ID T-504

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 22

Client: C.E. Schmidt
Client ID: T-504
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 644
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 8:44
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

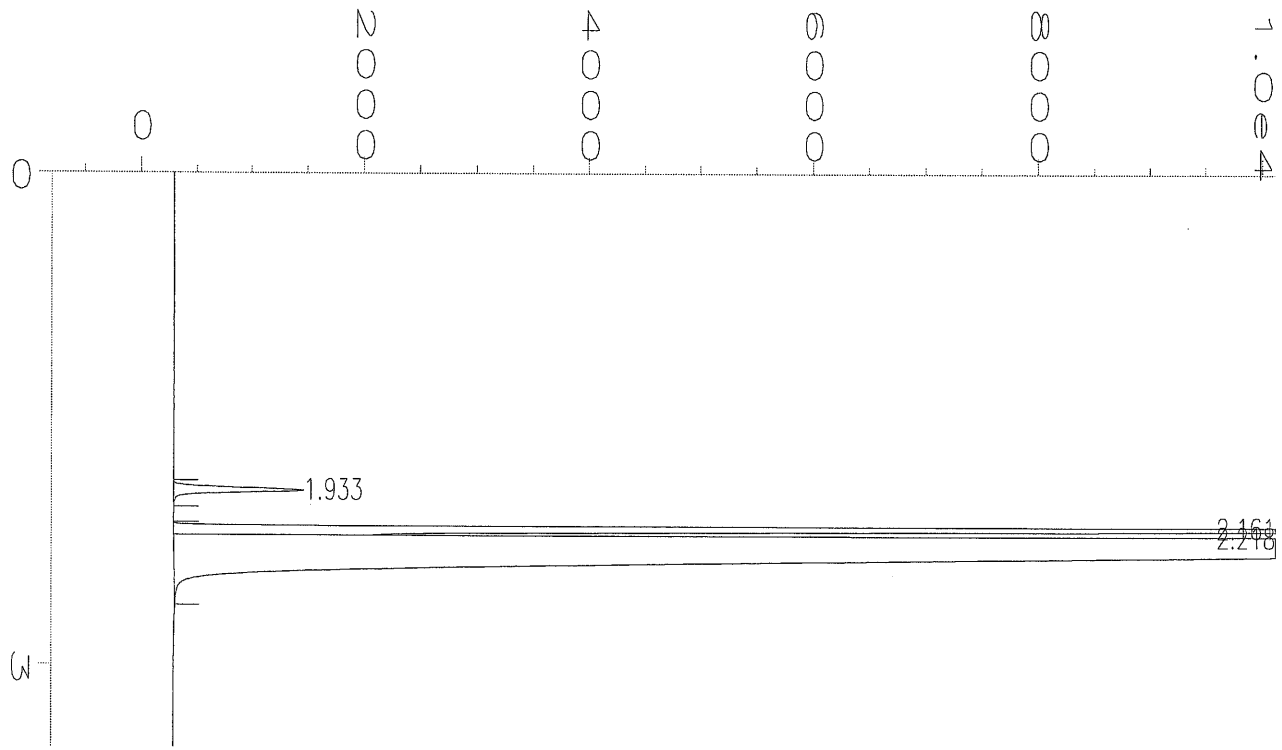
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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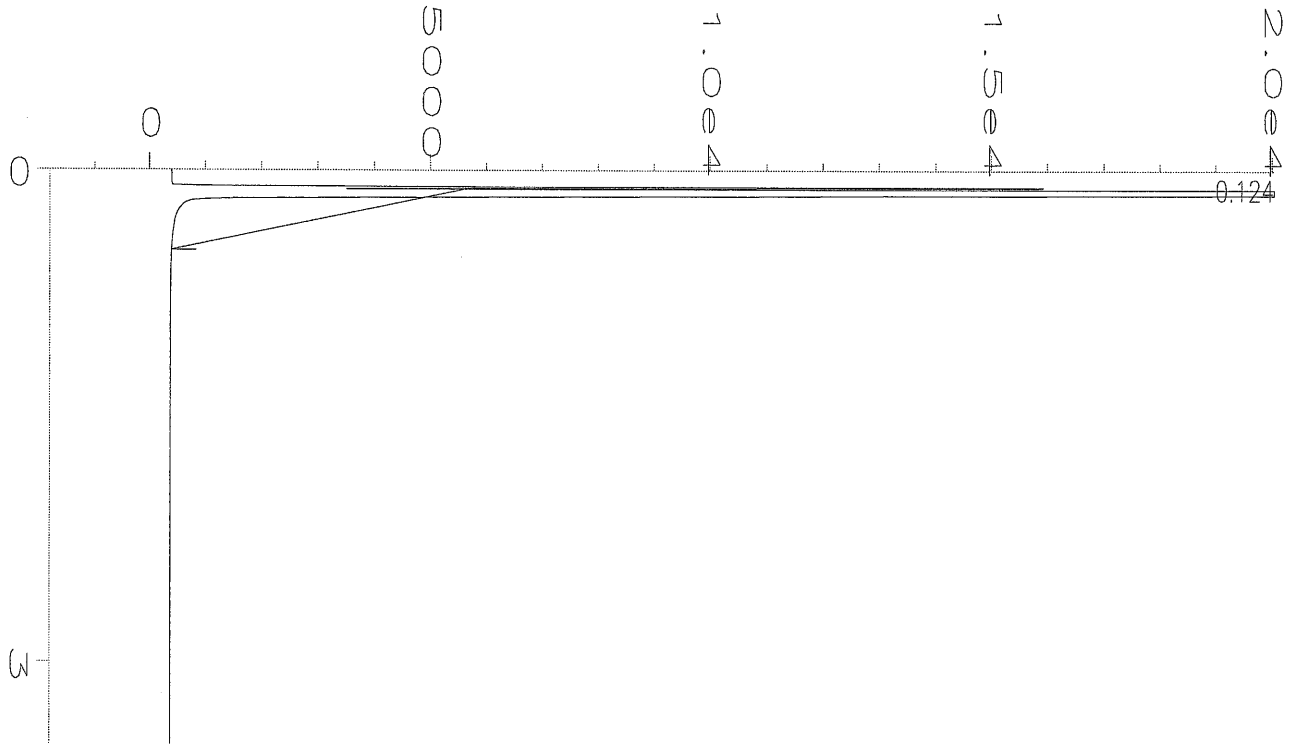
Data File Name : C:\GCCHEM\1\DATA\12094GCO\443522MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-504
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 02:43 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 02:46 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443522MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.933	2376	1178	BB	0.031	1.1714
2	2.161	28910	15886	BV	0.030	14.2554
3	2.218	171514	27973	VB	0.089	84.5732

Total area = 202800

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443522PA.D
Operator : DA
Instrument : GCL
Sample Name : T-504
Run Time Bar Code:
Acquired on : 09 Dec 24 02:43 PM
Report Created on: 09 Dec 24 02:46 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443522PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	247702	252804	BB S	0.024	100.0000

Total area = 247702

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443522A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**22**		SF:	**2**	
Description:	**T-504**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **8:44**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:43**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**644**				
Can Factor	**1.28**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28910**
7727-37-9	Nitrogen	03	2.07	**171514**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443522A	Detect Flag:	ND	**Laboratory Number:**	**22**
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.28				
Air Volume:	0.50 ml	Temp	**25** C		
Base Volume	0.50 ml	Atm P	**760.0** torr		
Dilution Factor	1.28	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.115	0.038	0.114	384	1,152	U
Oxygen	32.00	16.05	16.05	16.05	160,523	16.05	16.05	500	0.064	0.192	0.064	0.192	640	1,920	
Nitrogen	28.01	83.95	83.95	83.95	839,477	83.95	83.95	1000	0.128	0.384	0.128	0.384	1,280	3,840	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Sum - N2		16.05	100.00												
Sum		100.0													
Total Nitrogen		88.14													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 22

File Name: 2443522A
Description: T-504
Can/Tube#: 644
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 8:44
Date Analyzed: 12/09/24 **Time:** 14:43
Can Dilution Factor: 1.28

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.05	640	1,920	160,523	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	128	384	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 23

Client ID T-505

Analytical Method ASTM D1945

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Analytical Report
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 23

Client: C.E. Schmidt
Client ID: T-505
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 883
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:55
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

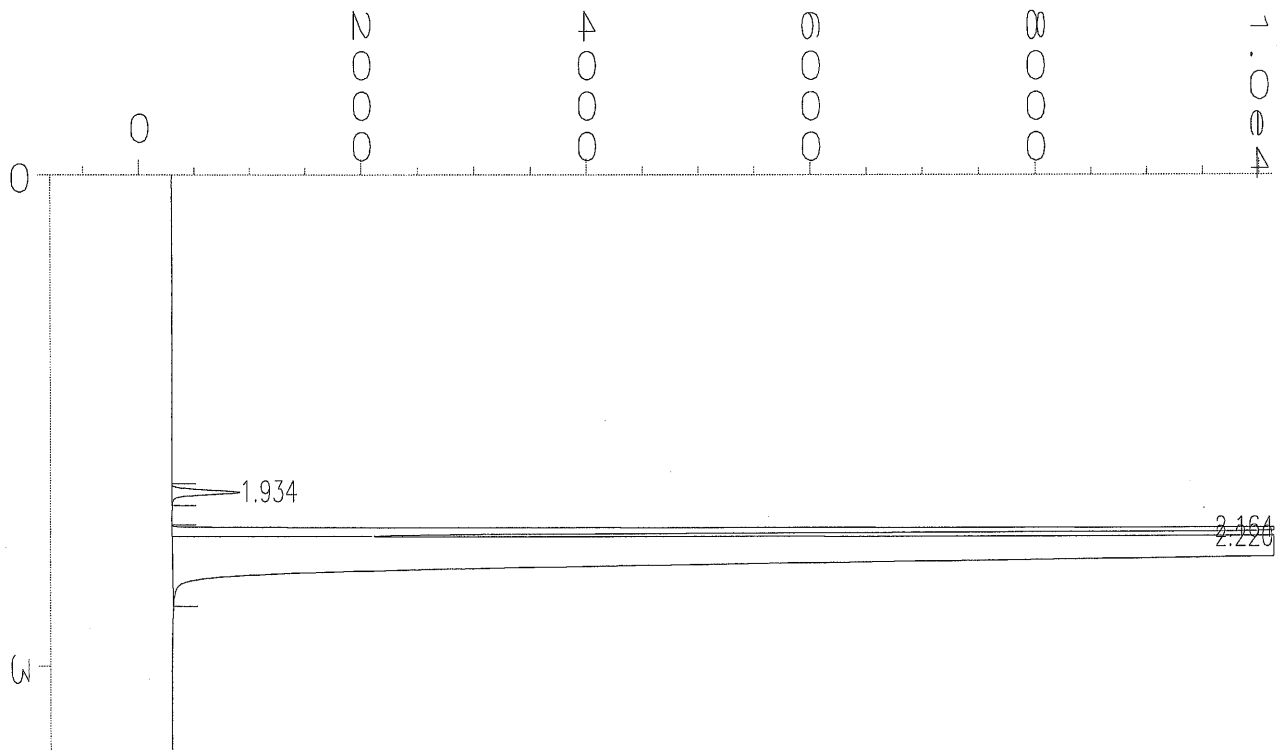
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443523MA.D
Operator : DA
Instrument : GCL
Sample Name : T-505
Run Time Bar Code:
Acquired on : 09 Dec 24 02:47 PM
Report Created on: 09 Dec 24 02:51 PM
Sample Info : SCHMIDT

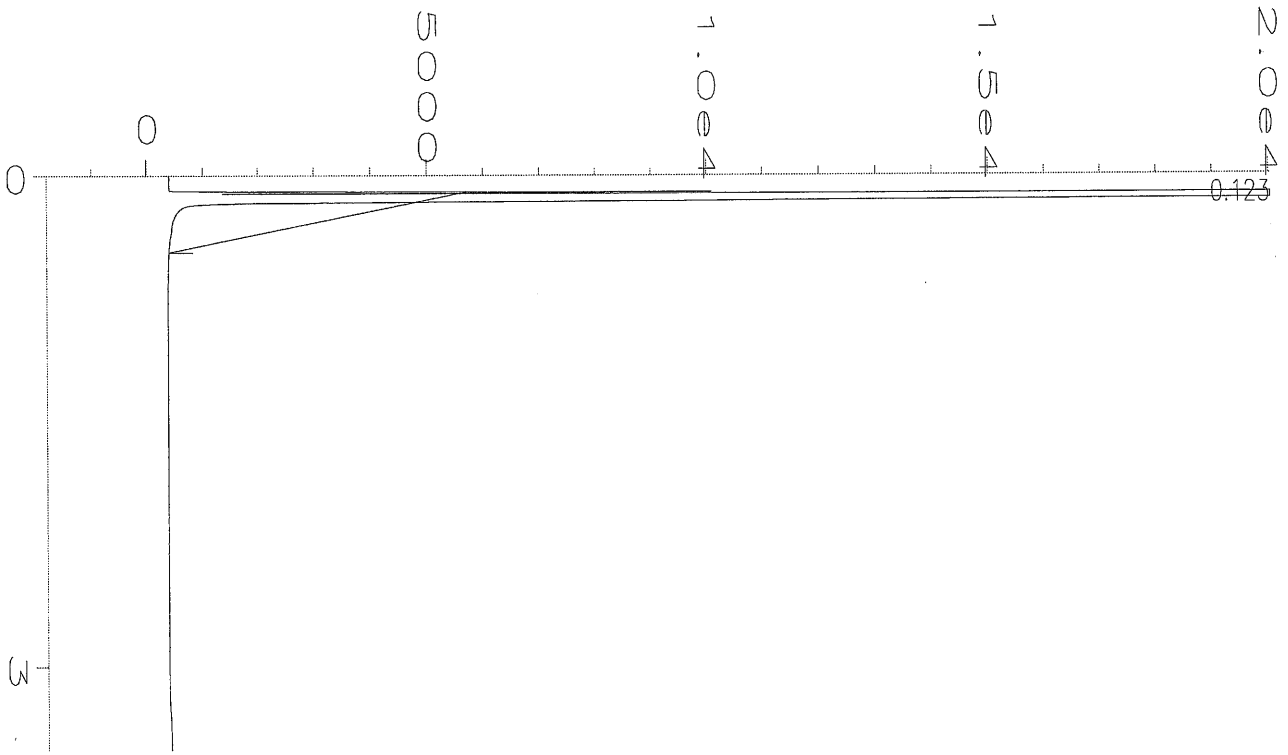
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443523MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.934	1236	614	BB	0.031	0.5917
2	2.164	28166	16015	BV	0.029	13.4857
3	2.220	179459	28374	VB	0.084	85.9226

Total area = 208861

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443523PA.D
Operator : DA
Instrument : GCL
Sample Name : T-505
Run Time Bar Code:
Acquired on : 09 Dec 24 02:47 PM
Report Created on: 09 Dec 24 02:51 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443523PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.123	249307	240651	BB S	0.025	100.0000

Total area = 249307

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443523A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**23**		SF:	**2**	
Description:	**T-505**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **10:55**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **14:47**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**883**				
Can Factor	**1.35**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28166**
7727-37-9	Nitrogen	03	2.07	**179459**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 23

File Name:	2443523A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.35				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.35		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	405	1,215	U
Oxygen	32.00	16.49	16.49	16.49	164,945	16.49	16.49	500	0.068	0.203	0.068	0.204	675	2,025	
Nitrogen	28.01	83.51	83.51	83.51	835,055	83.51	83.51	1000	0.135	0.405	0.135	0.405	1,350	4,050	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	135	405	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	135	405	U
Sum - N2		16.49	100.00												
Sum		100.0													
Total Nitrogen		97.27													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 23

File Name: 2443523A
Description: T-505
Can/Tube#: 883
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:55
Date Analyzed: 12/09/24 **Time:** 14:47
Can Dilution Factor: 1.35

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	405	1,215	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.49	675	2,025	164,945	
630-08-0	Carbon Monoxide	0.014	0.042	ND	135	405	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	135	405	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 24

Client ID T-506

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 24

Client: C.E. Schmidt
Client ID: T-506
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 784
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:11
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

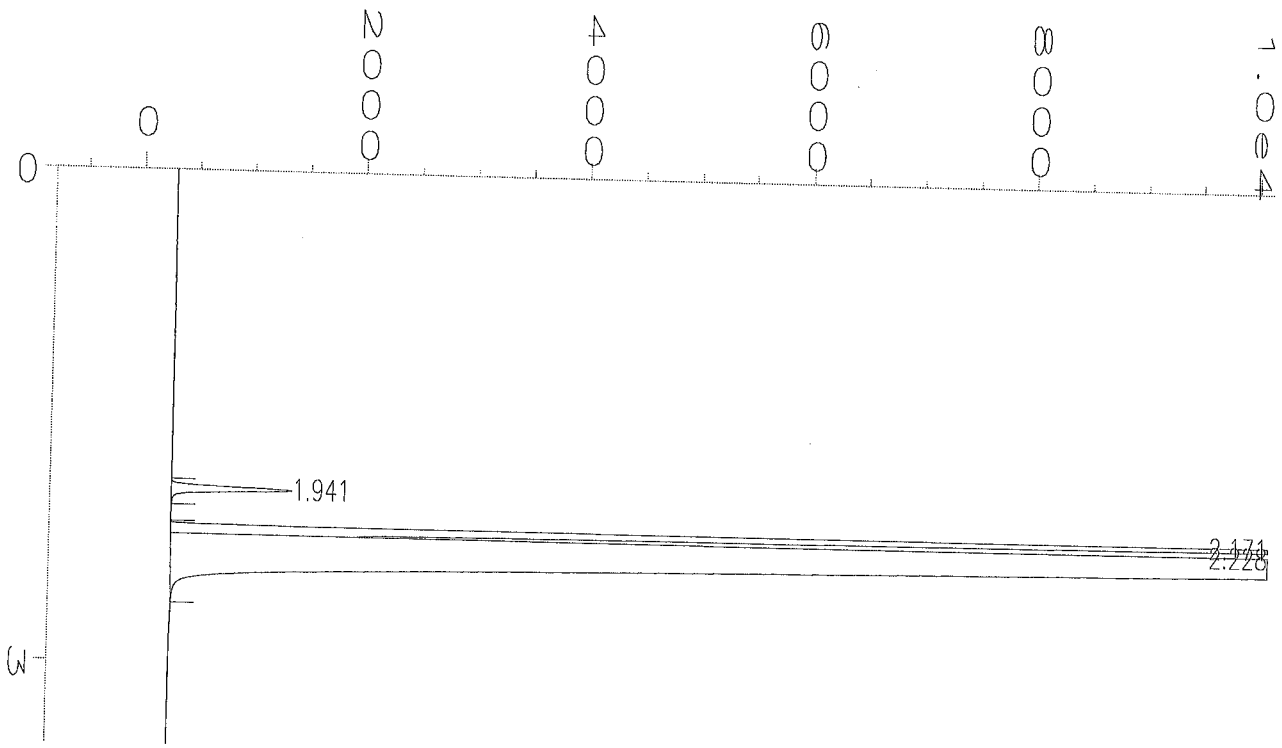
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443524MA.D
Operator : DA
Instrument : GCL
Sample Name : T-506
Run Time Bar Code:
Acquired on : 09 Dec 24 02:51 PM
Report Created on: 09 Dec 24 02:55 PM
Sample Info : SCHMIDT

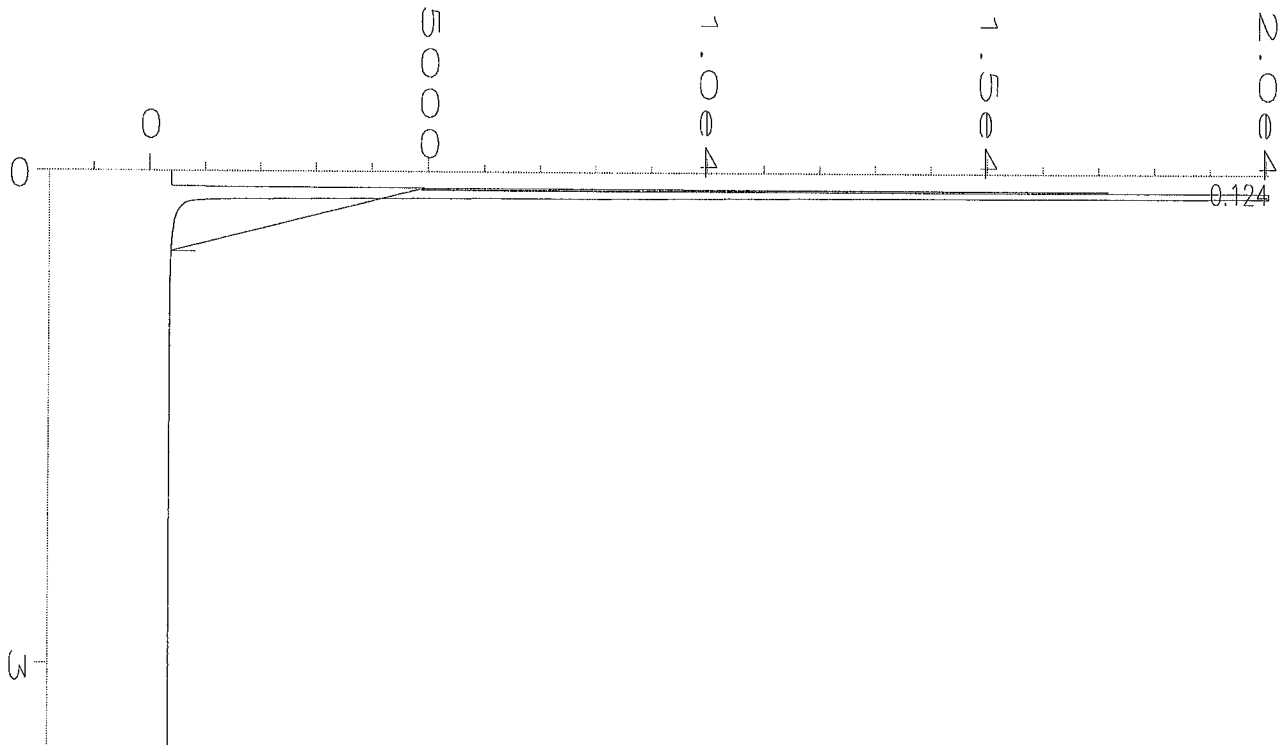
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443524MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.941	2235	1098	BB	0.032	1.0965
2	2.171	27322	15515	BV	0.029	13.4039
3	2.228	174282	27990	VB	0.084	85.4997

Total area = 203839

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443524PA.D
Operator : DA
Instrument : GCL
Sample Name : T-506
Run Time Bar Code:
Acquired on : 09 Dec 24 02:51 PM
Report Created on: 09 Dec 24 02:55 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443524PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	251963	248473	BB S	0.016	100.0000

Total area = 251963

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2410924A**		Method:	**D1945**	
SDG:	**224109**		Cal Update:	**4/19/24**	
Lab Id:	**24**		SF:	**2**	
Description:	**T-206**		Not Detected Flag:	**ND**	
Date Sampled:	**03/20/24**	Time: **10:49**	Matrix	**AA**	
Date Received:	**03/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**04/19/24**	Time: **15:38**	Instrument	**GCO**	
QCBatch	**041924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**759**				
Can Factor	**1.36**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample RT	Sample Area
1333-74-0	Hydrogen	01	1.72		**0**
7782-44-7	Oxygen	02	1.99	1.94	**32512**
7727-37-9	Nitrogen	03	2.19	2.10	**176075**
74-82-8	Methane	04	2.85	2.80	**0**
630-08-0	Carbon Monoxide	05	2.99		**0**
124-38-9	Carbon Dioxide	06	0.34	0.34	**290**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224109

Laboratory Number: 24

File Name:	2410924A		Detect Flag:	ND	
QCBatch	041924-GCO		Report Normalized:	**No**	
Can Factor	1.36				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	407	1,222	U
Oxygen	32.00	19.16	19.16	19.16	191,569	19.16	19.16	500	0.068	0.204	0.068	0.204	679	2,037	
Nitrogen	28.01	80.77	80.77	80.77	807,650	80.77	80.77	1000	0.136	0.407	0.136	0.408	1,358	4,075	
Methane	16.04	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	407	U
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	407	U
Carbon Dioxide	44.01	0.08	0.08	0.08	781	0.08	0.08	100	0.014	0.041	0.014	0.042	136	407	
Sum - N2		19.23	100.00												
Sum		100.0													
Total Nitrogen		96.02													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224109
Laboratory Number: 24

File Name: 2410924A
Description: T-206
Can/Tube#: 759
QC_Batch: 041924-GCO

Date Sampled: 03/20/24 **Time:** 10:49
Date Analyzed: 04/19/24 **Time:** 15:38
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	407	1,222	ND	ND
7782-44-7	Oxygen	0.068	0.204	19.16	679	2,037	191,569	
74-82-8	Methane	0.014	0.042	ND	136	407	ND	ND
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	407	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	0.08	136	407	781	

Sample Data Packages

SDG Number 224435
Lab Id Number 25

Client ID T-507

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 25

Client: C.E. Schmidt
Client ID: T-507
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 712
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:56
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

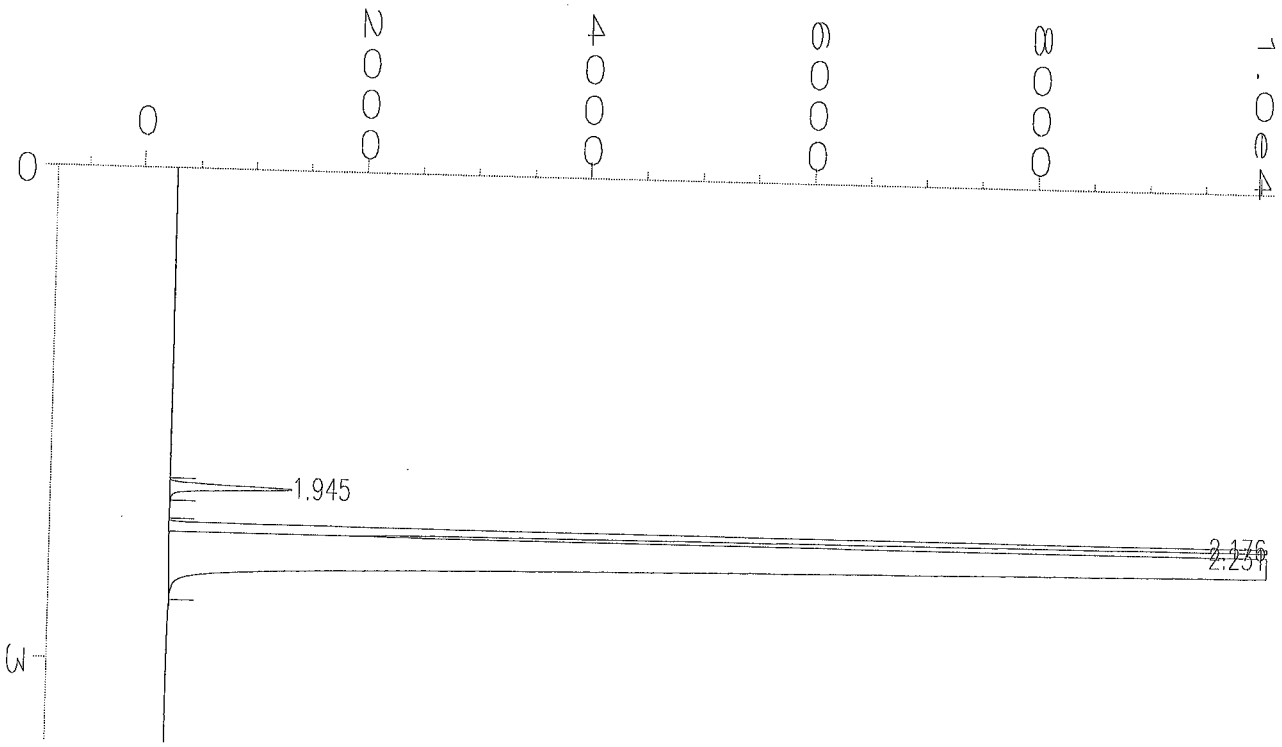
InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443525MA.D
Operator : DA
Instrument : GCL
Sample Name : T-507
Run Time Bar Code:
Acquired on : 09 Dec 24 02:55 PM
Report Created on: 09 Dec 24 02:59 PM
Sample Info : SCHMIDT

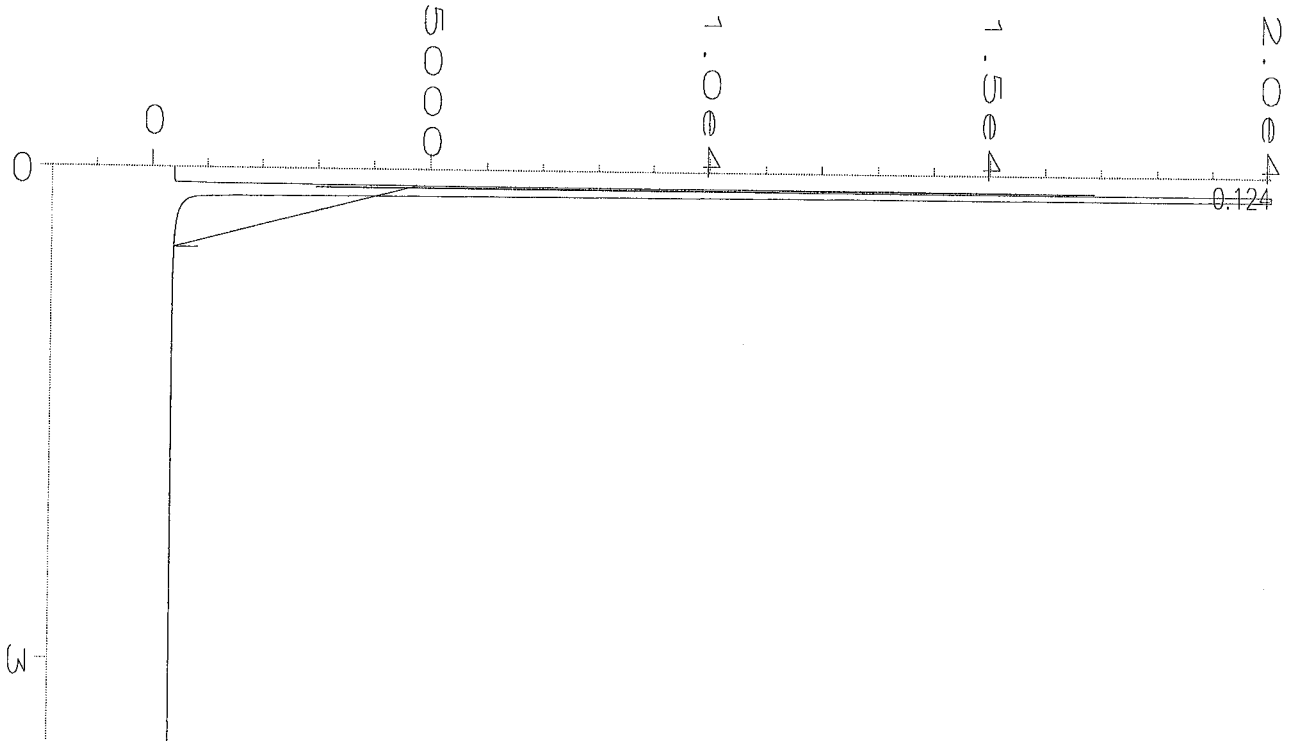
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443525MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.945	2232	1100	BB	0.032	1.0966
2	2.176	26823	15229	BV	0.029	13.1815
3	2.231	174433	28022	VB	0.085	85.7219

Total area = 203487

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443525PA.D
Operator : DA
Instrument : GCL
Sample Name : T-507
Run Time Bar Code:
Acquired on : 09 Dec 24 02:55 PM
Report Created on: 09 Dec 24 02:59 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443525PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	258790	253148	BB S	0.016	100.0000

Total area = 258790

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443525A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**25**			SF:	**2**
Description:	**T-507**			Not Detected Flag:	**ND**
Date Sampled:	**11/20/24**	Time:	**10:56**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**14:55**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**712**				
Can Factor	**1.38**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26823**
7727-37-9	Nitrogen	03	2.07	**174433**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

File Name:	2443525A	Detect Flag:	ND
QCBatch	120924-GCO	Report Normalized:	**No**
Can Factor	1.38		
Air Volume:	0.50 ml	Temp	**25** C
Base Volume	0.50 ml	Atm P	**760.0** torr
Dilution Factor	1.38	Gas Constant	24.4
Gas Constant:	24.4	RL Factor	**3**
Decimal Places:	2		

SDG: 224435
Laboratory Number: 25

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.124	0.041	0.123	414	1,242	U
Oxygen	32.00	16.06	16.06	16.06	160,571	16.06	16.06	500	0.069	0.207	0.069	0.207	690	2,070	
Nitrogen	28.01	83.94	83.94	83.94	839,429	83.94	83.94	1000	0.138	0.414	0.138	0.414	1,380	4,140	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Sum - N2		16.06	100.00												
Sum		100.0													
Total Nitrogen		96.64													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 25

File Name: 2443525A
Description: T-507
Can/Tube#: 712
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:56
Date Analyzed: 12/09/24 **Time:** 14:55
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.06	690	2,070	160,571	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 26

Client ID T-508

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 26

Client: C.E. Schmidt
Client ID: T-508
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 549
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 10:40
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

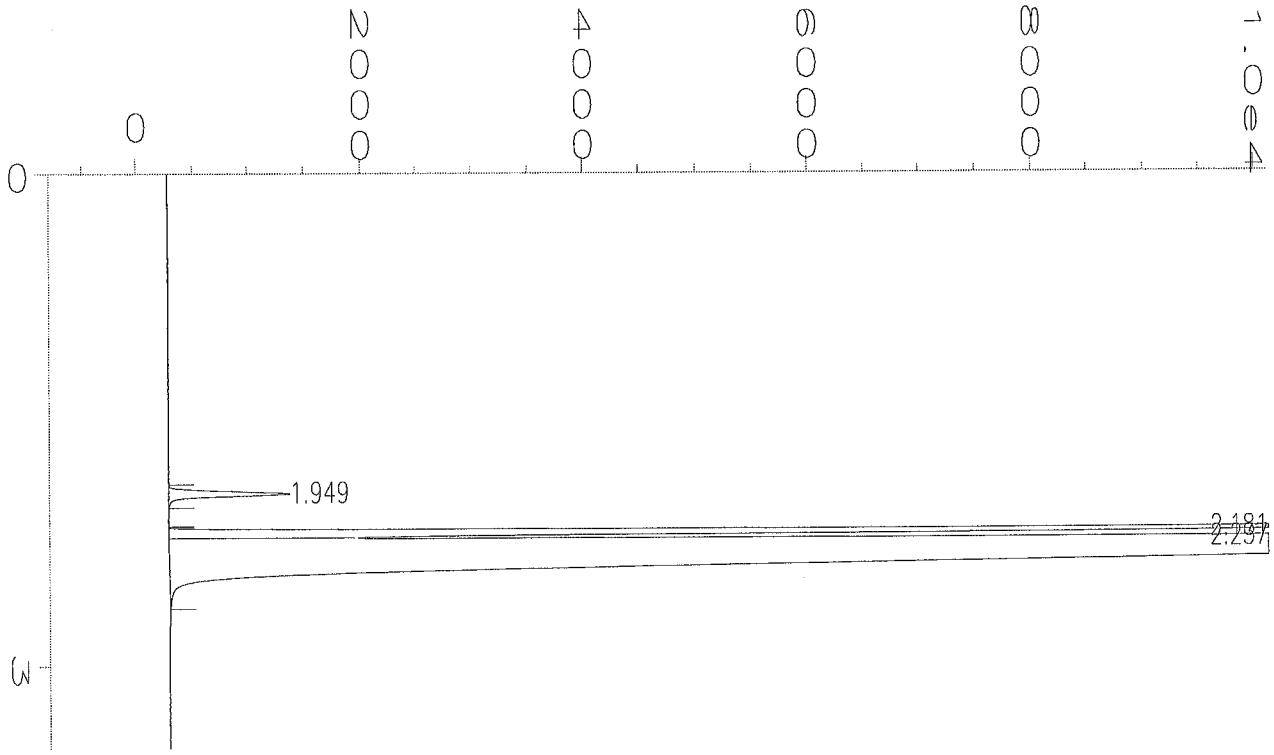
InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443526MA.D
Operator : DA
Instrument : GCL
Sample Name : T-508
Run Time Bar Code:
Acquired on : 09 Dec 24 03:00 PM
Report Created on: 09 Dec 24 03:04 PM
Sample Info : SCHMIDT

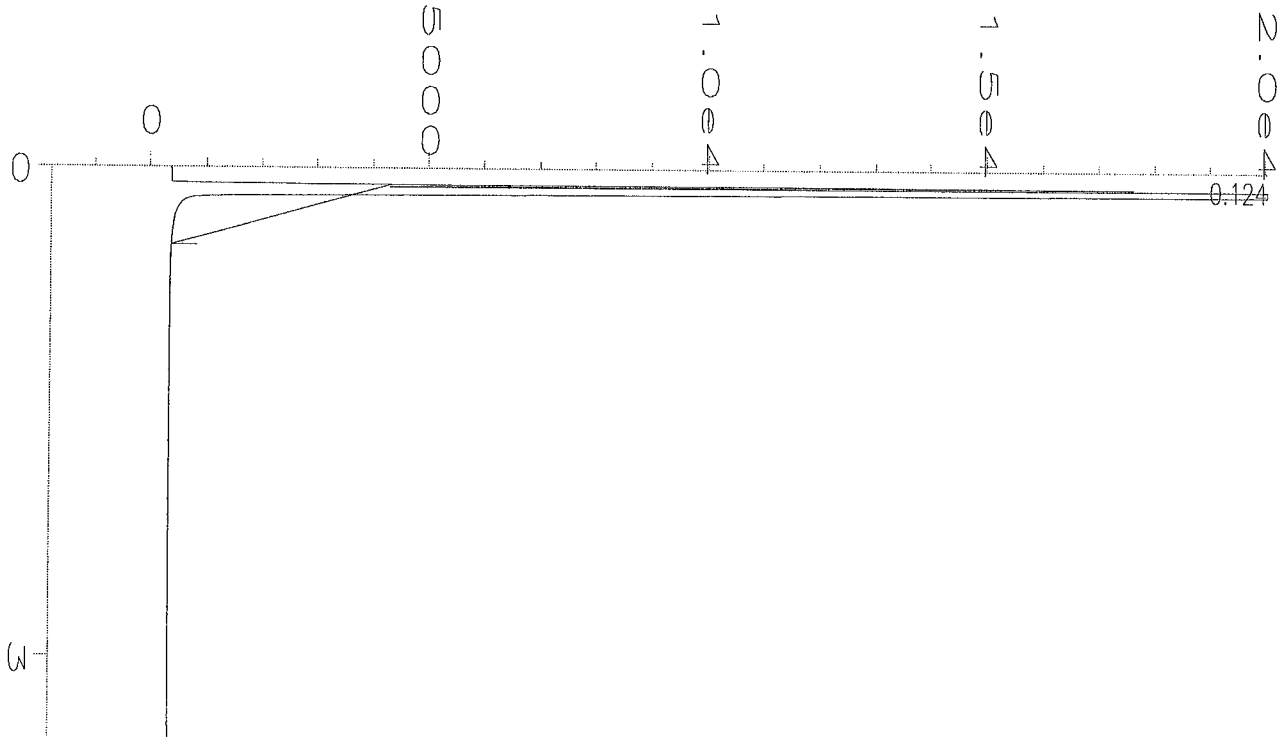
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443526MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.949	2210	1084	BB	0.032	1.0835
2	2.181	26623	15297	BV	0.029	13.0516
3	2.237	175148	27894	VB	0.084	85.8648

Total area = 203981

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443526PA.D
Operator : DA
Instrument : GCL
Sample Name : T-508
Run Time Bar Code:
Acquired on : 09 Dec 24 03:00 PM
Report Created on: 09 Dec 24 03:04 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443526PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	262570	251272	BB S	0.016	100.0000

Total area = 262570

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443526A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**26**		SF:	**2**	
Description:	**T-508**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **10:40**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:00**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**549**				
Can Factor	**1.38**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26623**
7727-37-9	Nitrogen	03	2.07	**175148**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 26

File Name:	2443526A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.38				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.124	0.041	0.123	414	1,242	U
Oxygen	32.00	15.94	15.94	15.94	159,373	15.94	15.94	500	0.069	0.207	0.069	0.207	690	2,070	
Nitrogen	28.01	84.06	84.06	84.06	840,627	84.06	84.06	1000	0.138	0.414	0.138	0.414	1,380	4,140	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Sum - N2		15.94	100.00												
Sum		100.0													
Total Nitrogen		97.04													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
ND		Y
ND		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 26

File Name: 2443526A
Description: T-508
Can/Tube#: 549
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 10:40
Date Analyzed: 12/09/24 **Time:** 15:00
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	15.94	690	2,070	159,373	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 27

Client ID T-509

Analytical Method ASTM D1945

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Analytical Report
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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 27

Client: C.E. Schmidt
Client ID: T-509
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 882
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:20
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

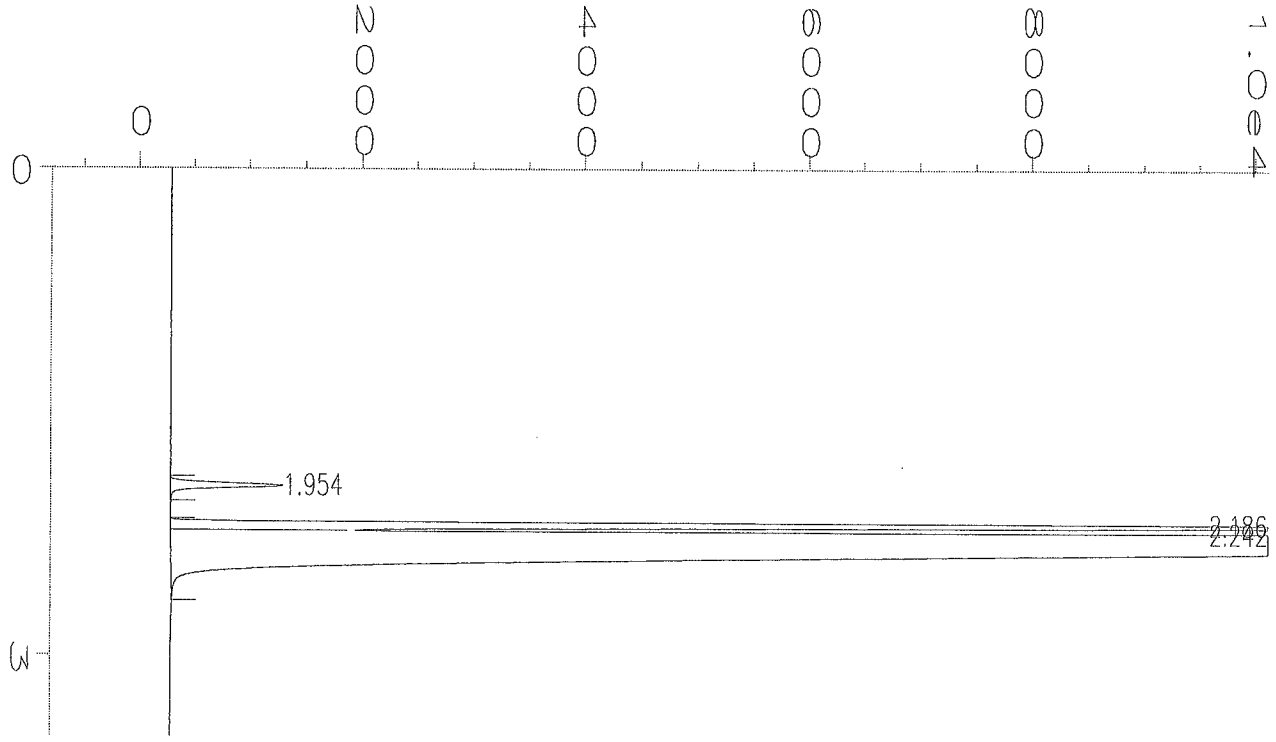
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443527MA.D
Operator : DA
Instrument : GCL
Sample Name : T-509
Run Time Bar Code:
Acquired on : 09 Dec 24 03:04 PM
Report Created on: 09 Dec 24 03:08 PM
Sample Info : SCHMIDT

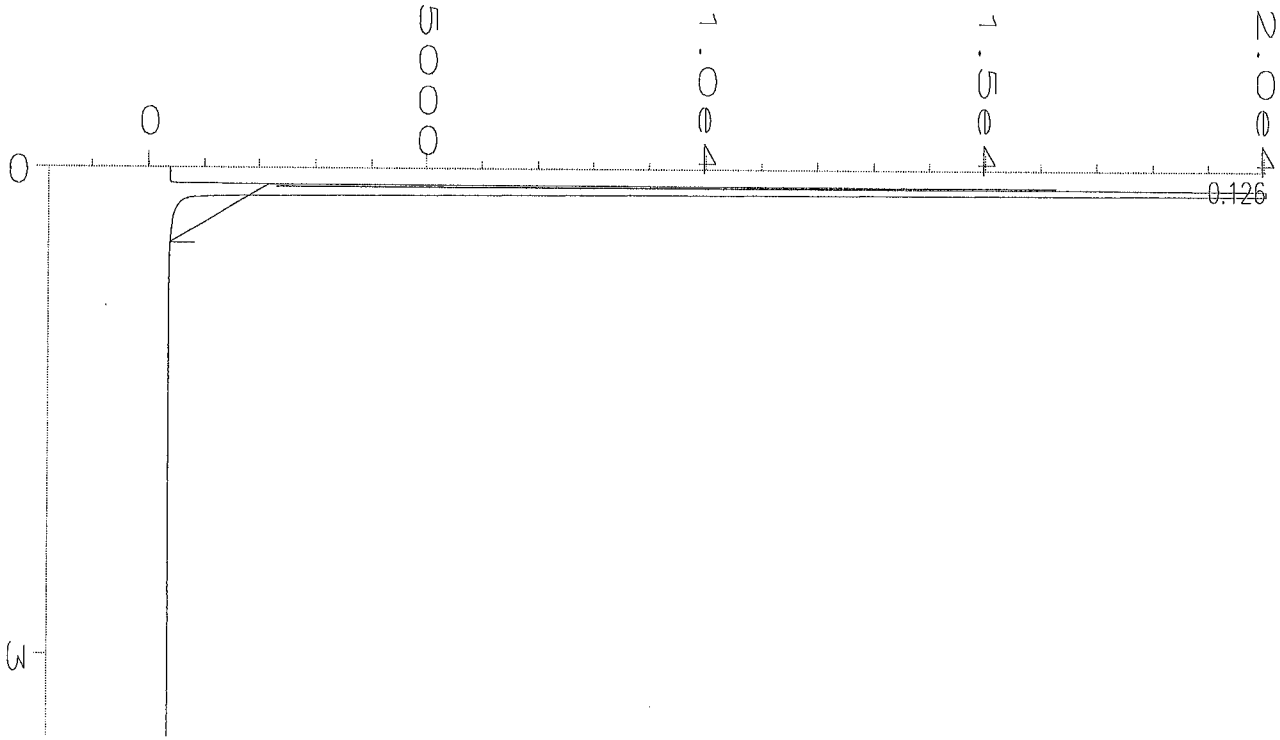
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443527MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.954	2095	1021	BB	0.032	1.0225
2	2.186	26557	15187	BV	0.029	12.9613
3	2.242	176245	28283	VB	0.104	86.0162

Total area = 204898

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443527PA.D
Operator : DA
Instrument : GCL
Sample Name : T-509
Run Time Bar Code:
Acquired on : 09 Dec 24 03:04 PM
Report Created on: 09 Dec 24 03:08 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443527PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.126	286600	242834	BB S	0.044	100.0000

Total area = 286600

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443527A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**27**		SF:	**2**	
Description:	**T-509**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **12:20**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:04**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**882**				
Can Factor	**1.40**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26557**
7727-37-9	Nitrogen	03	2.07	**176245**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 27

File Name:	2443527A
QCBatch	120924-GCO
Can Factor	1.40
Air Volume:	0.50 ml
Base Volume	0.50 ml
Dilution Factor	1.40
Gas Constant:	24.4
Decimal Places:	2

Detect Flag: ND
Report Normalized: **No**

Temp	**25**	C
Atm P	**760.0**	torr
Gas Constant	24.4	
RL Factor	**3**	

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.042	0.126	0.042	0.126	420	1,260	U
Oxygen	32.00	16.13	16.13	16.13	161,282	16.13	16.13	500	0.070	0.210	0.070	0.210	700	2,100	
Nitrogen	28.01	83.87	83.87	83.87	838,718	83.87	83.87	1000	0.140	0.420	0.140	0.420	1,400	4,200	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.042	0.014	0.042	140	420	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.042	0.014	0.042	140	420	U
Sum - N2		16.13	100.00												
Sum		100.0													
Total Nitrogen		99.06													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 27

File Name: 2443527A
Description: T-509
Can/Tube#: 882
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:20
Date Analyzed: 12/09/24 **Time:** 15:04
Can Dilution Factor: 1.40

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.042	0.126	ND	420	1,260	ND	ND
7782-44-7	Oxygen	0.070	0.210	16.13	700	2,100	161,282	
630-08-0	Carbon Monoxide	0.014	0.042	ND	140	420	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	140	420	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 28

Client ID T-510

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 28

Client: C.E. Schmidt
Client ID: T-510
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 860
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

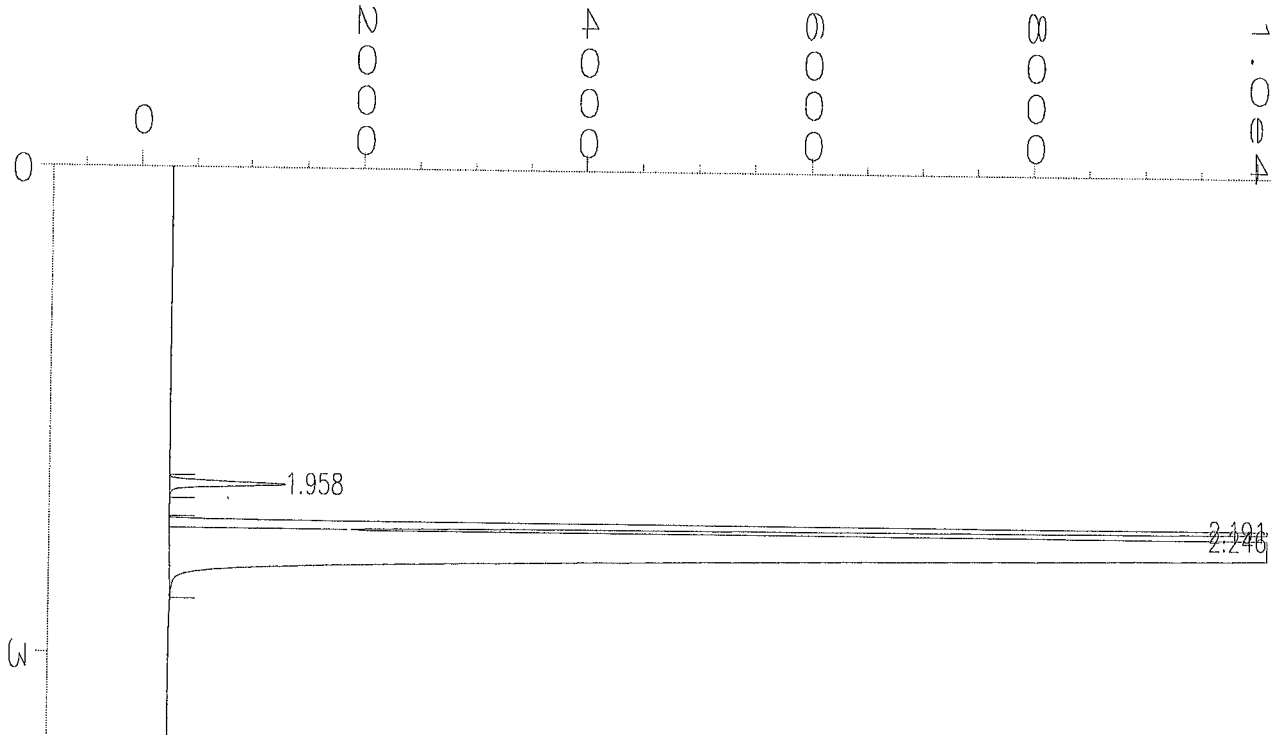
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443528MA.D
Operator : DA
Instrument : GCL
Sample Name : T-510
Run Time Bar Code:
Acquired on : 09 Dec 24 03:09 PM
Report Created on: 09 Dec 24 03:13 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443528MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.958	2132	1041	BB	0.032	1.0425
2	2.191	25896	15136	BV	0.028	12.6643
3	2.246	176453	27957	VB	0.085	86.2931

Total area = 204481

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443528PA.D
Operator : DA
Instrument : GCL
Sample Name : T-510
Run Time Bar Code:
Acquired on : 09 Dec 24 03:09 PM
Report Created on: 09 Dec 24 03:13 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443528PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	288021	262028	BB S	0.017	100.0000

Total area = 288021

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443528A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**28**		SF:	**2**	
Description:	**T-510**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **12:18**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:09**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**860**				
Can Factor	**1.42**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**25896**
7727-37-9	Nitrogen	03	2.07	**176453**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 28

File Name:	2443528A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.42				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.42		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.043	0.128	0.043	0.129	426	1,278	U
Oxygen	32.00	15.95	15.95	15.95	159,515	15.95	15.95	500	0.071	0.213	0.071	0.213	710	2,130	
Nitrogen	28.01	84.05	84.05	84.05	840,485	84.05	84.05	1000	0.142	0.426	0.142	0.426	1,420	4,260	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.043	0.014	0.042	142	426	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.043	0.014	0.042	142	426	U
Sum - N2		15.95	100.00												
Sum		100.0													
Total Nitrogen		100.60													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	=	Y
ND	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 | **SDG:** 224435 | **Laboratory Number:** 28

File Name: 24435528A | **Date Sampled:** 11/20/24 | **Time:** 12:18
Description: T-510 | **Date Analyzed:** 12/09/24 | **Time:** 15:09
Can/Tube#: 860 | **Can Dilution Factor:** 1.42
QC_Batch: 120924-GCO

		MDL	RL	Result	MDL	RL	Result	Flag
CAS#	Compound	%	%	%	ppmv	ppmv	ppmV	
1333-74-0	Hydrogen	0.043	0.129	ND	426	1,278	ND	ND
7782-44-7	Oxygen	0.071	0.213	15.95	710	2,130	159,515	
630-08-0	Carbon Monoxide	0.014	0.042	ND	142	426	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	142	426	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 29

Client ID T-511

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 29

Client: C.E. Schmidt
Client ID: T-511
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 627
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:31
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

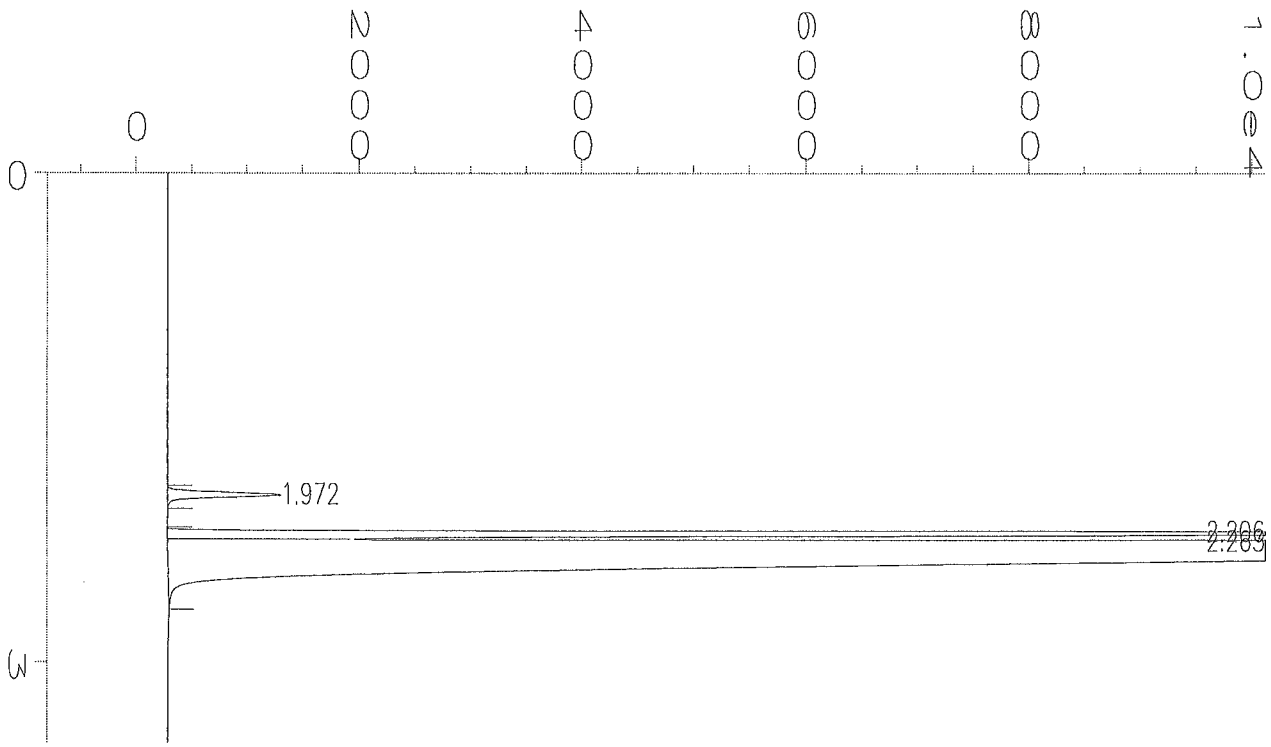
Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:



==========

Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443529MA.D
Operator : DA
Instrument : GCL
Sample Name : T-511
Run Time Bar Code:
Acquired on : 09 Dec 24 03:23 PM
Report Created on: 09 Dec 24 03:26 PM
Sample Info : SCHMIDT

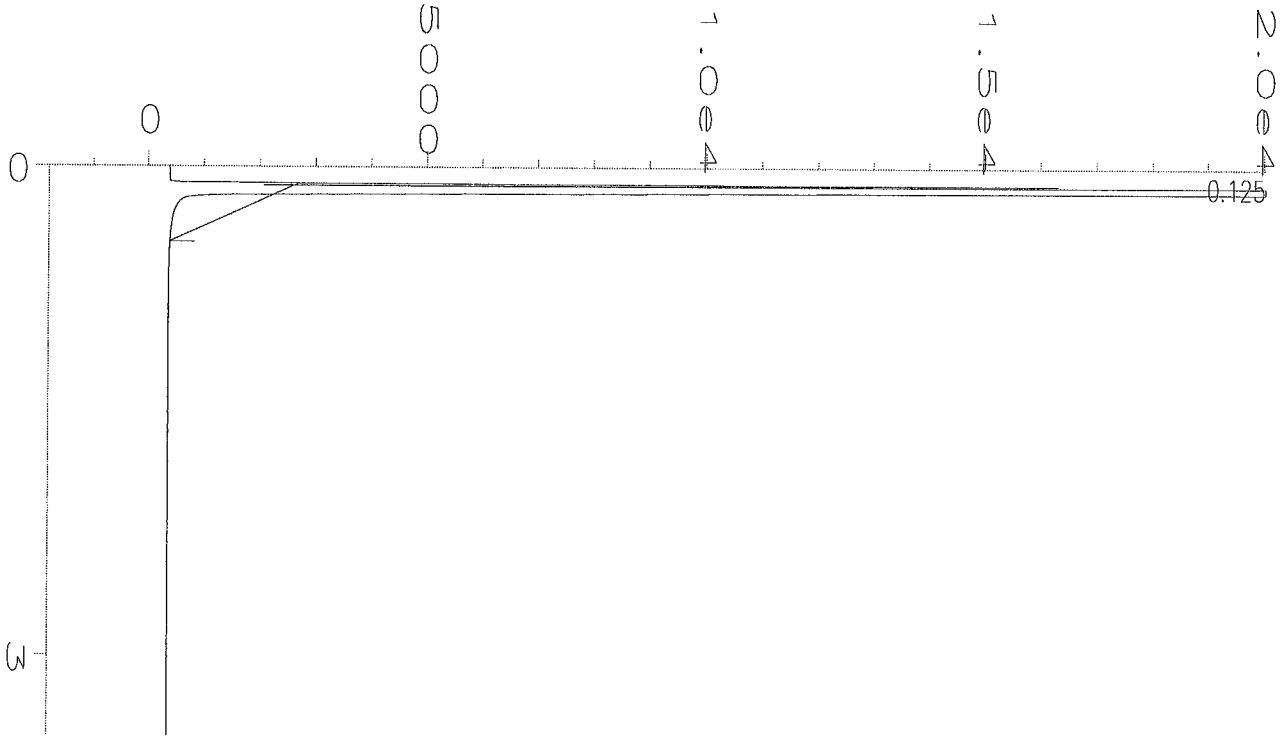
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443529MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.972	2120	1023	BB	0.032	1.0316
2	2.206	27057	15201	BV	0.029	13.1672
3	2.263	176313	27590	VB	0.089	85.8012

Total area = 205490

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443529PA.D
Operator : DA
Instrument : GCL
Sample Name : T-511
Run Time Bar Code:
Acquired on : 09 Dec 24 03:23 PM
Report Created on: 09 Dec 24 03:26 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443529PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	278296	238814	BB S	0.043	100.0000

Total area = 278296

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443529A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**29**			SF:	**2**
Description:	**T-511**			Not Detected Flag:	**ND**
Date Sampled:	**11/20/24**	Time:	**12:31**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**15:23**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**627**				
Can Factor	**1.37**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27057**
7727-37-9	Nitrogen	03	2.07	**176313**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443529A	Detect Flag:	ND	**Laboratory Number:**	**29**
QCBatch	120924-GCO	Report Normalized:	**No**		
Can Factor	1.37				
Air Volume:	0.50 ml	Temp	**25** C		
Base Volume	0.50 ml	Atm P	**760.0** torr		
Dilution Factor	1.37	Gas Constant	24.4		
Gas Constant:	24.4	RL Factor	**3**		
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.123	0.041	0.123	411	1,233	U
Oxygen	32.00	16.08	16.08	16.08	160,798	16.08	16.08	500	0.069	0.206	0.069	0.207	685	2,055	
Nitrogen	28.01	83.92	83.92	83.92	839,202	83.92	83.92	1000	0.137	0.411	0.137	0.411	1,370	4,110	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	137	411	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	137	411	U
Sum - N2		16.08	100.00												
Sum		100.0													
Total Nitrogen		96.98													

3951

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 29

File Name: 2443529A
Description: T-511
Can/Tube#: 627
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:31
Date Analyzed: 12/09/24 **Time:** 15:23
Can Dilution Factor: 1.37

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	411	1,233	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.08	685	2,055	160,798	
630-08-0	Carbon Monoxide	0.014	0.042	ND	137	411	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	137	411	ND	ND

Sample Data Packages

SDG Number **224435**

Lab Id Number **30**

Client ID T-512

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 30

Client: C.E. Schmidt
Client ID: T-512
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 417
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

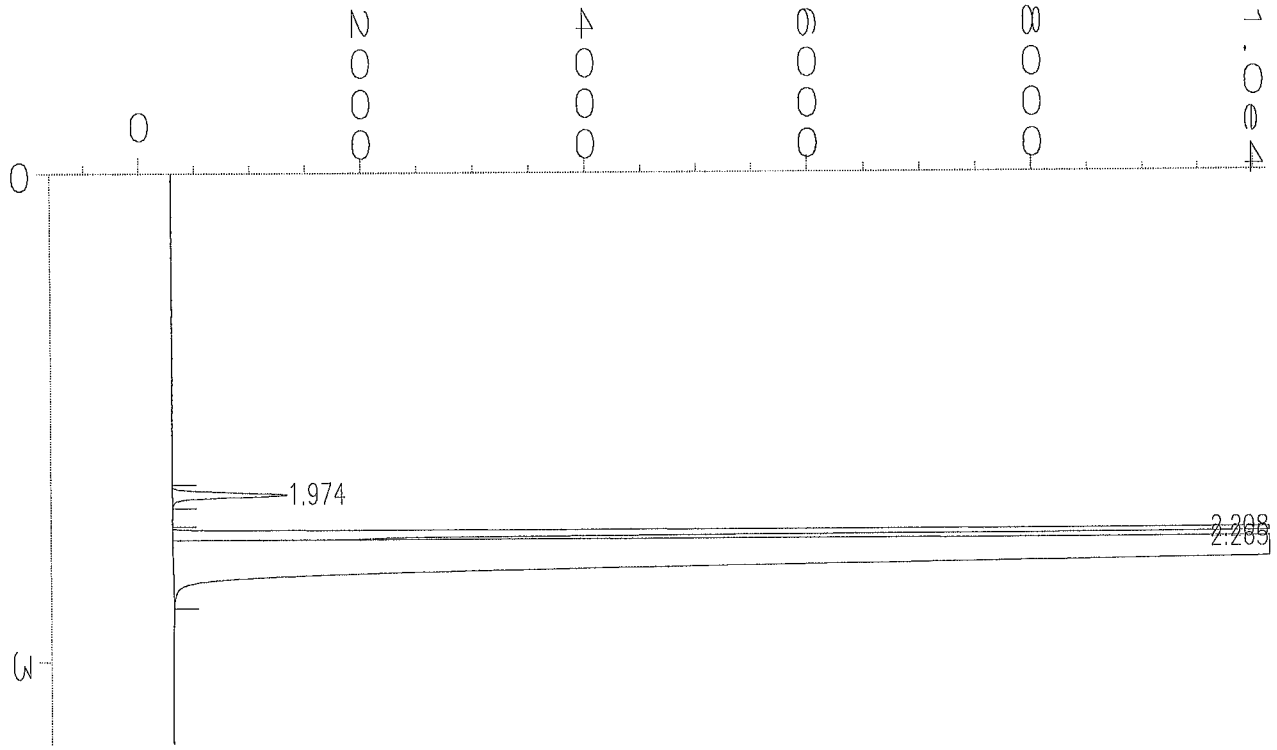
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443530MA.D
Operator : DA
Instrument : GCL
Sample Name : T-512
Run Time Bar Code:
Acquired on : 09 Dec 24 03:27 PM
Report Created on: 09 Dec 24 03:31 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443530MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.974	2161	1044	BB	0.032	1.0559
2	2.208	27618	15392	BV	0.029	13.4939
3	2.265	174893	27726	VB	0.084	85.4502

Total area = 204672

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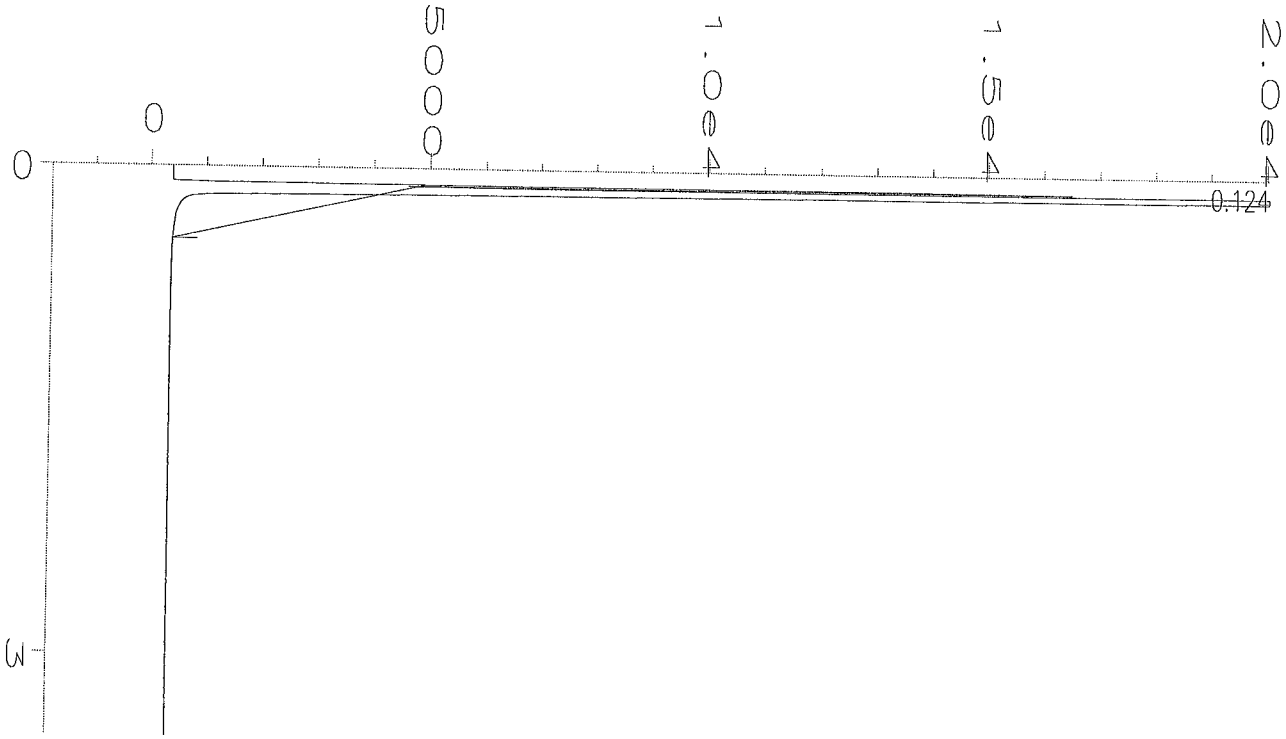

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443530PA.D
Operator : DA
Instrument : GCL
Sample Name : T-512
Run Time Bar Code:
Acquired on : 09 Dec 24 03:27 PM
Report Created on: 09 Dec 24 03:31 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443530PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	256018	248306	BB S	0.016	100.0000

Total area = 256018

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	2443530A			Method:	D1945
SDG:	224435			Cal Update:	4/19/24
Lab Id:	30			SF:	2
Description:	T-512			Not Detected Flag:	ND
Date Sampled:	11/20/24	Time:	12:41	Matrix	AA
Date Received:	11/21/24	Time:	13:00	Type	TRG
Date Analyzed:	12/09/24	Time:	15:27	Instrument	GCO
QCBatch	120924-GCO			Flux Factor:	0.385 mg/m2*min
Can Number	417				
Can Factor	1.36				
Volume:	0.5				
Type	SA				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**6302**
7782-44-7	Oxygen	02	1.97	**27618**
7727-37-9	Nitrogen	03	2.07	**174893**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 30

File Name:	2443530A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	No	
Can Factor	1.36				
Air Volume:	0.50	ml	Temp	25	C
Base Volume	0.50	ml	Atm P	760.0	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	3	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.55	#REF!	0.55	5,454	0.55	0.55	300	0.041	0.122	0.041	0.123	408	1,224	
Oxygen	32.00	16.29	#REF!	16.29	162,934	16.29	16.29	500	0.068	0.204	0.068	0.204	680	2,040	
Nitrogen	28.01	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	1000	0.136	0.408	0.136	0.408	1,360	4,080	#REF!
Carbon Monoxide	28.01	0.00	#REF!	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Carbon Dioxide	44.01	0.00	#REF!	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Sum - N2		#REF!	#REF!												
Sum		#REF!													
Total Nitrogen		95.49													

95483

EPA Qual	Det Qual	Rpt
	=	Y
	=	Y
	#REF!	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 30

File Name: 2443530A
Description: T-512
Can/Tube#: 417
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:41
Date Analyzed: 12/09/24 **Time:** 15:27
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	0.55	408	1,224	5,454	
7782-44-7	Oxygen	0.068	0.204	16.29	680	2,040	162,934	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443530A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**30**		SF:	**2**	
Description:	**T-512**		Not Detected Flag:	**ND**	
Date Sampled:	**11/20/24**	Time: **12:41**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:27**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**417**				
Can Factor	**1.36**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27618**
7727-37-9	Nitrogen	03	2.07	**174893**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 30

File Name:	2443530A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.36				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	408	1,224	U
Oxygen	32.00	16.29	16.29	16.29	162,934	16.29	16.29	500	0.068	0.204	0.068	0.204	680	2,040	
Nitrogen	28.01	83.71	83.71	83.71	837,066	83.71	83.71	1000	0.136	0.408	0.136	0.408	1,360	4,080	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Sum - N2		16.29	100.00												
Sum		100.0													
Total Nitrogen		95.49													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	=	Y
ND	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 | **SDG:** 224435

Laboratory Number: 30

File Name: 24435304 | **Date Sampled:** 11/20/24 | **Time:** 12:41

Description: T-512 | **Date Analyzed:** 12/09/24 | **Time:** 15:27

Can/Tube#: 417 | **Can Dilution Factor:** 1.36

QC_Batch: 120924-GCO

		MDL	RL	Result	MDL	RL	Result	Flag
CAS#	Compound	%	%	%	ppmv	ppmv	ppmV	
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.29	680	2,040	162,934	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 31

Client ID T-513

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/20/2024 | 224435 | 31

Client: C.E. Schmidt
Client ID: T-513
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 781
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/20/2024 Time: 12:28
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

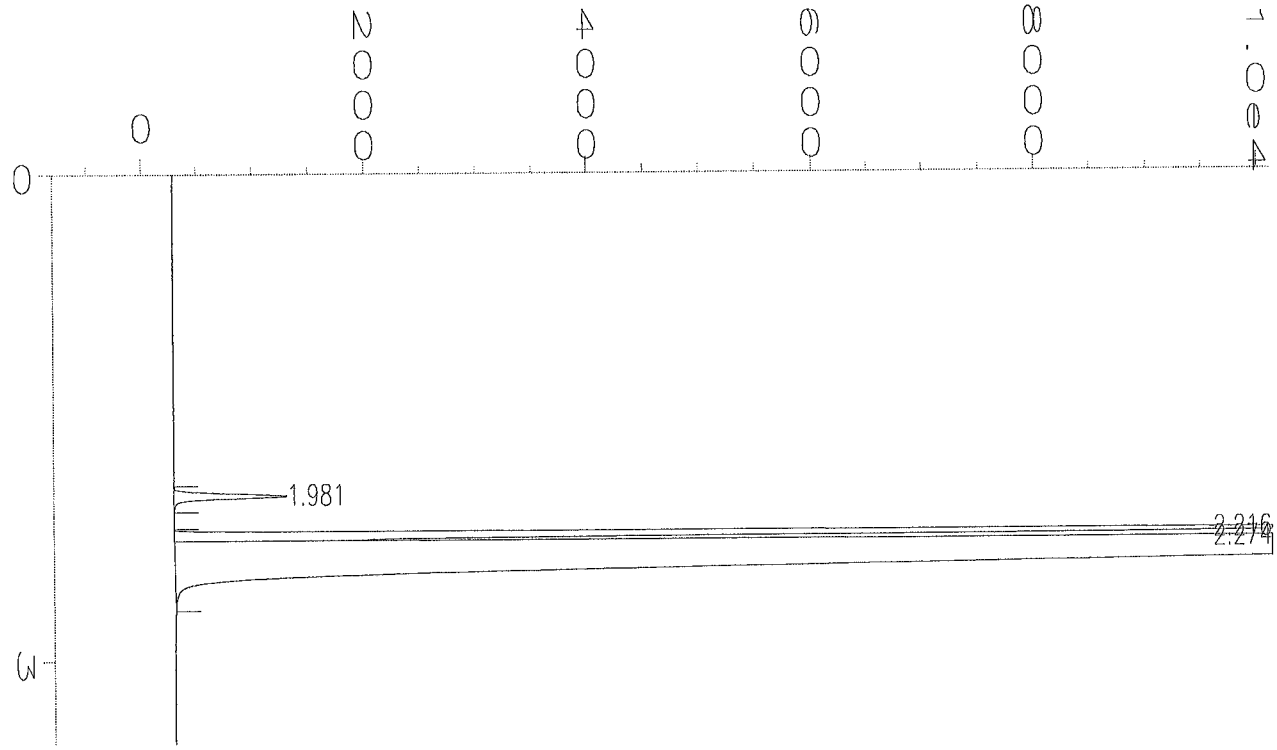
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443531MA.D
Operator : DA
Instrument : GCL
Sample Name : T-513
Run Time Bar Code:
Acquired on : 09 Dec 24 03:34 PM
Report Created on: 09 Dec 24 03:38 PM
Sample Info : SCHMIDT

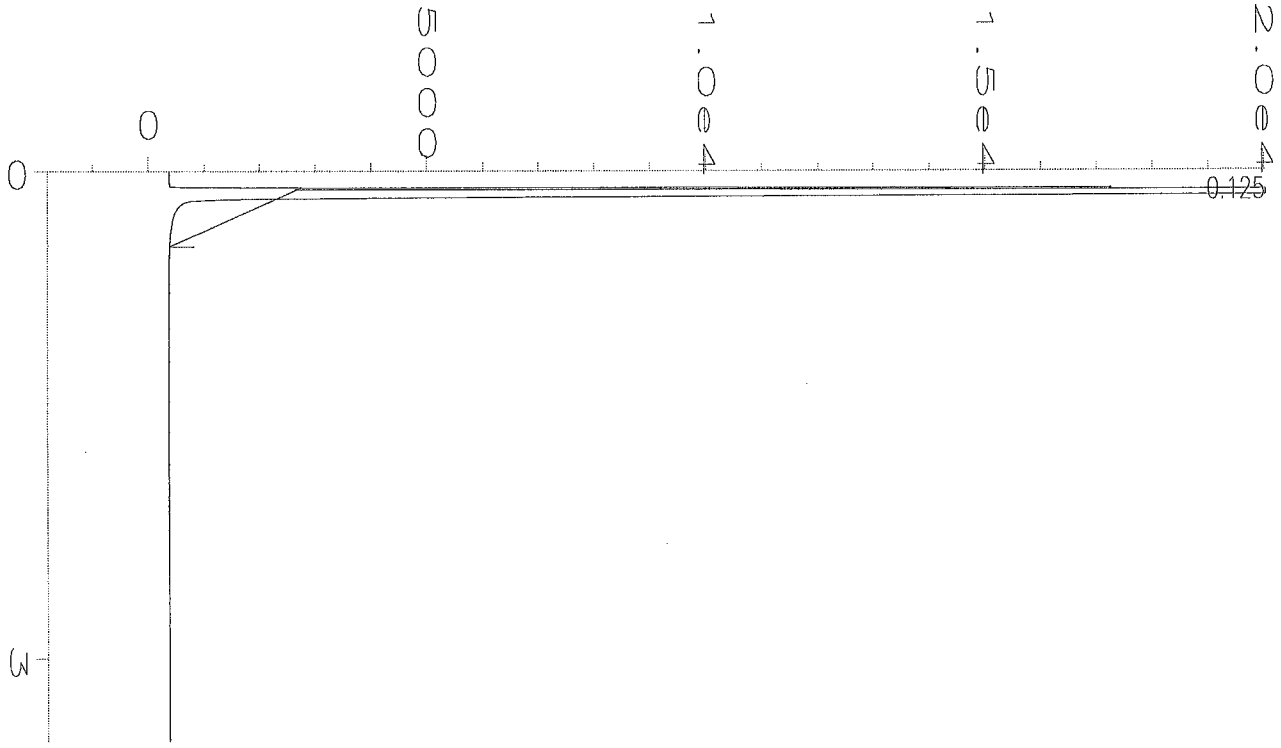
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443531MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.981	2126	1016	BB	0.032	1.0387
2	2.216	27347	15154	BV	0.030	13.3617
3	2.274	175197	27490	VB	0.086	85.5996

Total area = 204670

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443531PA.D
Operator : DA
Instrument : GCL
Sample Name : T-513
Run Time Bar Code:
Acquired on : 09 Dec 24 03:34 PM
Report Created on: 09 Dec 24 03:38 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443531PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	280024	261964	BB S	0.017	100.0000

Total area = 280024

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443531A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**31**			SF:	**2**
Description:	**T-513**			Not Detected Flag:	**ND**
Date Sampled:	**11/20/24**	Time:	**12:28**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**15:34**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**781**				
Can Factor	**1.36**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27347**
7727-37-9	Nitrogen	03	2.07	**175197**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 31

File Name:	2443531A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.36				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.36		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	408	1,224	U
Oxygen	32.00	16.13	16.13	16.13	161,335	16.13	16.13	500	0.068	0.204	0.068	0.204	680	2,040	
Nitrogen	28.01	83.87	83.87	83.87	838,665	83.87	83.87	1000	0.136	0.408	0.136	0.408	1,360	4,080	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	136	408	U
Sum - N2		16.13	100.00												
Sum		100.0													
Total Nitrogen		95.66													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	=	Y
ND	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435

Laboratory Number: 31

File Name: 24435314
Description: T-513
Can/Tube#: 781
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:28
Date Analyzed: 12/09/24 **Time:** 15:34
Can Dilution Factor: 1.36

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	408	1,224	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.13	680	2,040	161,335	
630-08-0	Carbon Monoxide	0.014	0.042	ND	136	408	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	136	408	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 32

Client ID T-514

Analytical Method ASTM D1945

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Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/20/2024

224435 32

Client: C.E. Schmidt
Client ID: T-514
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 506
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Date:
Initial :
Final:
Factor:

Sampled: 11/20/2024 Time: 12:45
Received: 11/21/2024 Time: 13:00

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

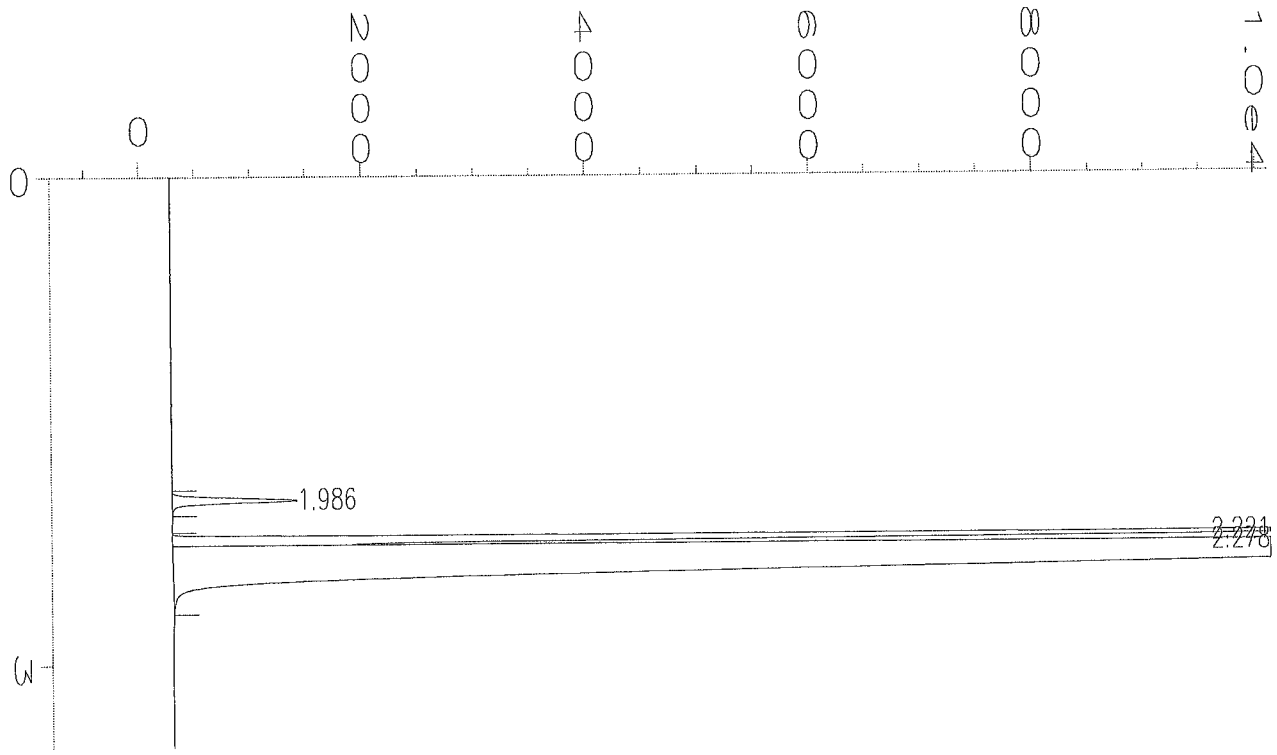
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria

Report Types: PDF Only

EDD Instructions EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443532MA.D
Operator : DA
Instrument : GCL
Sample Name : T-514
Run Time Bar Code:
Acquired on : 09 Dec 24 03:39 PM
Report Created on: 09 Dec 24 03:42 PM
Sample Info : SCHMIDT

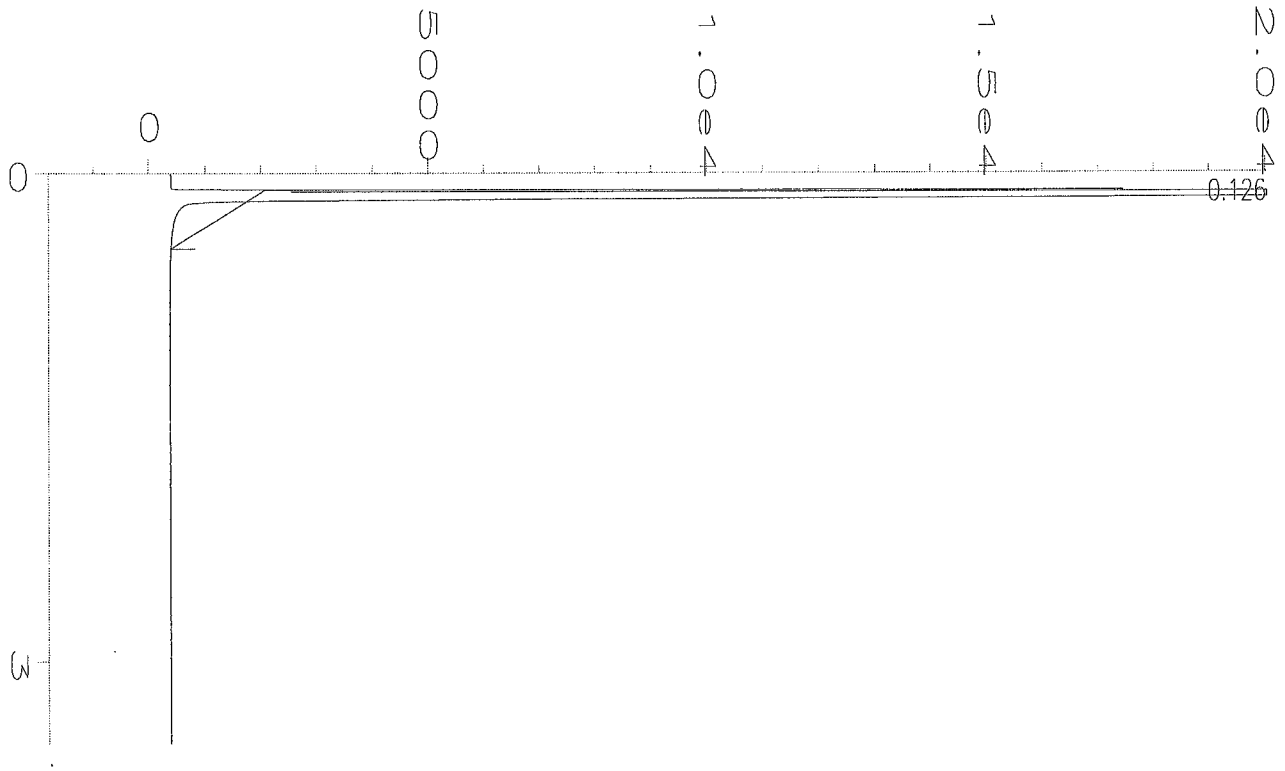
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443532MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.986	2366	1134	BB	0.033	1.1624
2	2.221	26805	15002	BV	0.029	13.1695
3	2.278	174366	27426	VB	0.085	85.6681

Total area = 203537

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443532PA.D
Operator : DA
Instrument : GCL
Sample Name : T-514
Run Time Bar Code:
Acquired on : 09 Dec 24 03:39 PM
Report Created on: 09 Dec 24 03:42 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443532PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.126	282855	240720	BB S	0.045	100.0000

Total area = 282855

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443532A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**32**			SF:	**2**
Description:	**T-514**			Not Detected Flag:	**ND**
Date Sampled:	**11/20/24**	Time:	**12:45**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**15:39**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**506**				
Can Factor	**1.38**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26805**
7727-37-9	Nitrogen	03	2.07	**174366**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 32

File Name:	2443532A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.38				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.124	0.041	0.123	414	1,242	U
Oxygen	32.00	16.05	16.05	16.05	160,463	16.05	16.05	500	0.069	0.207	0.069	0.207	690	2,070	
Nitrogen	28.01	83.95	83.95	83.95	839,537	83.95	83.95	1000	0.138	0.414	0.138	0.414	1,380	4,140	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Sum - N2		16.05	100.00												
Sum		100.0													
Total Nitrogen		96.61													

Confidential Business Information

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 32

File Name: 2443532A
Description: T-514
Can/Tube#: 506
QC_Batch: 120924-GCO

Date Sampled: 11/20/24 **Time:** 12:45
Date Analyzed: 12/09/24 **Time:** 15:39
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.05	690	2,070	160,463	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 33

Client ID T-601

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:	Expires:		
	12/21/2024	224435	33

Client:	C.E. Schmidt	MS Load Vol:	300
Client ID:	T-601	MS SIM Vol:	
Description:		GCK Load Vol:	200
Project Name:	Chiquita Canyon	GCP Load Vol:	
EAS Project:	17807 EAS PM: David Atkinson	Sample Volume:	

Media:	CAN	Can Pressurization:	Sampled:	11/21/2024	Time: 8:18
Can Number:	700		Received:	11/21/2024	Time: 13:00
FC Number:	0				
TAT Working:		Date:			
Sampling Time:		Initial :			
Flow:		Final:			
		Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945 ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

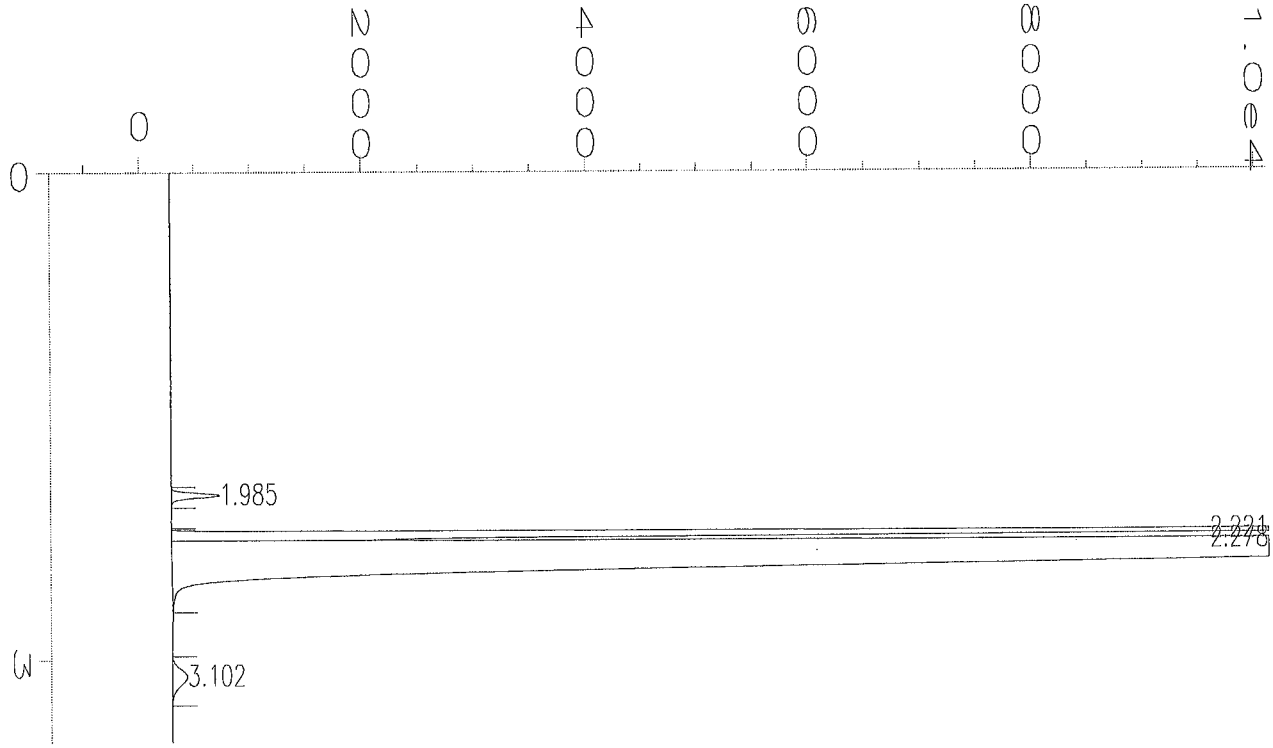
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443533MA.D
Operator : DA
Instrument : GCL
Sample Name : T-601
Run Time Bar Code:
Acquired on : 09 Dec 24 03:43 PM
Report Created on: 09 Dec 24 03:46 PM
Sample Info : SCHMIDT

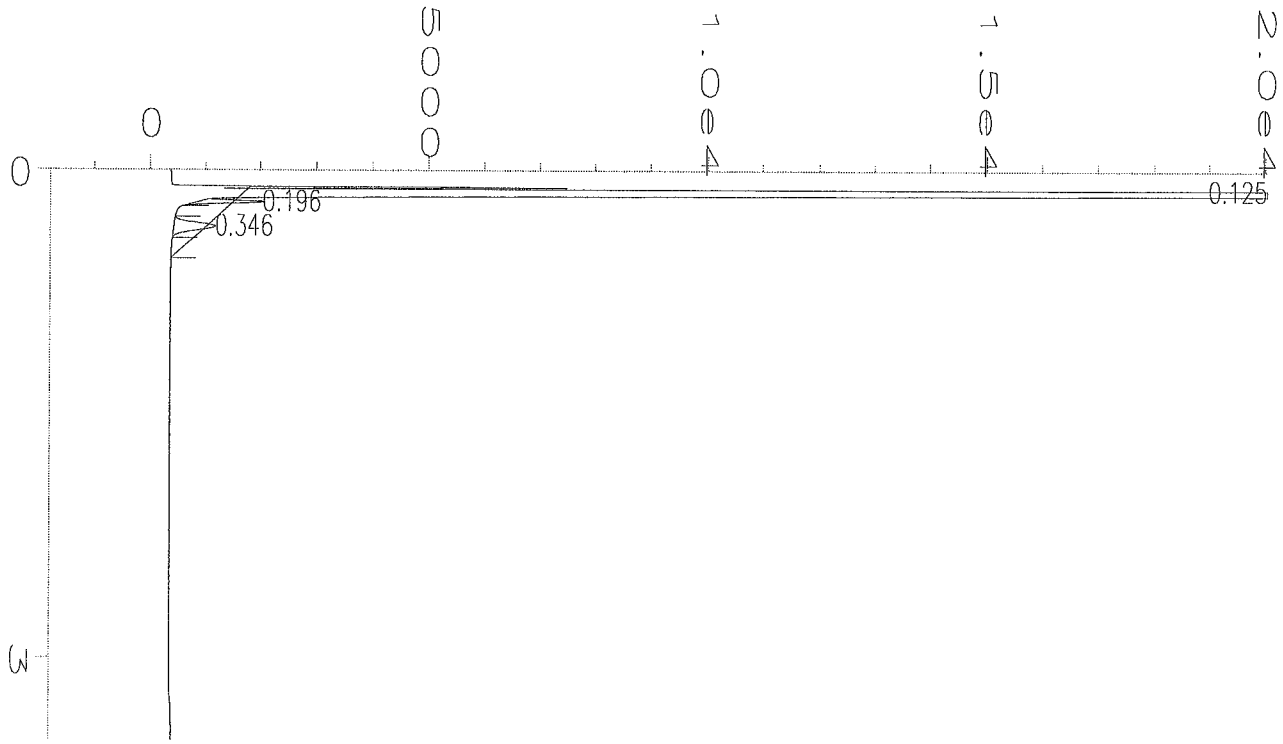
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443533MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.985	899	435	BB	0.032	0.4290
2	2.221	29545	15990	BV	0.030	14.0927
3	2.278	178267	27856	VB	0.086	85.0323
4	3.102	935	134	BB	0.107	0.4460

Total area = 209646

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443533PA.D
Operator : DA
Instrument : GCL
Sample Name : T-601
Run Time Bar Code:
Acquired on : 09 Dec 24 03:43 PM
Report Created on: 09 Dec 24 03:46 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443533PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	293631	269466	BB S	0.017	98.7250
2	0.196	1409	1215	BB T	0.019	0.4737
3	0.346	2383	749	BV T	0.050	0.8013

Total area = 297423

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443533A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**33**		SF:	**2**	
Description:	**T-601**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **8:18**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:43**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**700**				
Can Factor	**1.30**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29545**
7727-37-9	Nitrogen	03	2.07	**178267**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**2383**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 33

File Name:	2443533A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.30				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.30		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.117	0.039	0.117	390	1,170	U
Oxygen	32.00	16.66	16.66	16.66	166,612	16.66	16.66	500	0.065	0.195	0.065	0.195	650	1,950	
Nitrogen	28.01	82.72	82.72	82.72	827,247	82.72	82.72	1000	0.130	0.390	0.130	0.390	1,300	3,900	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	130	390	U
Carbon Dioxide	44.01	0.61	0.61	0.61	6,140	0.61	0.61	100	0.013	0.039	0.013	0.039	130	390	
Sum - N2		17.28	100.00												
Sum		100.0													
Total Nitrogen		93.04													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 33

File Name: 2443533A
Description: T-601
Can/Tube#: 700
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 8:18
Date Analyzed: 12/09/24 **Time:** 15:43
Can Dilution Factor: 1.30

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	390	1,170	ND	ND
7782-44-7	Oxygen	0.065	0.195	16.66	650	1,950	166,612	
630-08-0	Carbon Monoxide	0.013	0.039	ND	130	390	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.61	130	390	6,140	

Sample Data Packages

SDG Number **224435**

Lab Id Number **34**

Client ID T-602

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 34

Client: C.E. Schmidt
Client ID: T-602
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 673
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:29
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

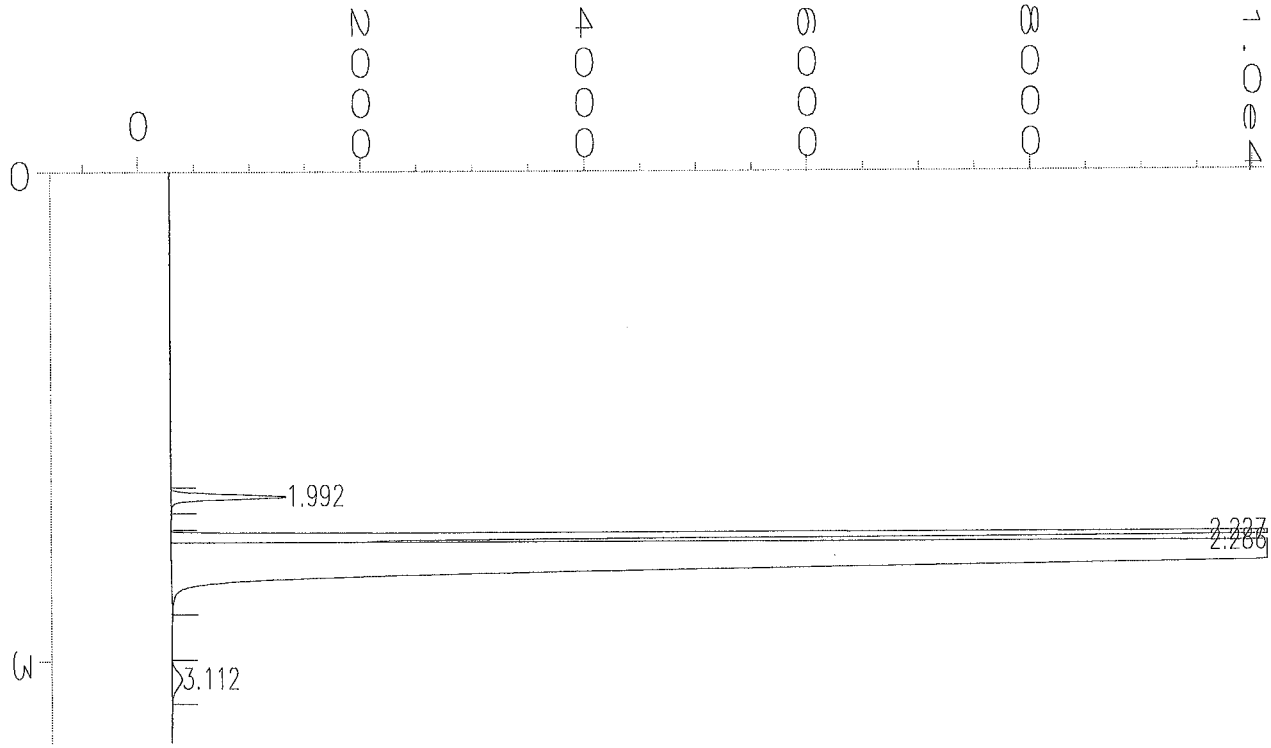
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443534MA.D
Operator : DA
Instrument : GCL
Sample Name : T-602
Run Time Bar Code:
Acquired on : 09 Dec 24 03:47 PM
Report Created on: 09 Dec 24 03:51 PM
Sample Info : SCHMIDT

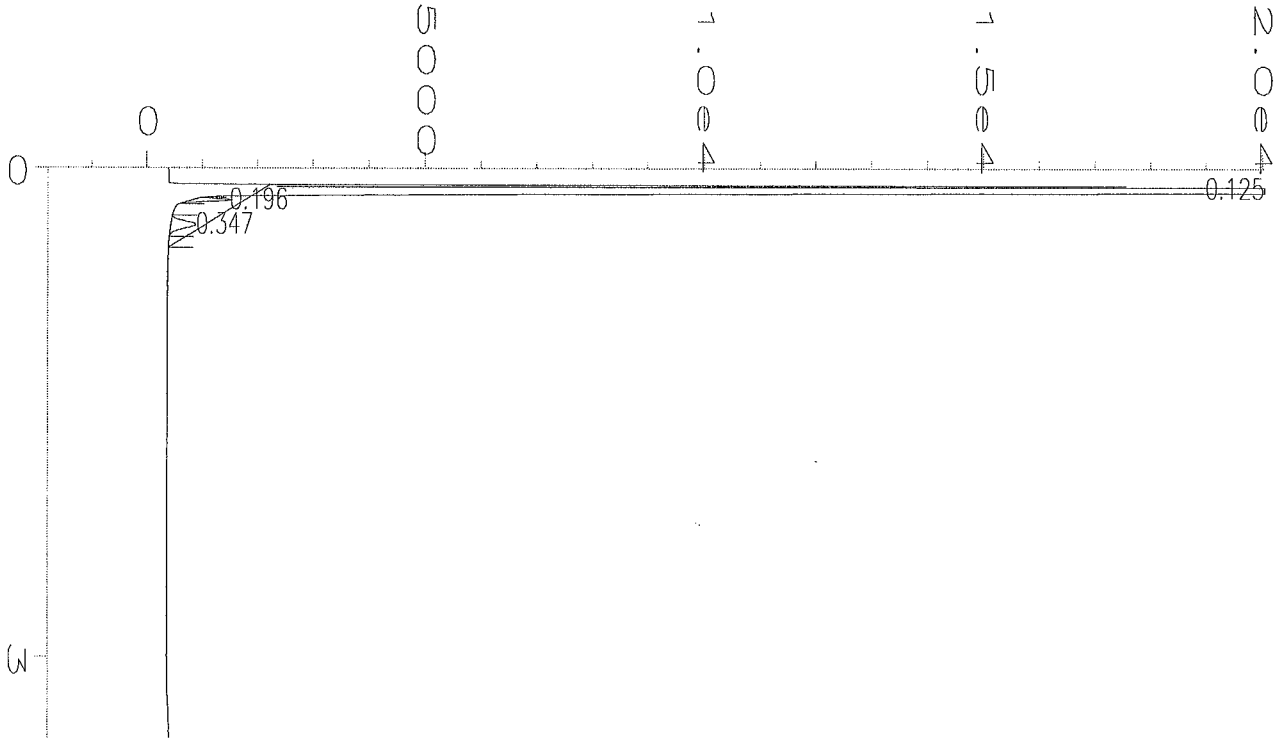
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443534MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.992	2185	1040	BB	0.033	1.0697
2	2.227	29100	15496	BV	0.031	14.2490
3	2.286	172348	27115	VB	0.088	84.3913
4	3.112	592	83	BB	0.101	0.2900

Total area = 204225

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443534PA.D
Operator : DA
Instrument : GCL
Sample Name : T-602
Run Time Bar Code:
Acquired on : 09 Dec 24 03:47 PM
Report Created on: 09 Dec 24 03:51 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443534PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	285359	241251	BB S	0.058	99.2292
2	0.196	829	731	BB T	0.018	0.2882
3	0.347	1388	441	BB T	0.049	0.4826

Total area = 287576

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443534A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**34**		SF:	**2**	
Description:	**T-602**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **8:29**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:47**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**673**				
Can Factor	**1.28**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29100**
7727-37-9	Nitrogen	03	2.07	**172348**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**1388**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443534A		Detect Flag:	ND	**Laboratory Number: 34**
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.28				
Air Volume:	0.50 ml		Temp	**25**	C
Base Volume	0.50 ml		Atm P	**760.0**	torr
Dilution Factor	1.28		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.038	0.115	0.038	0.114	384	1,152	U
Oxygen	32.00	16.16	16.16	16.16	161,578	16.16	16.16	500	0.064	0.192	0.064	0.192	640	1,920	
Nitrogen	28.01	83.49	83.49	83.49	834,900	83.49	83.49	1000	0.128	0.384	0.128	0.384	1,280	3,840	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.038	0.013	0.039	128	384	U
Carbon Dioxide	44.01	0.35	0.35	0.35	3,521	0.35	0.35	100	0.013	0.038	0.013	0.039	128	384	
Sum - N2		16.51	100.00												
Sum		100.0													
Total Nitrogen		88.57													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	Y	Y
=	Y	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 | **SDG:** 224435 | **Laboratory Number:** 34

File Name: 24435344 | **Date Sampled:** 11/21/24 | **Time:** 8:29
Description: T-602 | **Date Analyzed:** 12/09/24 | **Time:** 15:47
Can/Tube#: 673 | **Can Dilution Factor:** 1.28
QC_Batch: 120924-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.038	0.114	ND	384	1,152	ND	ND
7782-44-7	Oxygen	0.064	0.192	16.16	640	1,920	161,578	
630-08-0	Carbon Monoxide	0.013	0.039	ND	128	384	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.35	128	384	3,521	

Sample Data Packages

SDG Number 224435
Lab Id Number 35

Client ID T-603

Analytical Method ASTM D1945

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Analytical Report
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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 35

Client: C.E. Schmidt
Client ID: T-603
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 550
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Initial :
Final:
Factor:

Date:

Sampled: 11/21/2024 Time: 8:31
Received: 11/21/2024 Time: 13:00

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

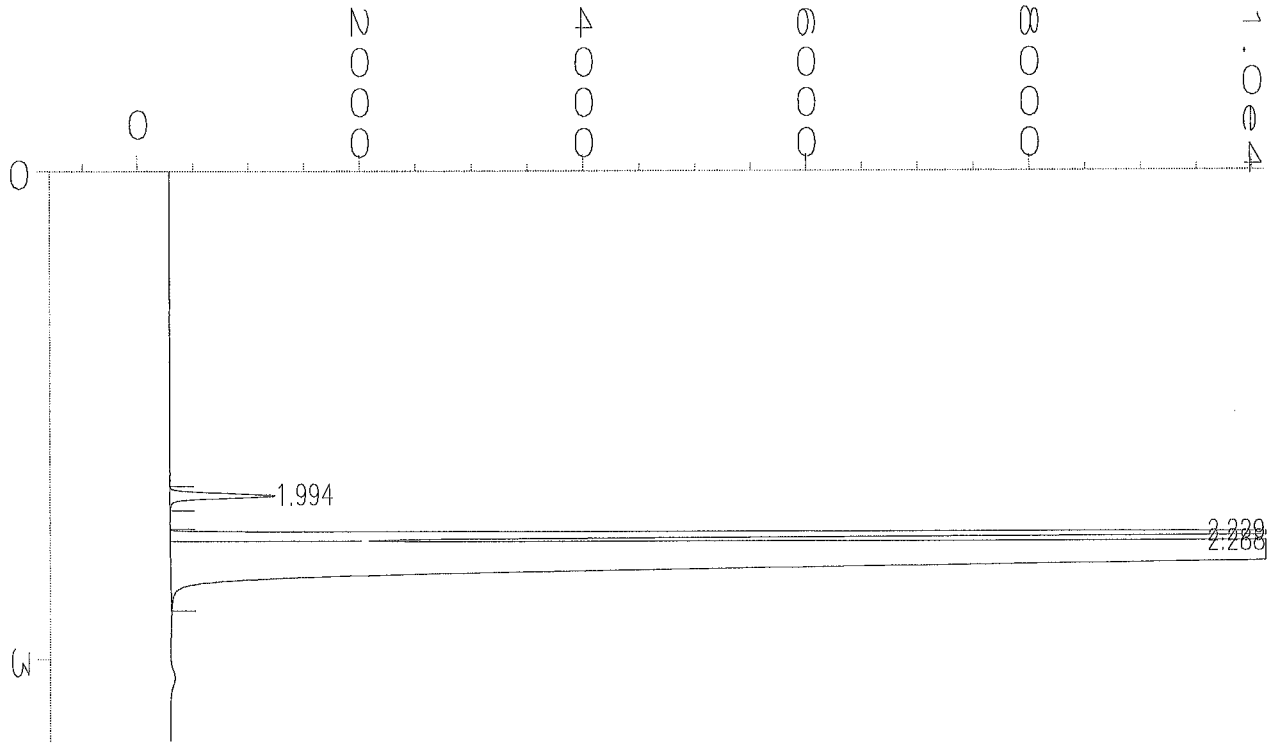
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443535MA.D
Operator : DA
Instrument : GCL
Sample Name : T-603
Run Time Bar Code:
Acquired on : 09 Dec 24 03:51 PM
Report Created on: 09 Dec 24 03:55 PM
Sample Info : SCHMIDT

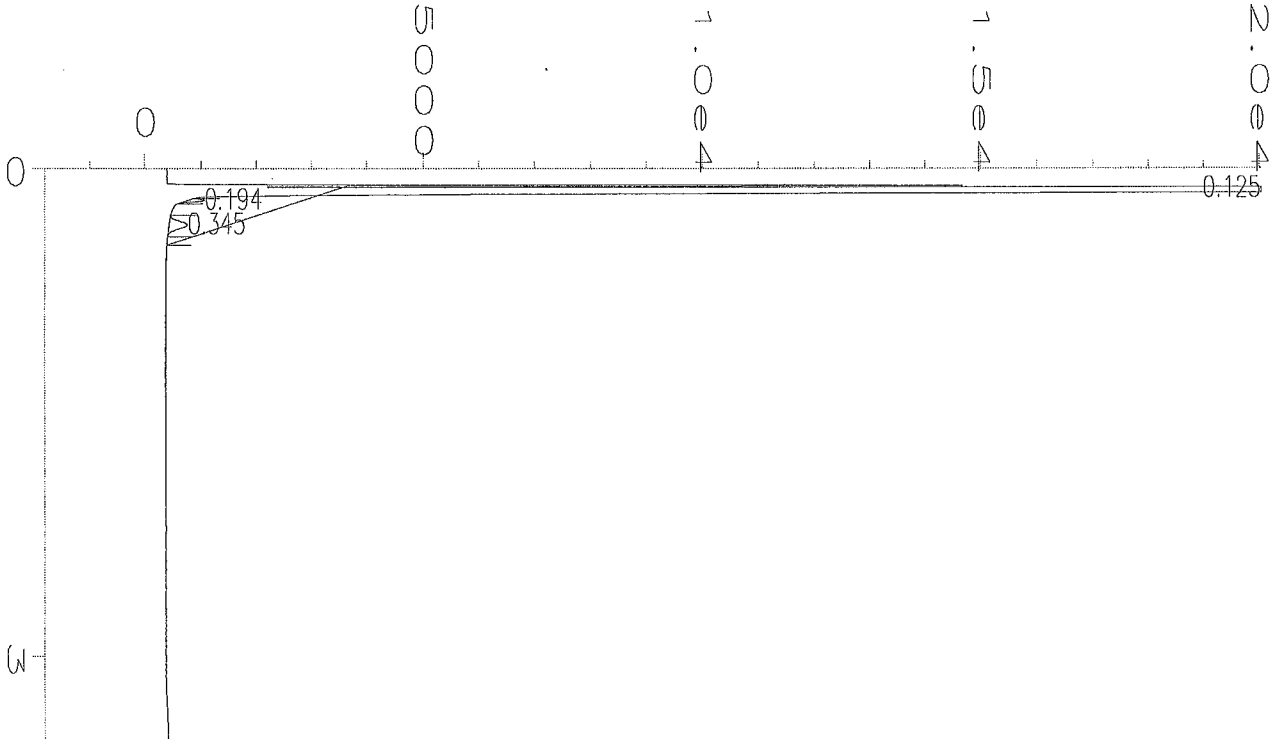
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443535MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.994	2009	953	BB	0.033	0.9821
2	2.229	29747	15611	BV	0.031	14.5433
3	2.288	172787	26988	VB	0.107	84.4746

Total area = 204543

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443535PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-603
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 03:51 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 03:55 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443535PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	266148	264361	BB S	0.016	99.4984
2	0.194	308	285	BB T	0.048	0.1153
3	0.345	1033	329	BB T	0.049	0.3863

Total area = 267489

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443535A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**35**			SF:	**2**
Description:	**T-603**			Not Detected Flag:	**ND**
Date Sampled:	**11/21/24**	Time:	**8:31**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**15:51**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**550**				
Can Factor	**1.24**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29747**
7727-37-9	Nitrogen	03	2.07	**172787**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**1033**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 35

File Name:	2443535A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.24				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.24		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.037	0.112	0.037	0.111	372	1,116	U
Oxygen	32.00	16.00	16.00	16.00	160,009	16.00	16.00	500	0.062	0.186	0.062	0.186	620	1,860	
Nitrogen	28.01	83.75	83.75	83.75	837,452	83.75	83.75	1000	0.124	0.372	0.124	0.372	1,240	3,720	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.012	0.037	0.012	0.036	124	372	U
Carbon Dioxide	44.01	0.25	0.25	0.25	2,539	0.25	0.25	100	0.012	0.037	0.012	0.036	124	372	
Sum - N2		16.25	100.00												
Sum		100.0													
Total Nitrogen		86.02													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 35

File Name: 2443535A
Description: T-603
Can/Tube#: 550
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 8:31
Date Analyzed: 12/09/24 **Time:** 15:51
Can Dilution Factor: 1.24

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.037	0.111	ND	372	1,116	ND	ND
7782-44-7	Oxygen	0.062	0.186	16.00	620	1,860	160,009	
630-08-0	Carbon Monoxide	0.012	0.036	ND	124	372	ND	ND
124-38-9	Carbon Dioxide	0.012	0.036	0.25	124	372	2,539	

Sample Data Packages

SDG Number 224435
Lab Id Number 36

Client ID T-604

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 36

Client: C.E. Schmidt
Client ID: T-604
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 738
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 8:18
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

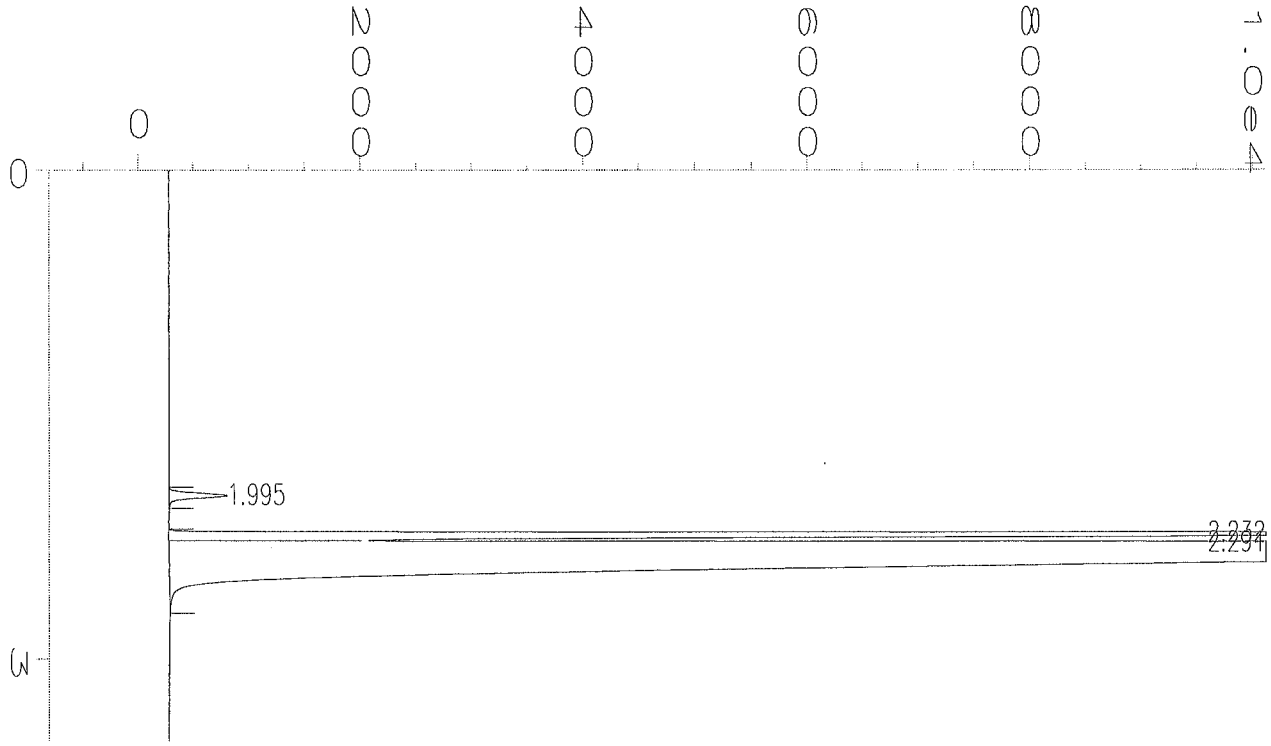
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443536MA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-604
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 03:56 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 03:59 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443536MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.995	1088	521	BB	0.033	0.5207
2	2.232	28538	15626	BV	0.030	13.6513
3	2.291	179420	27697	VB	0.088	85.8280

Total area = 209047

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443536PA.D
Operator : DA
Instrument : GCL
Sample Name : T-604
Run Time Bar Code:
Acquired on : 09 Dec 24 03:56 PM
Report Created on: 09 Dec 24 03:59 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443536PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	282096	263360	BB S	0.017	99.8682
2	0.344	372	122	BB T	0.045	0.1318

Total area = 282469

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443536A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**36**		SF:	**2**	
Description:	**T-604**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **8:18**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **15:56**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**738**				
Can Factor	**1.33**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28538**
7727-37-9	Nitrogen	03	2.07	**179420**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**372**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 36

File Name:	2443536A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.33				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.33		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.040	0.120	0.040	0.120	399	1,197	U
Oxygen	32.00	16.46	16.46	16.46	164,647	16.46	16.46	500	0.067	0.200	0.067	0.201	665	1,995	
Nitrogen	28.01	83.44	83.44	83.44	834,372	83.44	83.44	1000	0.133	0.399	0.133	0.399	1,330	3,990	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.040	0.013	0.039	133	399	U
Carbon Dioxide	44.01	0.10	0.10	0.10	981	0.10	0.10	100	0.013	0.040	0.013	0.039	133	399	
Sum - N2		16.56	100.00												
Sum		100.0													
Total Nitrogen		95.80													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
ND		Y
=		Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435

Analytical Method: D1945 **Laboratory Number:** 36

File Name: 24435036A **Date Sampled:** 11/21/24 **Time:** 8:18
Description: T-604 **Date Analyzed:** 12/09/24 **Time:** 15:56
Can/Tube#: 738 **Can Dilution Factor:** 1.33
QC_Batch: 120924-GCO

		MDL	RL	Result	MDL	RL	Result	Flag
CAS#	Compound	%	%	%	ppmv	ppmv	ppmV	
1333-74-0	Hydrogen	0.040	0.120	ND	399	1,197	ND	ND
7782-44-7	Oxygen	0.067	0.201	16.46	665	1,995	164,647	
630-08-0	Carbon Monoxide	0.013	0.039	ND	133	399	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.10	133	399	981	

Sample Data Packages

SDG Number 224435

Lab Id Number 37

Client ID T-605

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 37

Client: C.E. Schmidt
Client ID: T-605
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 892
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:41
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

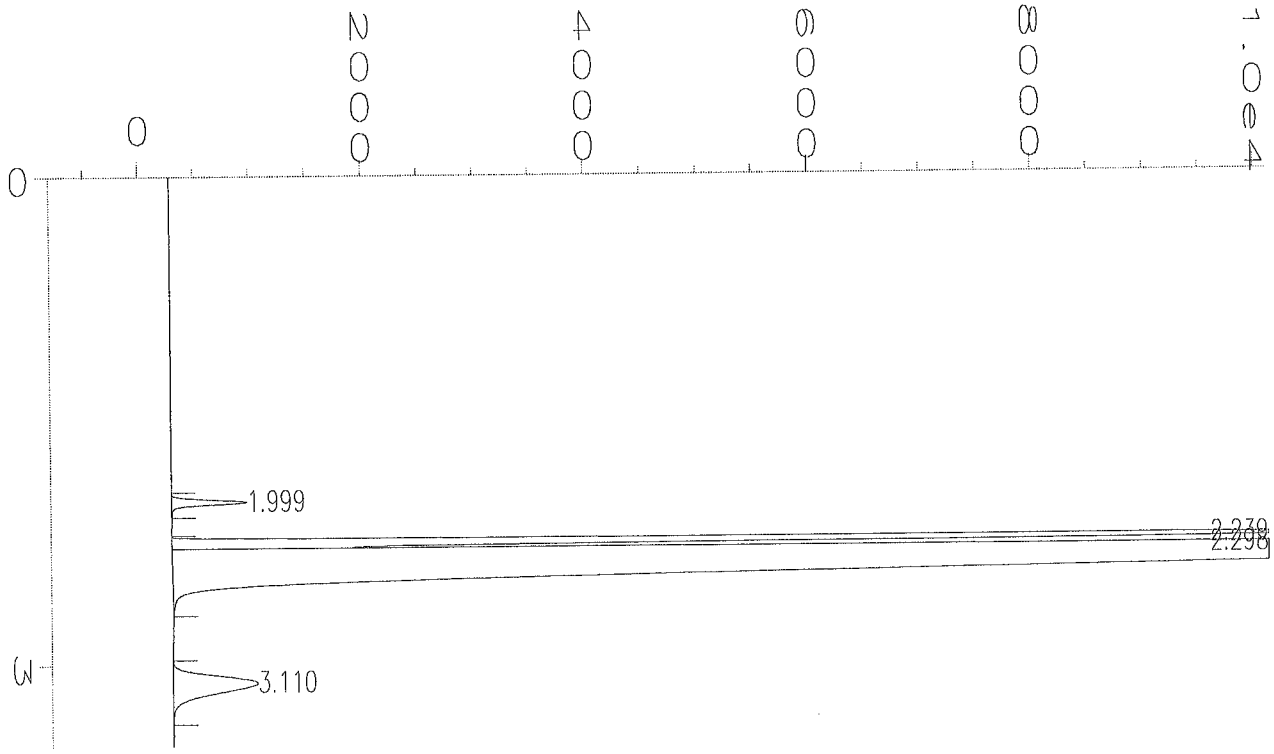
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443537MA.D
Operator : DA
Instrument : GCL
Sample Name : T-605
Run Time Bar Code:
Acquired on : 09 Dec 24 04:00 PM
Report Created on: 09 Dec 24 04:03 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443537MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.999	1447	685	BB	0.033	0.7188
2	2.239	28123	14758	BV	0.031	13.9743
3	2.298	166218	26479	VB	0.085	82.5938
4	3.110	5460	765	BB	0.110	2.7131

Total area = 201247

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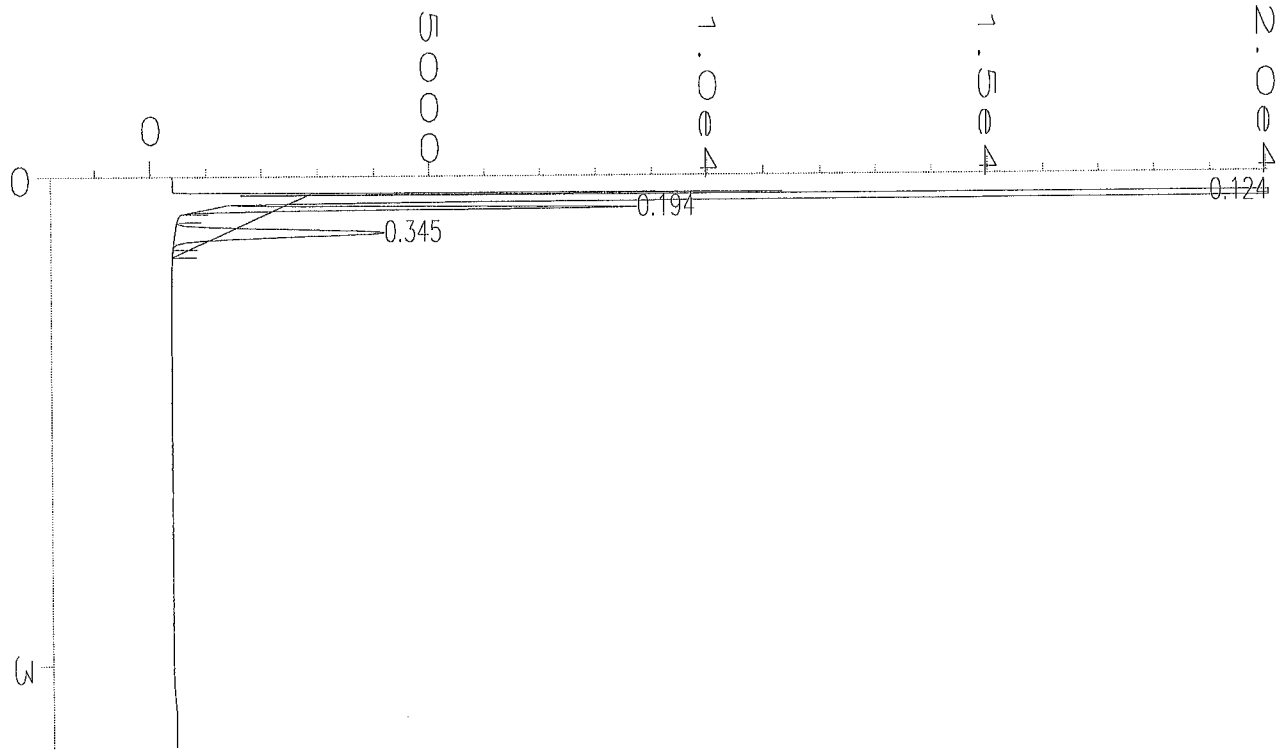

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443537PA.D
Operator : DA
Instrument : GCL
Sample Name : T-605
Run Time Bar Code:
Acquired on : 09 Dec 24 04:00 PM
Report Created on: 09 Dec 24 04:03 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443537PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	267373	257904	BB S	0.016	92.4187
2	0.194	9766	7756	BB T	0.020	3.3755
3	0.345	12168	3745	BB T	0.051	4.2058

Total area = 289307

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443537A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**37**		SF:	**2**	
Description:	**T-605**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **9:41**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **16:00**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**892**				
Can Factor	**1.31**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28123**
7727-37-9	Nitrogen	03	2.07	**166218**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**12168**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 37

File Name:	2443537A	Detect Flag:	ND
QCBatch	120924-GCO	Report Normalized:	**No**
Can Factor	1.31		
Air Volume:	0.50 ml	Temp	**25** C
Base Volume	0.50 ml	Atm P	**760.0** torr
Dilution Factor	1.31	Gas Constant	24.4
Gas Constant:	24.4	RL Factor	**3**
Decimal Places:	2		

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.118	0.039	0.117	393	1,179	U
Oxygen	32.00	15.98	15.98	15.98	159,813	15.98	15.98	500	0.066	0.197	0.066	0.198	655	1,965	
Nitrogen	28.01	80.86	80.86	80.86	808,592	80.86	80.86	1000	0.131	0.393	0.131	0.393	1,310	3,930	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Carbon Dioxide	44.01	3.16	3.16	3.16	31,595	3.16	3.16	100	0.013	0.039	0.013	0.039	131	393	
Sum - N2		19.14	100.00												
Sum		100.0													
Total Nitrogen		87.42													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 | **SDG:** 224435 | **Laboratory Number:** 37

File Name: 24435374 | **Date Sampled:** 11/21/24 | **Time:** 9:41
Description: T-605 | **Date Analyzed:** 12/09/24 | **Time:** 16:00
Can/Tube#: 892 | **Can Dilution Factor:** 1.31
QC_Batch: 120924-GCO

		MDL	RL	Result	MDL	RL	Result	Flag
CAS#	Compound	%	%	%	ppmv	ppmv	ppmV	
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	15.98	655	1,965	159,813	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	3.16	131	393	31,595	

Sample Data Packages

SDG Number 224435
Lab Id Number 38

Client ID T-606

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 38

Client: C.E. Schmidt
Client ID: T-606
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 608
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:58
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

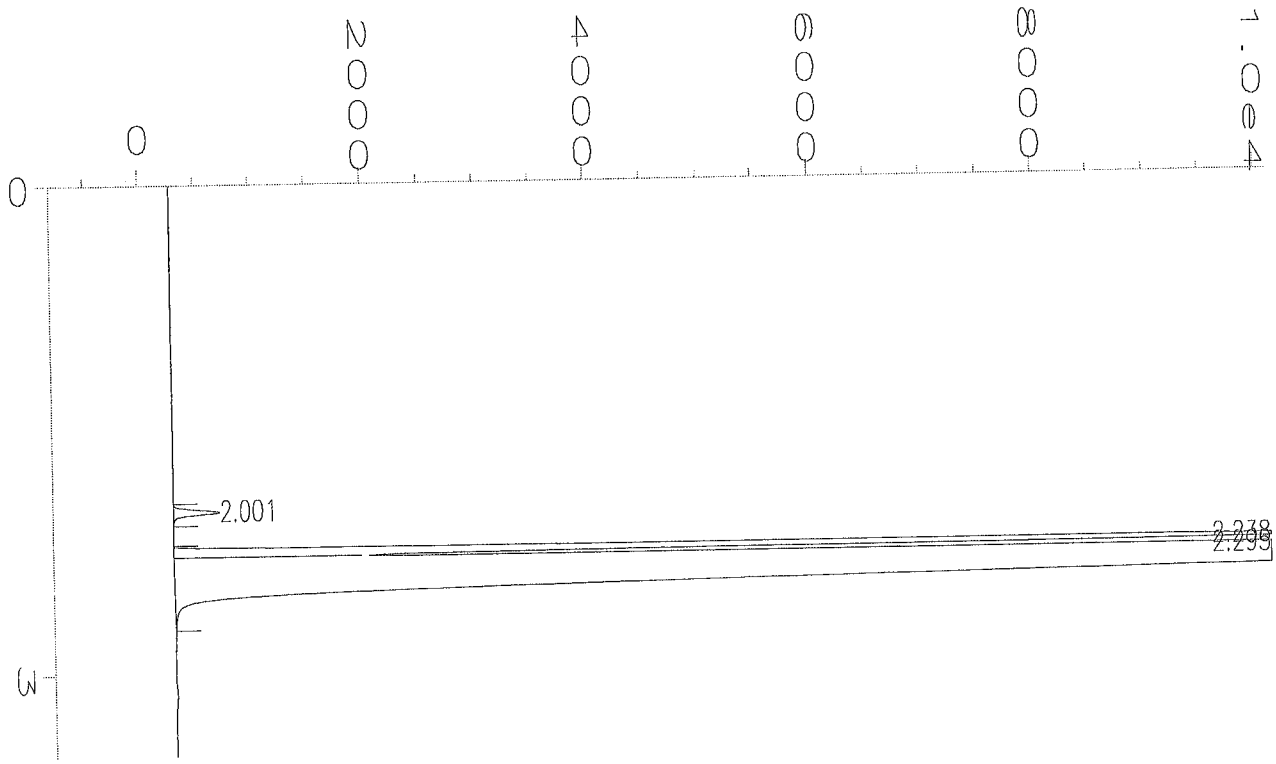
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443538MA.D
Operator : DA
Instrument : GCL
Sample Name : T-606
Run Time Bar Code:
Acquired on : 09 Dec 24 04:04 PM
Report Created on: 09 Dec 24 04:07 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443538MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.001	870	414	BB	0.033	0.4114
2	2.238	28083	15608	BV	0.030	13.2707
3	2.295	182665	28151	VB	0.085	86.3180

Total area = 211618

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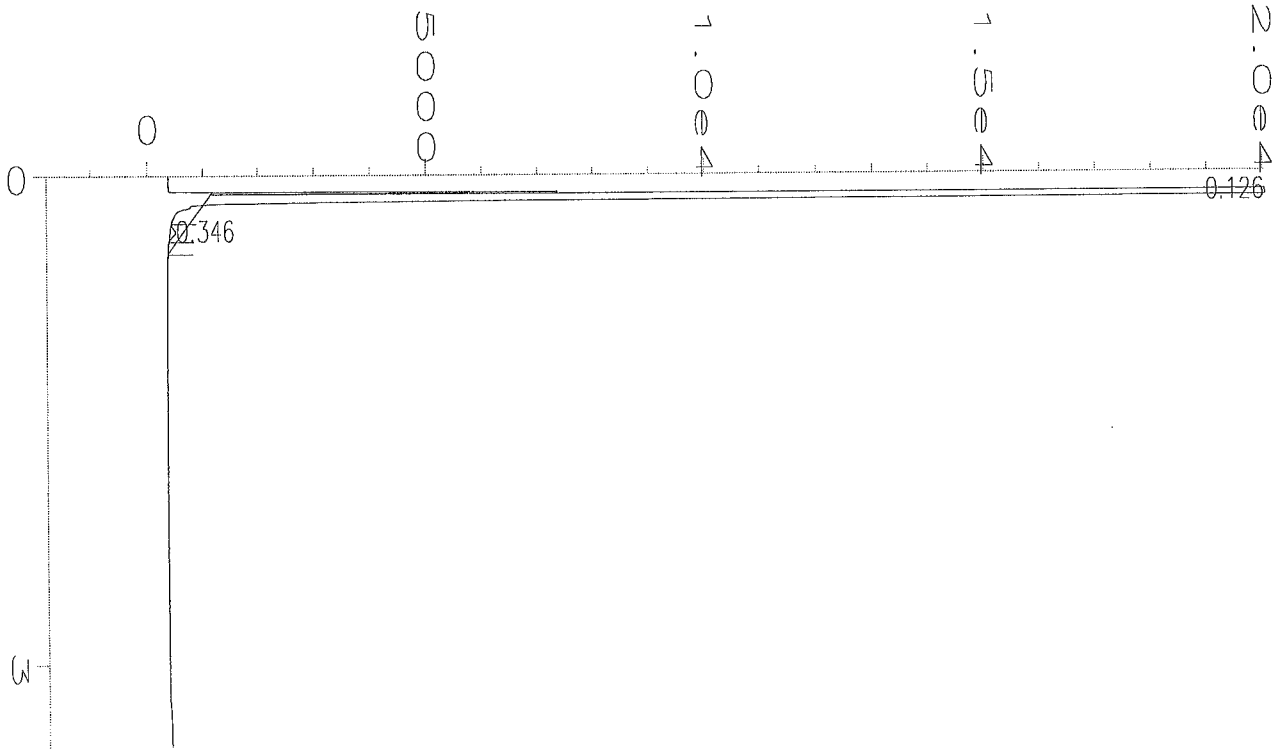

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443538PA.D
Operator : DA
Instrument : GCL
Sample Name : T-606
Run Time Bar Code:
Acquired on : 09 Dec 24 04:04 PM
Report Created on: 09 Dec 24 04:07 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443538PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.126	299190	246319	BB S	0.036	99.8974
2	0.346	307	101	BV T	0.045	0.1026

Total area = 299497

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443538A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**38**			SF:	**2**
Description:	**T-606**			Not Detected Flag:	**ND**
Date Sampled:	**11/21/24**	Time:	**9:58**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**16:04**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**608**				
Can Factor	**1.38**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28083**
7727-37-9	Nitrogen	03	2.07	**182665**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**307**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443538A		Detect Flag:	ND	**Laboratory Number: 38**
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.38				
Air Volume:	0.50 ml		Temp	**25** C	
Base Volume	0.50 ml		Atm P	**760.0** torr	
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.124	0.041	0.123	414	1,242	U
Oxygen	32.00	16.81	16.81	16.81	168,113	16.81	16.81	500	0.069	0.207	0.069	0.207	690	2,070	
Nitrogen	28.01	83.10	83.10	83.10	831,047	83.10	83.10	1000	0.138	0.414	0.138	0.414	1,380	4,140	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Carbon Dioxide	44.01	0.08	0.08	0.08	840	0.08	0.08	100	0.014	0.041	0.014	0.042	138	414	
Sum - N2		16.90	100.00												
Sum		100.0													
Total Nitrogen		101.20													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435

Analytical Method: D1945

Laboratory Number: 38

File Name: 24435538A

Description: T-606

Can/Tube#: 608

QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 9:58

Date Analyzed: 12/09/24 **Time:** 16:04

Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	16.81	690	2,070	168,113	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	0.08	138	414	840	

Sample Data Packages

SDG Number 224435

Lab Id Number 39

Client ID T-607

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 39

Client: C.E. Schmidt
Client ID: T-607
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 771
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:52
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY **Analytical Test:** Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

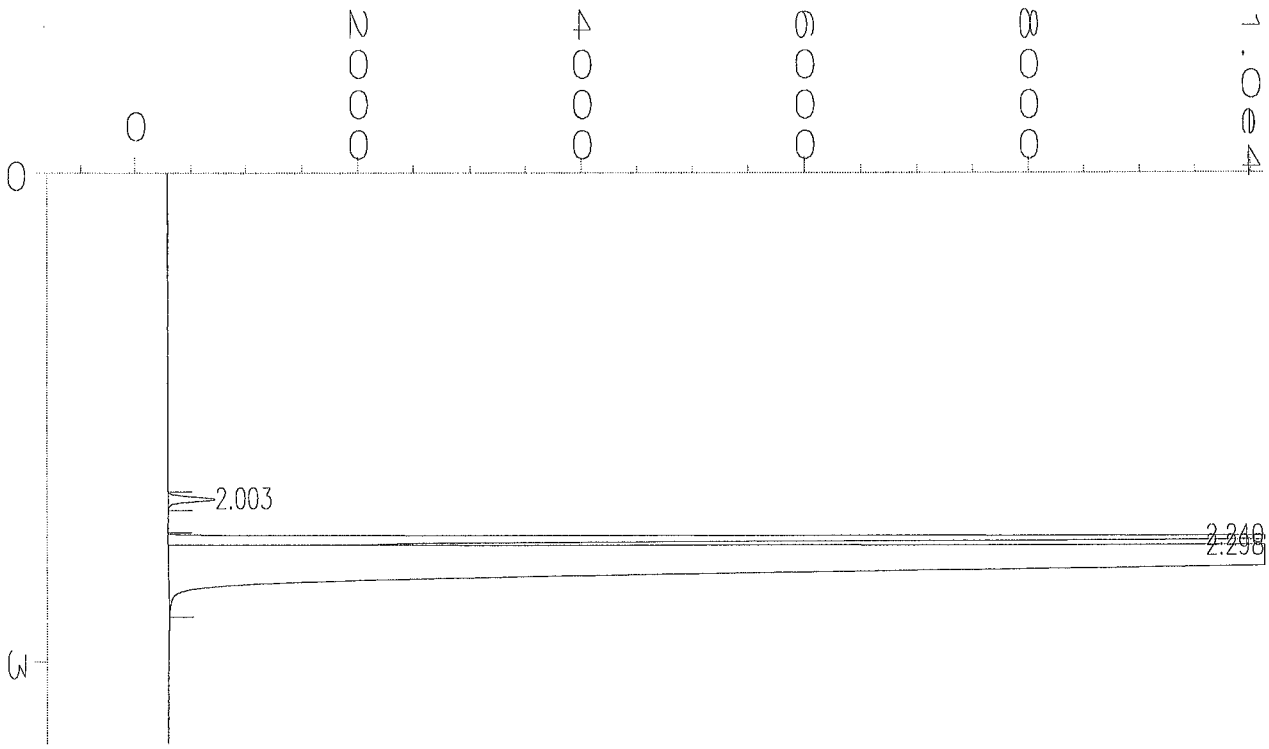
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443539MA.D
Operator : DA
Instrument : GCL
Sample Name : T-607
Run Time Bar Code:
Acquired on : 09 Dec 24 04:08 PM
Report Created on: 09 Dec 24 04:12 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443539MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.003	891	427	BB	0.033	0.4230
2	2.240	29677	15884	BV	0.031	14.0848
3	2.298	180135	27880	VB	0.089	85.4922

Total area = 210703

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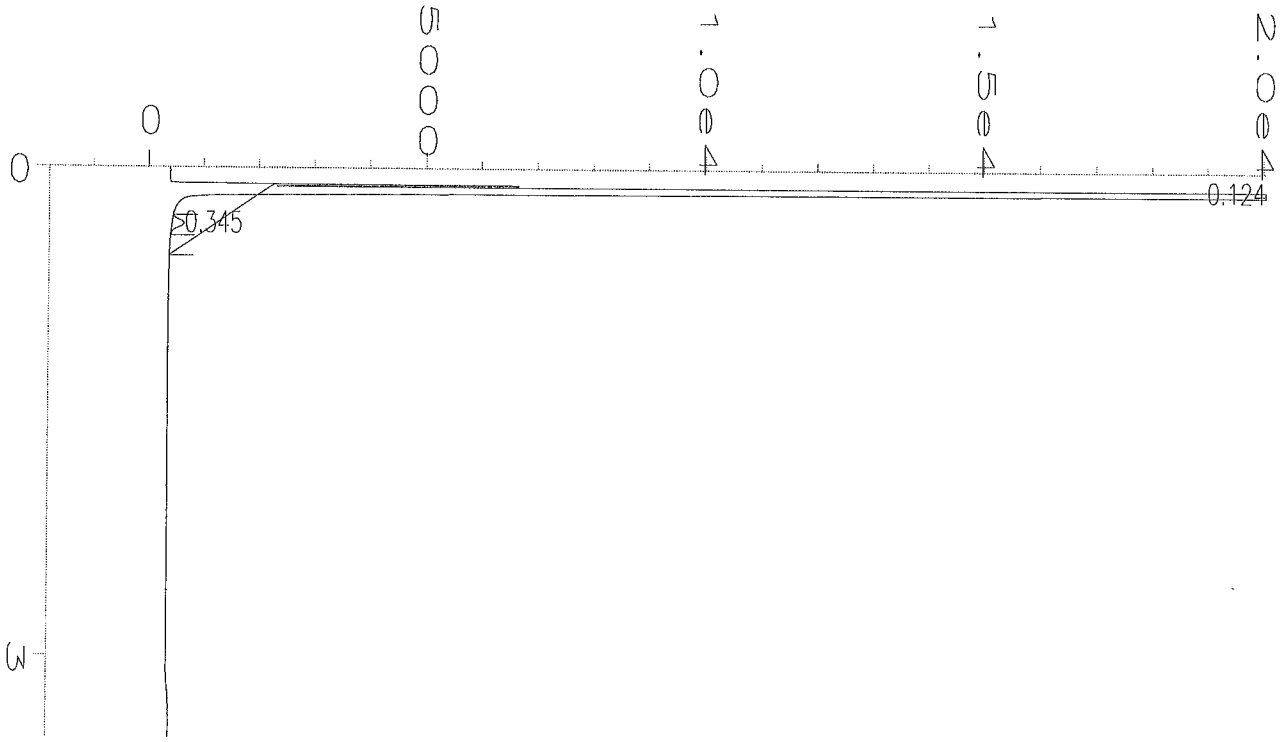

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443539PA.D
Operator : DA
Instrument : GCL
Sample Name : T-607
Run Time Bar Code:
Acquired on : 09 Dec 24 04:08 PM
Report Created on: 09 Dec 24 04:12 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443539PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	286707	267989	BB S	0.017	99.7586
2	0.345	694	223	BV T	0.048	0.2414

Total area = 287401

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443539A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**39**		SF:	**2**	
Description:	**T-607**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **9:52**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **16:08**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**771**				
Can Factor	**1.31**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**29677**
7727-37-9	Nitrogen	03	2.07	**180135**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**694**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

File Name:	2443539A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.31				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Laboratory Number: 39

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.118	0.039	0.117	393	1,179	U
Oxygen	32.00	16.86	16.86	16.86	168,644	16.86	16.86	500	0.066	0.197	0.066	0.198	655	1,965	
Nitrogen	28.01	82.96	82.96	82.96	829,554	82.96	82.96	1000	0.131	0.393	0.131	0.393	1,310	3,930	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Carbon Dioxide	44.01	0.18	0.18	0.18	1,802	0.18	0.18	100	0.013	0.039	0.013	0.039	131	393	
Sum - N2		17.04	100.00												
Sum		100.0													
Total Nitrogen		94.74													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	Y	Y
=	Y	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435

Analytical Method: D1945

Laboratory Number: 39

File Name: 24435391A

Description: T-607

Can/Tube#: 771

QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 9:52

Date Analyzed: 12/09/24 **Time:** 16:08

Can Dilution Factor: 1.31

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.86	655	1,965	168,644	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	0.18	131	393	1,802	

Sample Data Packages

SDG Number 224435
Lab Id Number 40

Client ID T-608

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 40

Client: C.E. Schmidt
Client ID: T-608
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 531
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 9:47
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

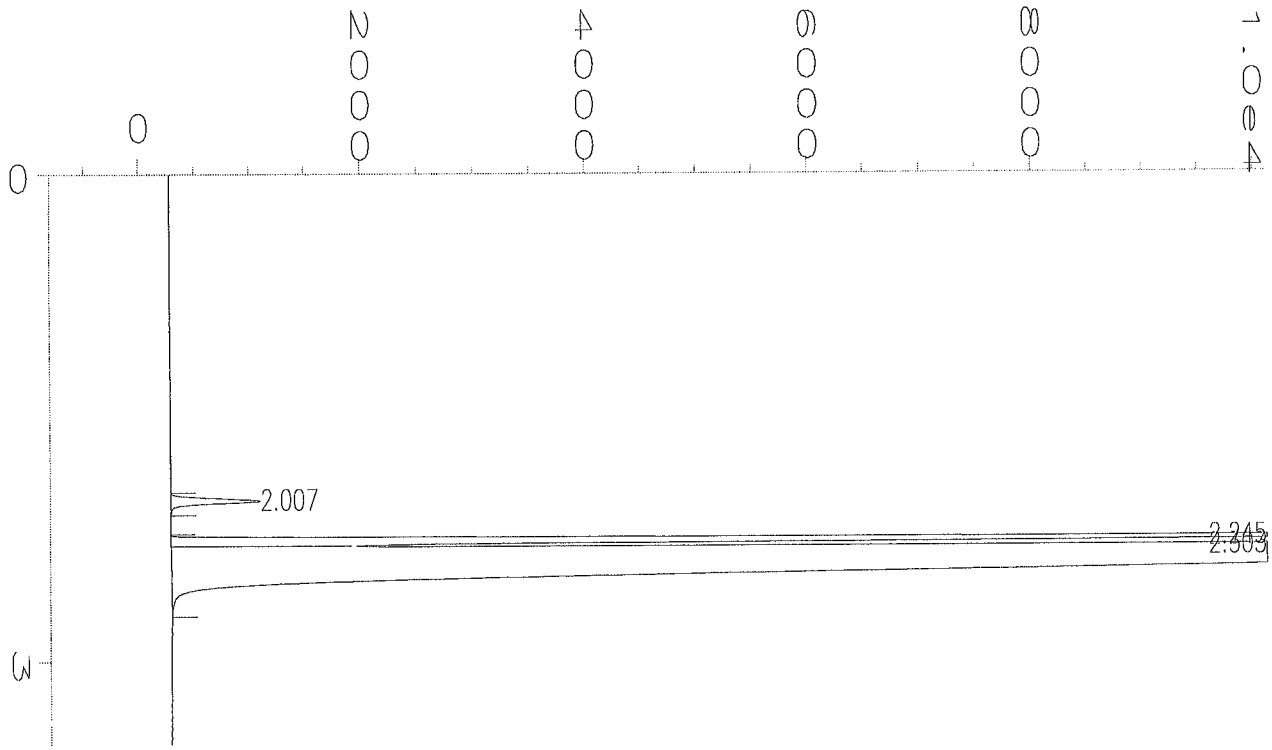
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443540MA.D
Operator : DA
Instrument : GCL
Sample Name : T-608
Run Time Bar Code:
Acquired on : 09 Dec 24 04:12 PM
Report Created on: 09 Dec 24 04:16 PM
Sample Info : SCHMIDT

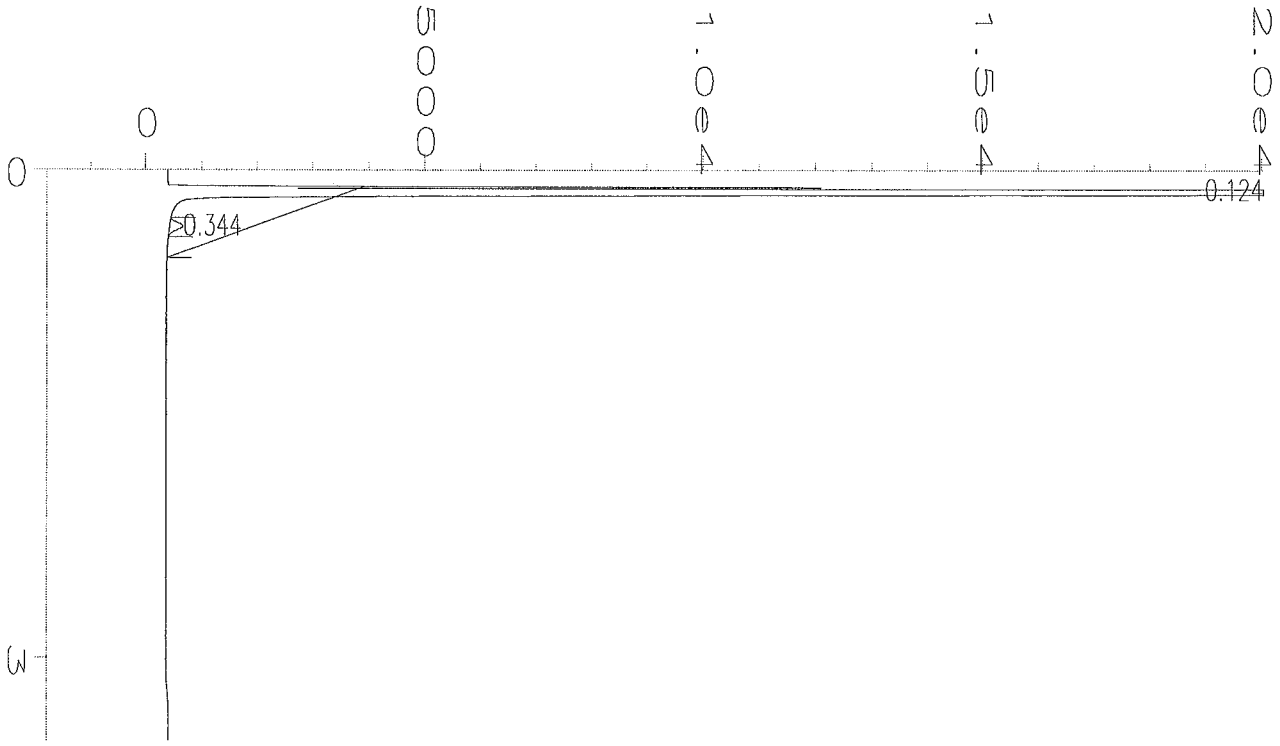
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443540MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.007	1714	811	BB	0.033	0.8289
2	2.245	27541	15357	BV	0.030	13.3217
3	2.303	177481	27306	VB	0.084	85.8494

Total area = 206736

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443540PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-608
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 04:12 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 04:16 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443540PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	260361	260471	BB S	0.016	99.7186
2	0.344	735	238	BV T	0.048	0.2814

Total area = 261096

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443540A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**40**		SF:	**2**	
Description:	**T-608**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **9:47**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **16:12**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**531**				
Can Factor	**1.35**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27541**
7727-37-9	Nitrogen	03	2.07	**177481**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**735**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 40

File Name:	2443540A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.35				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.35		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	405	1,215	U
Oxygen	32.00	16.13	16.13	16.13	161,285	16.13	16.13	500	0.068	0.203	0.068	0.204	675	2,025	
Nitrogen	28.01	83.67	83.67	83.67	836,749	83.67	83.67	1000	0.135	0.405	0.135	0.405	1,350	4,050	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	135	405	U
Carbon Dioxide	44.01	0.20	0.20	0.20	1,967	0.20	0.20	100	0.014	0.041	0.014	0.042	135	405	
Sum - N2		16.33	100.00												
Sum		100.0													
Total Nitrogen		96.19													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	Y	Y
=	Y	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 **Laboratory Number:** 40

SDG: 224435

File Name: 2443540A **Date Sampled:** 11/21/24 **Time:** 9:47

Description: T-608 **Date Analyzed:** 12/09/24 **Time:** 16:12

Can/Tube#: 531 **Can Dilution Factor:** 1.35

QC_Batch: 120924-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	405	1,215	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.13	675	2,025	161,285	
630-08-0	Carbon Monoxide	0.014	0.042	ND	135	405	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	0.20	135	405	1,967	

Sample Data Packages

SDG Number 224435
Lab Id Number 41

Client ID T-609

Analytical Method ASTM D1945

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 41

Client: C.E. Schmidt
Client ID: T-609
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 668
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:38
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

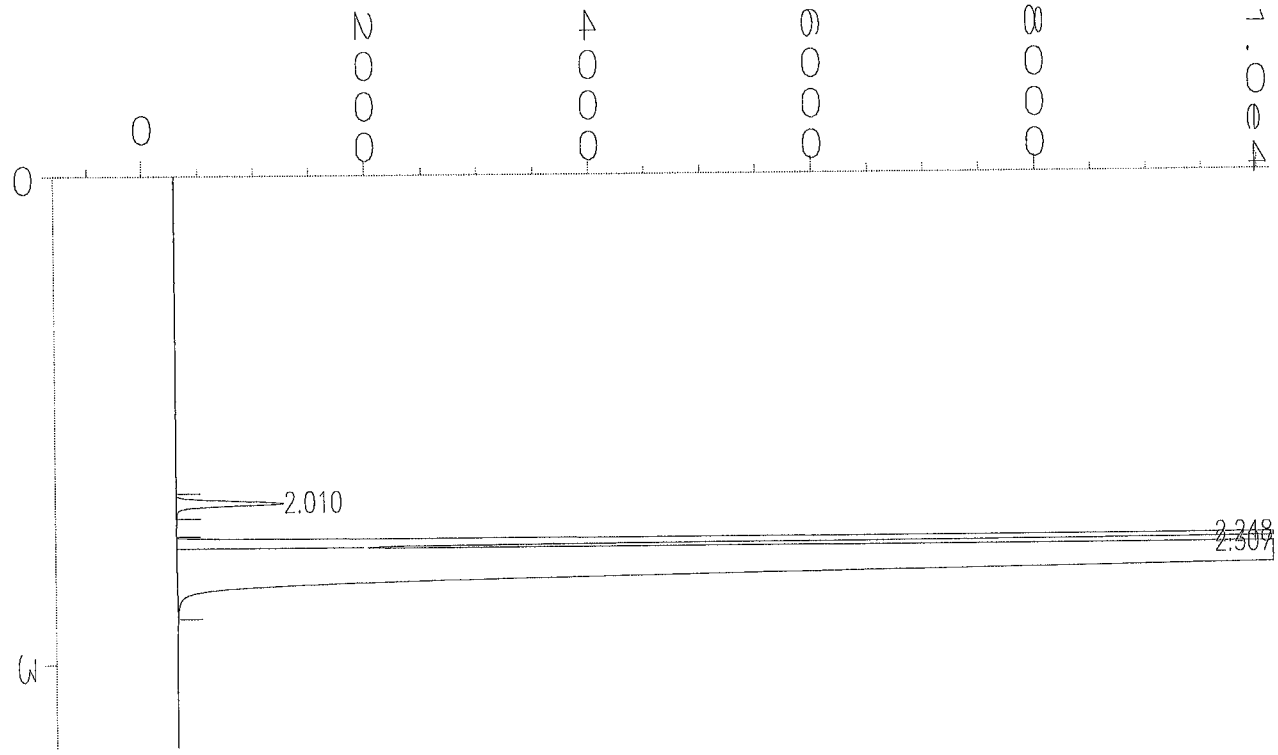
Analysis Instructions

Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions: EAS QC Criteria
Report Types: PDF Only
EDD Instructions EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443541MA.D
Operator : DA
Instrument : GCL
Sample Name : T-609
Run Time Bar Code:
Acquired on : 09 Dec 24 04:16 PM
Report Created on: 09 Dec 24 04:20 PM
Sample Info : SCHMIDT

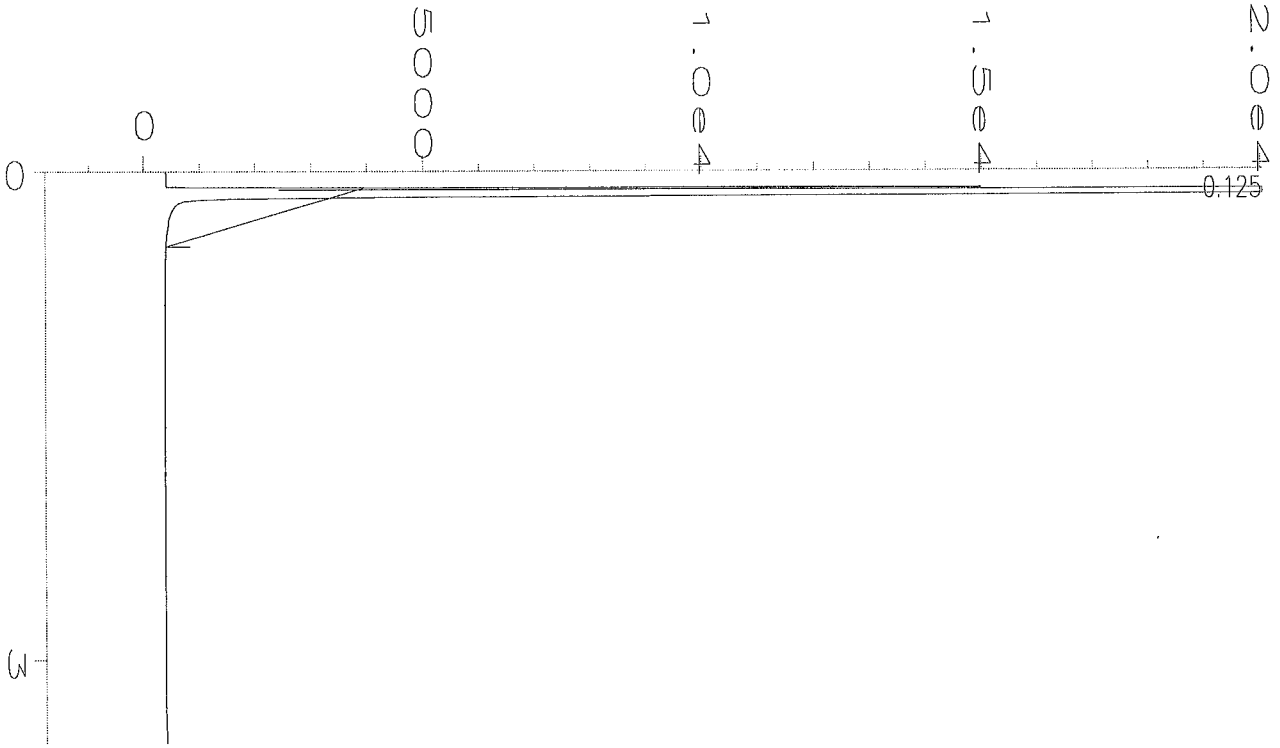
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443541MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.010	2075	972	BB	0.033	1.0087
2	2.248	28494	15425	BV	0.030	13.8529
3	2.307	175121	27032	VB	0.085	85.1384

Total area = 205689

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443541PA.D
Operator : DA
Instrument : GCL
Sample Name : T-609
Run Time Bar Code:
Acquired on : 09 Dec 24 04:16 PM
Report Created on: 09 Dec 24 04:20 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443541PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	265341	262890	BB S	0.016	100.0000

Total area = 265341

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443541A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**41**		SF:	**2**	
Description:	**T-609**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **11:38**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **16:16**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**668**				
Can Factor	**1.31**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28494**
7727-37-9	Nitrogen	03	2.07	**175121**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 41

File Name:	2443541A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.31				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.31		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.039	0.118	0.039	0.117	393	1,179	U
Oxygen	32.00	16.19	16.19	16.19	161,921	16.19	16.19	500	0.066	0.197	0.066	0.198	655	1,965	
Nitrogen	28.01	83.81	83.81	83.81	838,079	83.81	83.81	1000	0.131	0.393	0.131	0.393	1,310	3,930	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.013	0.039	0.013	0.039	131	393	U
Sum - N2		16.19	100.00												
Sum		100.0													
Total Nitrogen		92.10													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435

Analytical Method: D1945

Laboratory Number: 41

File Name: 24435541A

Description: T-609

Can/Tube#: 668

QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:38

Date Analyzed: 12/09/24 **Time:** 16:16

Can Dilution Factor: 1.31

		MDL	RL	Result	MDL	RL	Result	Flag
CAS#	Compound	%	%	%	ppmv	ppmv	ppmV	
1333-74-0	Hydrogen	0.039	0.117	ND	393	1,179	ND	ND
7782-44-7	Oxygen	0.066	0.198	16.19	655	1,965	161,921	
630-08-0	Carbon Monoxide	0.013	0.039	ND	131	393	ND	ND
124-38-9	Carbon Dioxide	0.013	0.039	ND	131	393	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 42

Client ID T-610

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
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Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 42

Client: C.E. Schmidt
Client ID: T-610
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 730
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:11
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

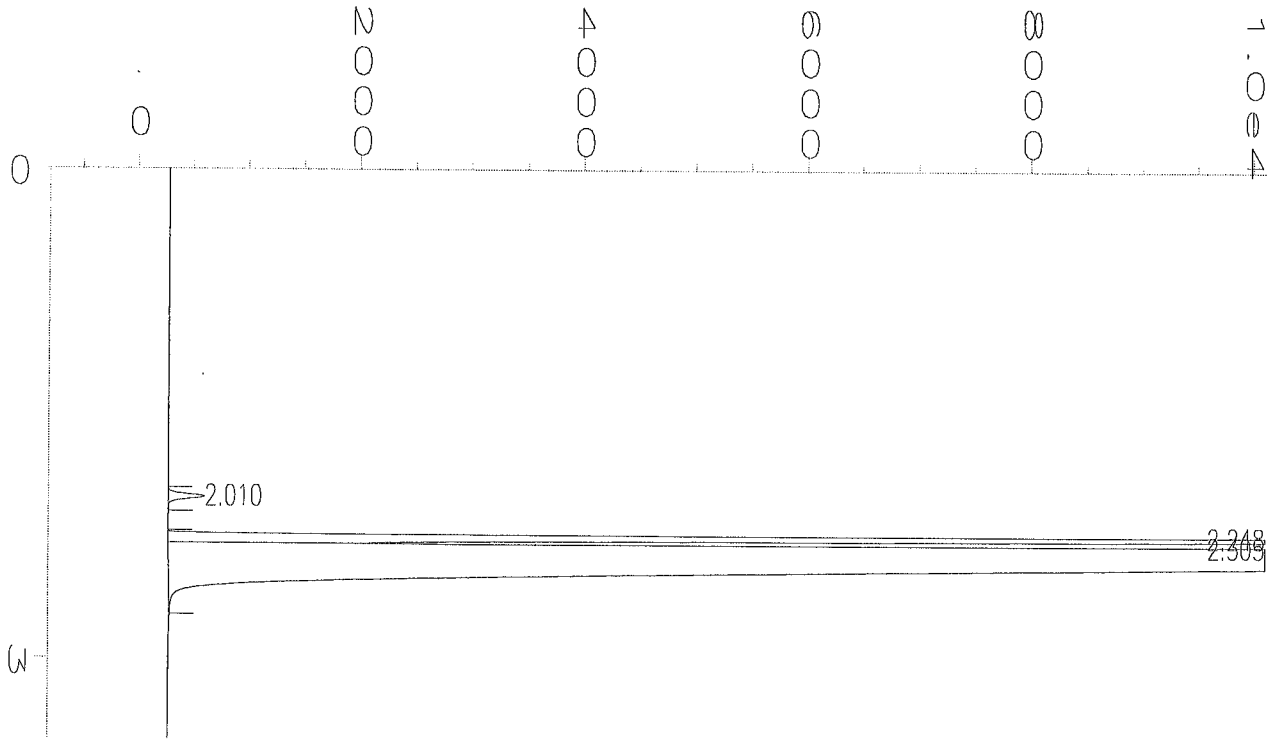
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443542MA.D
Operator : DA
Instrument : GCL
Sample Name : T-610
Run Time Bar Code:
Acquired on : 09 Dec 24 04:20 PM
Report Created on: 09 Dec 24 04:24 PM
Sample Info : SCHMIDT

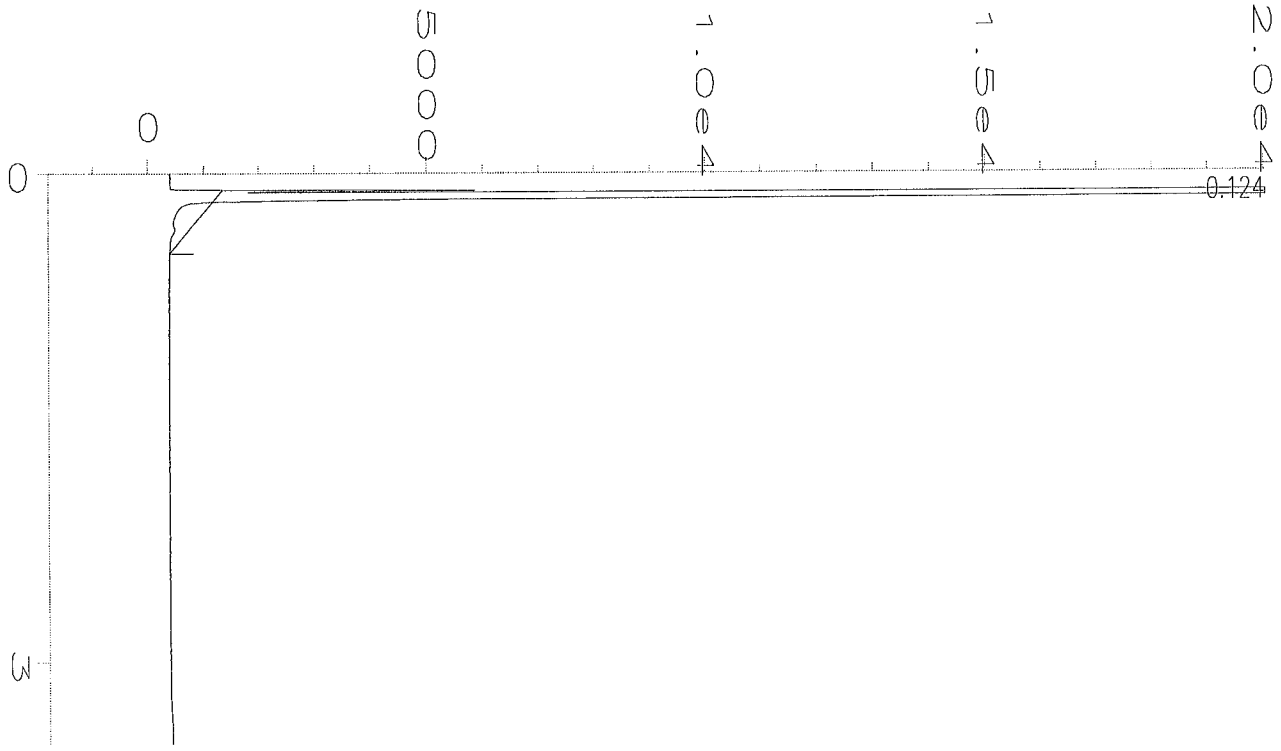
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443542MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.010	687	323	BB	0.033	0.3230
2	2.248	28818	15943	BV	0.030	13.5417
3	2.305	183306	28113	VB	0.084	86.1353

Total area = 212811

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443542PA.D
Operator : DA
Instrument : GCL
Sample Name : T-610
Run Time Bar Code:
Acquired on : 09 Dec 24 04:20 PM
Report Created on: 09 Dec 24 04:24 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443542PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	304481	265603	BB S	0.018	100.0000

Total area = 304481

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443542A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**42**			SF:	**2**
Description:	**T-610**			Not Detected Flag:	**ND**
Date Sampled:	**11/21/24**	Time:	**11:11**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**16:20**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**730**				
Can Factor	**1.37**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**28818**
7727-37-9	Nitrogen	03	2.07	**183306**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435

Laboratory Number: 42

File Name:	2443542A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.37				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.37		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.123	0.041	0.123	411	1,233	U
Oxygen	32.00	17.13	17.13	17.13	171,263	17.13	17.13	500	0.069	0.206	0.069	0.207	685	2,055	
Nitrogen	28.01	82.87	82.87	82.87	828,737	82.87	82.87	1000	0.137	0.411	0.137	0.411	1,370	4,110	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	137	411	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	137	411	U
Sum - N2		17.13	100.00												
Sum		100.0													
Total Nitrogen		100.82													

4435f.xls

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

SDG: 224435
Analytical Method: D1945
Laboratory Number: 42

File Name: 2443542A
Description: T-610
Can/Tube#: 730
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:11
Date Analyzed: 12/09/24 **Time:** 16:20
Can Dilution Factor: 1.37

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	411	1,233	ND	ND
7782-44-7	Oxygen	0.069	0.207	17.13	685	2,055	171,263	
630-08-0	Carbon Monoxide	0.014	0.042	ND	137	411	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	137	411	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 43

Client ID T-611

Analytical Method ASTM D1945

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Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 43

Client: C.E. Schmidt
Client ID: T-611
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 701
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:28
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY **Analytical Test:** Sample Location:

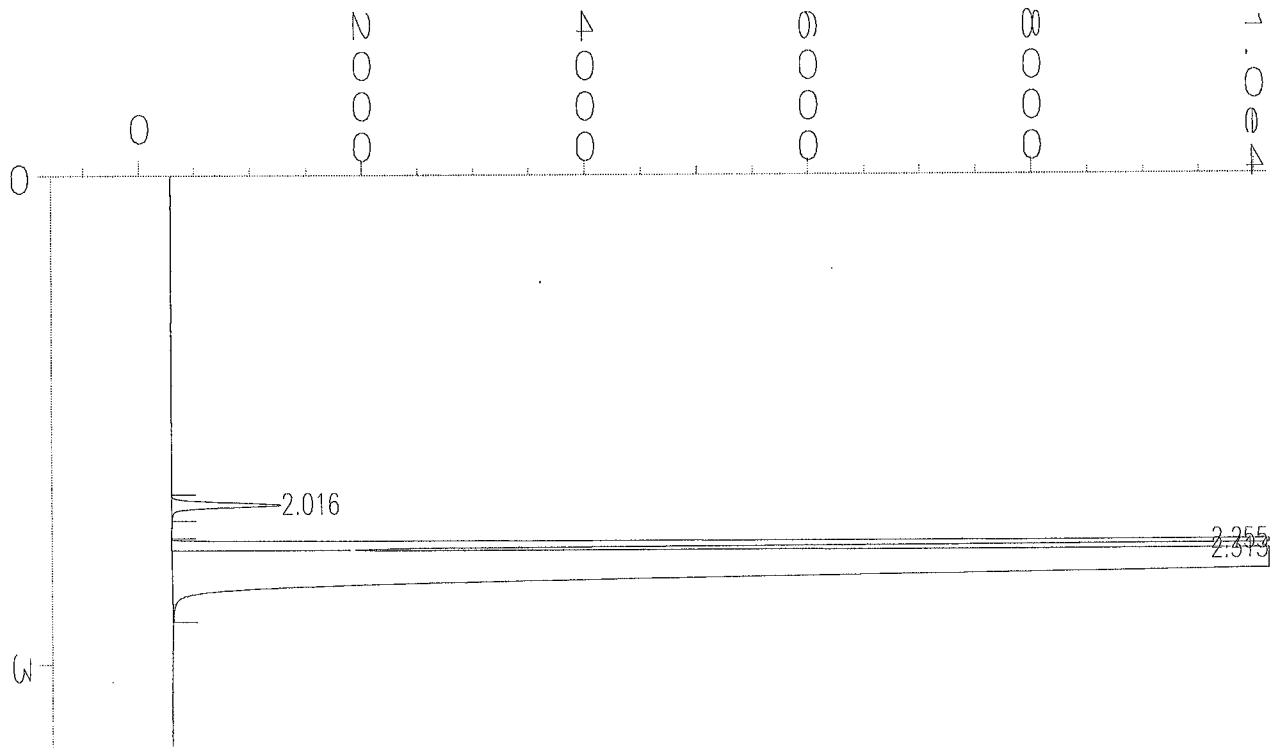
InstrumentMethod:	Item Description:		Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria
Report Types: PDF Only
EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443543MA.D
Operator : DA
Instrument : GCL
Sample Name : T-611
Run Time Bar Code:
Acquired on : 09 Dec 24 04:24 PM
Report Created on: 09 Dec 24 04:28 PM
Sample Info : SCHMIDT

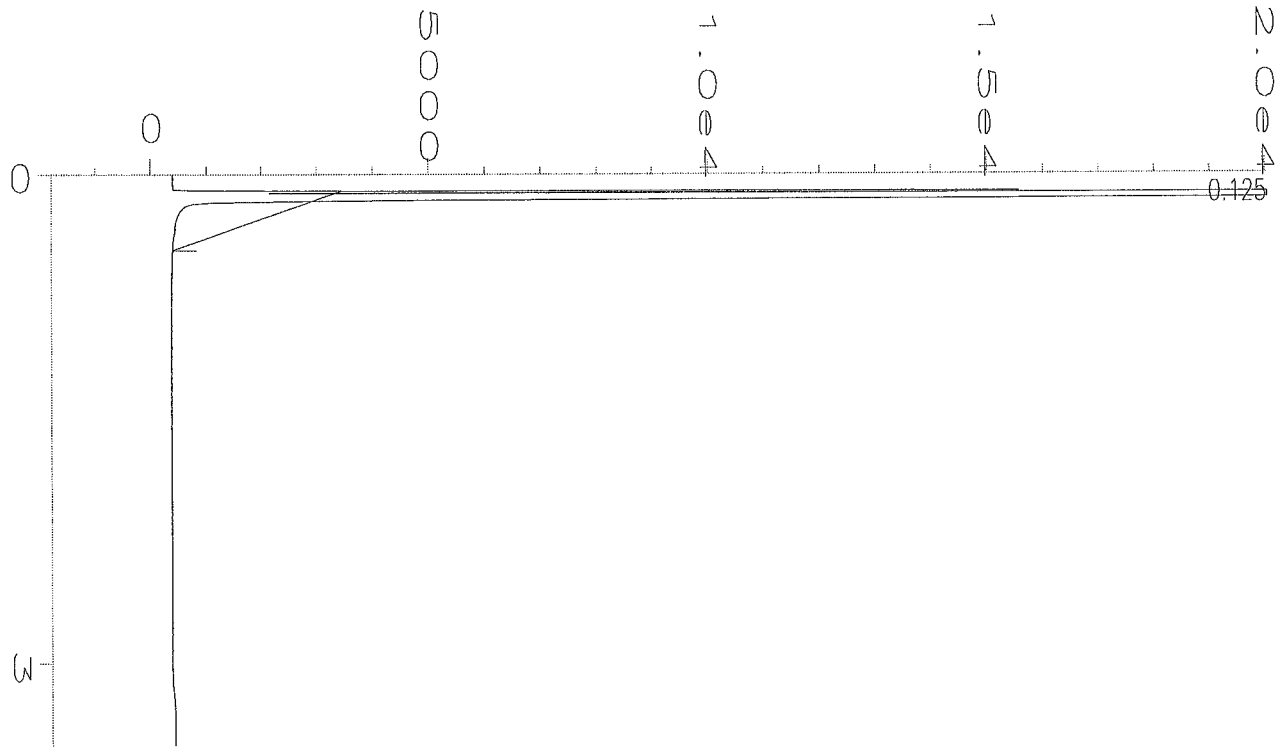
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443543MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.016	2110	986	BB	0.033	1.0293
2	2.255	27443	15149	BV	0.030	13.3892
3	2.313	175410	27003	VB	0.084	85.5815

Total area = 204963

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443543PA.D
Operator : DA
Instrument : GCL
Sample Name : T-611
Run Time Bar Code:
Acquired on : 09 Dec 24 04:24 PM
Report Created on: 09 Dec 24 04:28 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443543PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	265915	266031	BB S	0.016	100.0000

Total area = 265915

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443543A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**43**		SF:	**2**	
Description:	**T-611**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **11:28**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **16:24**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**701**				
Can Factor	**1.35**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**27443**
7727-37-9	Nitrogen	03	2.07	**175410**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 43

File Name:	2443543A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.35				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.35		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.122	0.041	0.123	405	1,215	U
Oxygen	32.00	16.07	16.07	16.07	160,711	16.07	16.07	500	0.068	0.203	0.068	0.204	675	2,025	
Nitrogen	28.01	83.93	83.93	83.93	839,289	83.93	83.93	1000	0.135	0.405	0.135	0.405	1,350	4,050	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	135	405	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	135	405	U
Sum - N2		16.07	100.00												
Sum		100.0													
Total Nitrogen		95.07													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	=	Y
ND	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 | **SDG:** 224435 | **Laboratory Number:** 43

File Name: 24435543A | **Date Sampled:** 11/21/24 | **Time:** 11:28
Description: T-611 | **Date Analyzed:** 12/09/24 | **Time:** 16:24
Can/Tube#: 701 | **Can Dilution Factor:** 1.35
QC_Batch: 120924-GCO

		MDL	RL	Result	MDL	RL	Result	Flag
CAS#	Compound	%	%	%	ppmv	ppmv	ppmV	
1333-74-0	Hydrogen	0.041	0.123	ND	405	1,215	ND	ND
7782-44-7	Oxygen	0.068	0.204	16.07	675	2,025	160,711	
630-08-0	Carbon Monoxide	0.014	0.042	ND	135	405	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	135	405	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 44

Client ID T-612

Analytical Method ASTM D1945

Index

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Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due:

Expires: 12/21/2024

224435 44

Client: C.E. Schmidt
Client ID: T-612
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 514
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:20
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test:

Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

Sample Type:

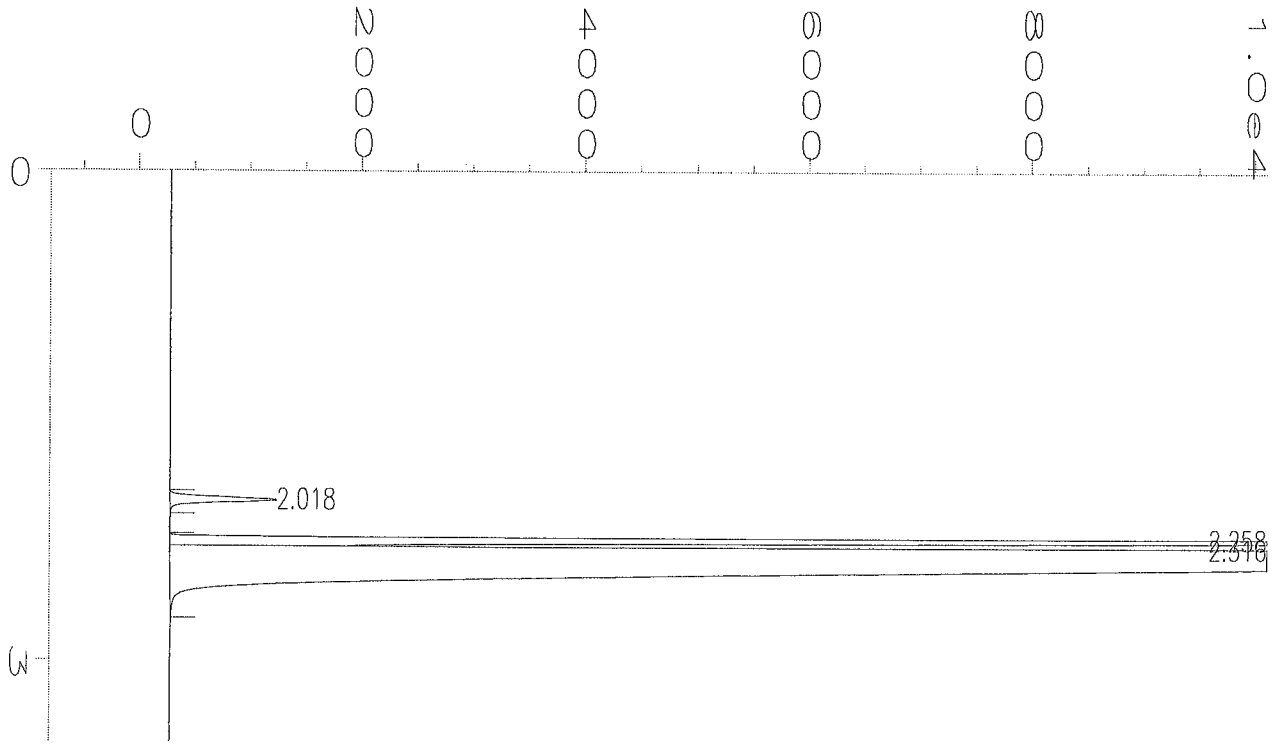
WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions EAS QC Criteria

Report Types: PDF Only

EDD Instructions **EDD Type:**



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443544MA.D
Operator : DA
Instrument : GCL
Sample Name : T-612
Run Time Bar Code:
Acquired on : 09 Dec 24 04:29 PM
Report Created on: 09 Dec 24 04:32 PM
Sample Info : SCHMIDT

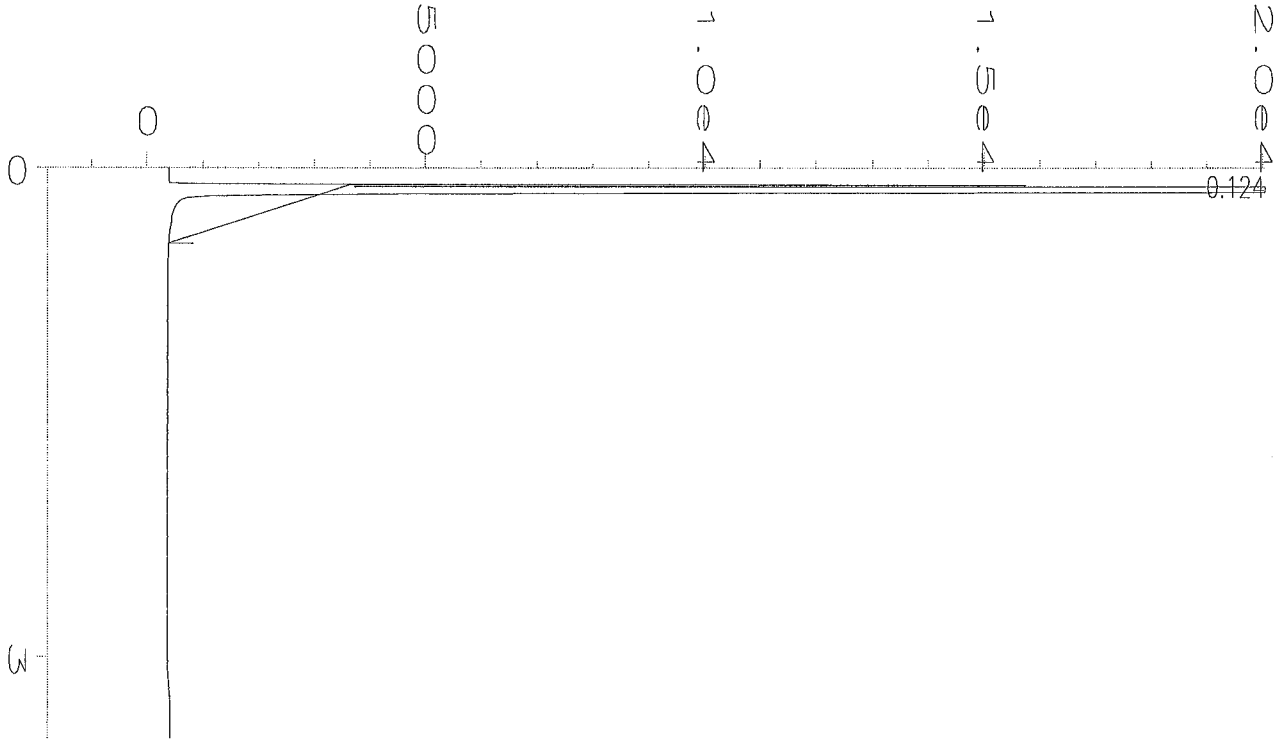
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443544MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.018	2064	967	BB	0.033	1.0038
2	2.258	26913	14957	BV	0.030	13.0874
3	2.316	176665	27109	VB	0.088	85.9087

Total area = 205643

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443544PA.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : T-612
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 04:29 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 04:32 PM
Analysis Method : ASTM1946.MTH
Sample Info : SCHMIDT

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443544PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	262130	257545	BB S	0.016	100.0000

Total area = 262130

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443544A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**44**			SF:	**2**
Description:	**T-612**			Not Detected Flag:	**ND**
Date Sampled:	**11/21/24**	Time:	**11:20**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**16:29**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**514**				
Can Factor	**1.39**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26913**
7727-37-9	Nitrogen	03	2.07	**176665**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 44

File Name: 2443544A
QCBatch 120924-GCO
Can Factor 1.39
Air Volume: 0.50 ml
Base Volume 0.50 ml
Dilution Factor 1.39
Gas Constant: 24.4
Decimal Places: 2

Detect Flag: ND
Report Normalized: **No**

Temp **25** C
Atm P **760.0** torr
Gas Constant 24.4
RL Factor **3**

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.042	0.125	0.042	0.126	417	1,251	U
Oxygen	32.00	16.23	16.23	16.23	162,277	16.23	16.23	500	0.070	0.209	0.070	0.210	695	2,085	
Nitrogen	28.01	83.77	83.77	83.77	837,723	83.77	83.77	1000	0.139	0.417	0.139	0.417	1,390	4,170	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.042	0.014	0.042	139	417	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.042	0.014	0.042	139	417	U
Sum - N2		16.23	100.00												
Sum		100.0													
Total Nitrogen		98.59													

EPA Qual	Det Qual	Rpt
ND	=	Y
=	=	Y
=	=	Y
ND	=	Y
ND	=	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945 | **Laboratory Number:** 44 | **SDG:** 224435

File Name: 24435444A | **Date Sampled:** 11/21/24 | **Time:** 11:20
Description: T-612 | **Date Analyzed:** 12/09/24 | **Time:** 16:29
Can/Tube#: 514 | **Can Dilution Factor:** 1.39
QC_Batch: 120924-GCO

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.042	0.126	ND	417	1,251	ND	ND
7782-44-7	Oxygen	0.070	0.210	16.23	695	2,085	162,277	
630-08-0	Carbon Monoxide	0.014	0.042	ND	139	417	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	139	417	ND	ND

Sample Data Packages

SDG Number 224435

Lab Id Number 45

Client ID T-613

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 45

Client: C.E. Schmidt
Client ID: T-613
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 694
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:25
Received: 11/21/2024 Time: 13:00

	Date:		
Initial :			
Final:			
Factor:			

LABORATORY

Analytical Test: | Sample Location:

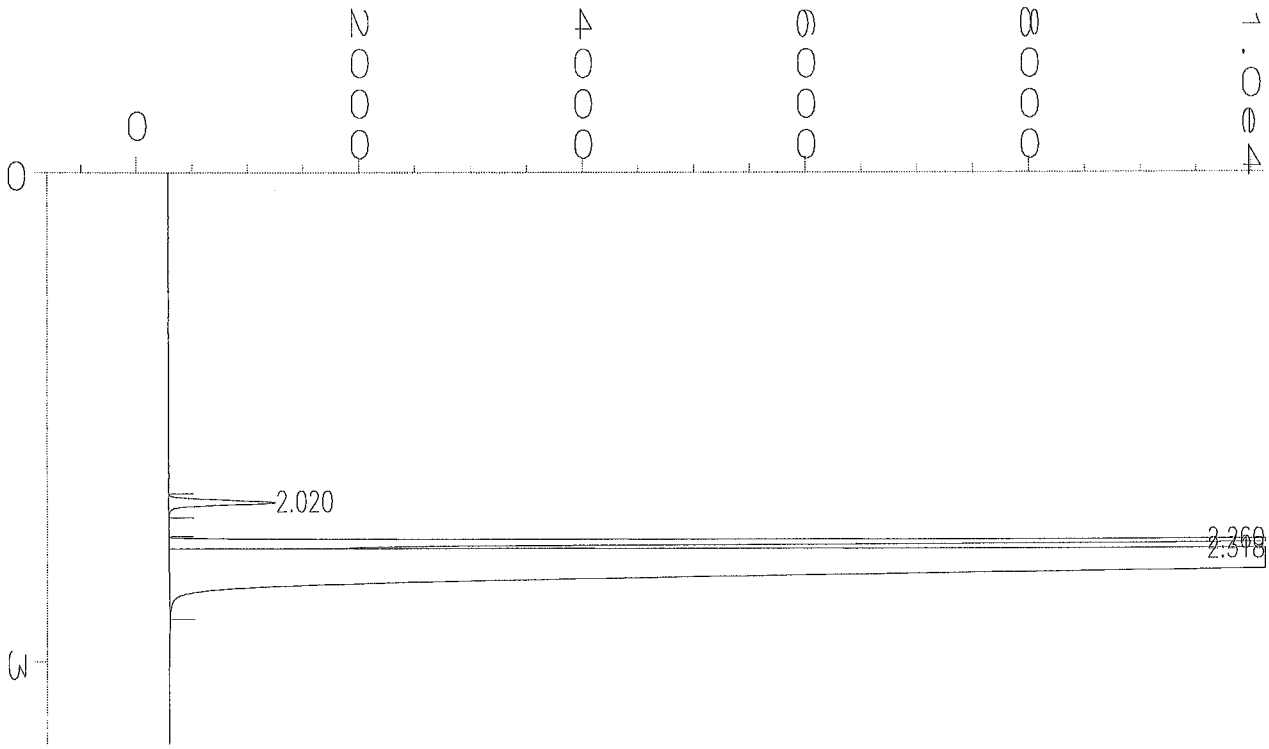
InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis 30

Analysis Instructions | Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only
EDD Instructions | EDD Type:



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443545MA.D
Operator : DA
Instrument : GCL
Sample Name : T-613
Run Time Bar Code:
Acquired on : 09 Dec 24 04:33 PM
Report Created on: 09 Dec 24 04:36 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443545MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.020	2064	963	BB	0.033	1.0073
2	2.260	26928	14822	BV	0.030	13.1403
3	2.318	175937	27188	VB	0.086	85.8524

Total area = 204929

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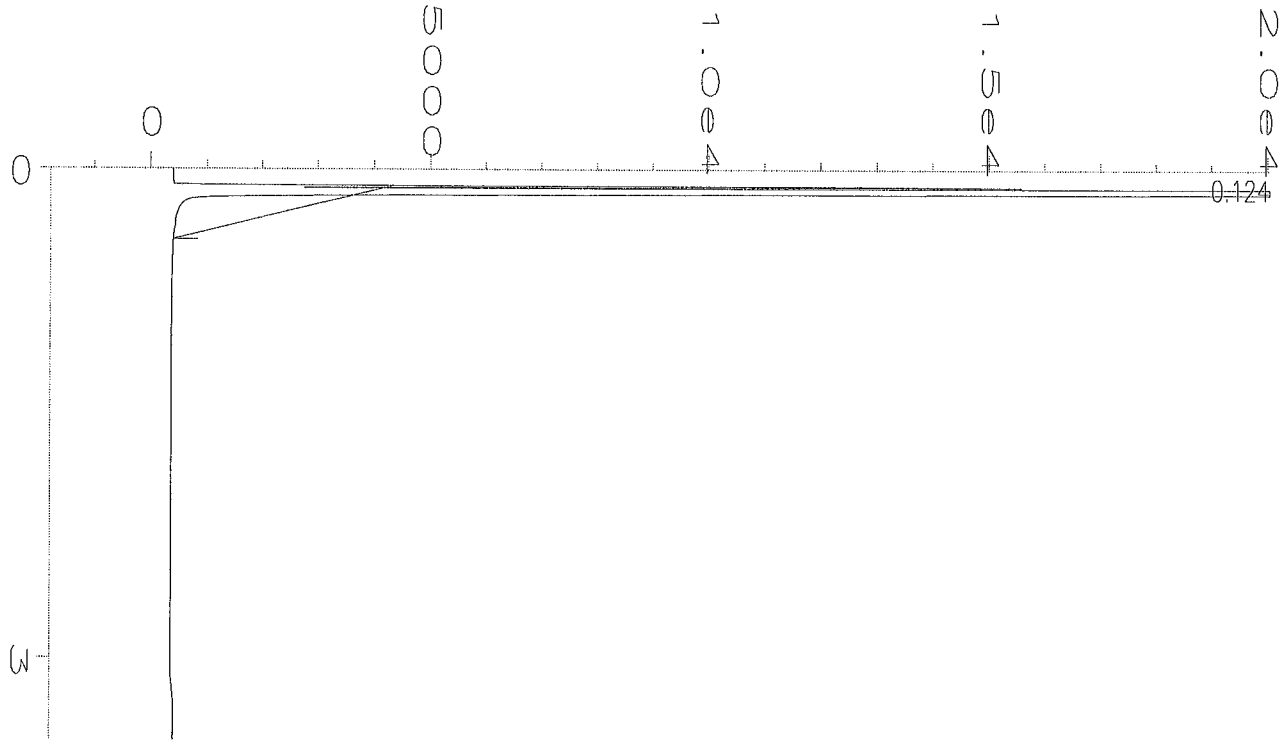

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\443545PA.D
Operator : DA
Instrument : GCL
Sample Name : T-613
Run Time Bar Code:
Acquired on : 09 Dec 24 04:33 PM
Report Created on: 09 Dec 24 04:36 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443545PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	266267	253992	BB S	0.016	100.0000

Total area = 266267

==========

QUANTITATION REPORT
ASTM D1945 GC/TCD

File Name:	**2443545A**		Method:	**D1945**	
SDG:	**224435**		Cal Update:	**4/19/24**	
Lab Id:	**45**		SF:	**2**	
Description:	**T-613**		Not Detected Flag:	**ND**	
Date Sampled:	**11/21/24**	Time: **11:25**	Matrix	**AA**	
Date Received:	**11/21/24**	Time: **13:00**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **16:33**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**694**				
Can Factor	**1.39**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26928**
7727-37-9	Nitrogen	03	2.07	**175937**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

File Name:	2443545A
QCBatch	120924-GCO
Can Factor	1.39
Air Volume:	0.50 ml
Base Volume	0.50 ml
Dilution Factor	1.39
Gas Constant:	24.4
Decimal Places:	2

Detect Flag: ND
Report Normalized: **No**

Temp	**25**	C
Atm P	**760.0**	torr
Gas Constant	24.4	
RL Factor	**3**	

SDG: 224435
Laboratory Number: 45

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.042	0.125	0.042	0.126	417	1,251	U
Oxygen	32.00	16.24	16.24	16.24	162,367	16.24	16.24	500	0.070	0.209	0.070	0.210	695	2,085	
Nitrogen	28.01	83.76	83.76	83.76	837,633	83.76	83.76	1000	0.139	0.417	0.139	0.417	1,390	4,170	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.042	0.014	0.042	139	417	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.042	0.014	0.042	139	417	U
Sum - N2		16.24	100.00												
Sum		100.0													
Total Nitrogen		98.18													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 45

File Name: 2443545A
Description: T-613
Can/Tube#: 694
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:25
Date Analyzed: 12/09/24 **Time:** 16:33
Can Dilution Factor: 1.39

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.042	0.126	ND	417	1,251	ND	ND
7782-44-7	Oxygen	0.070	0.210	16.24	695	2,085	162,367	
630-08-0	Carbon Monoxide	0.014	0.042	ND	139	417	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	139	417	ND	ND

Sample Data Packages

SDG Number 224435
Lab Id Number 46

Client ID T-614

Analytical Method ASTM D1945

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

Laboratory Worksheet

Due: | Expires: 12/21/2024 | 224435 | 46

Client: C.E. Schmidt
Client ID: T-614
Description:
Project Name: Chiquita Canyon
EAS Project: 17807 EAS PM: David Atkinson

MS Load Vol: 300
MS SIM Vol:
GCK Load Vol: 200
GCP Load Vol:
Sample Volume:

Media: CAN
Can Number: 880
FC Number: 0
TAT Working:
Sampling Time:
Flow:

Can Pressurization:

Sampled: 11/21/2024 Time: 11:36
Received: 11/21/2024 Time: 13:00

Date:
Initial :
Final:
Factor:

LABORATORY

Analytical Test: | Sample Location:

InstrumentMethod:	Item Description:	Holding Time:
GCO	ASTM D1945	ASTM D1945 Permanent Gas Analysis	30

Analysis Instructions

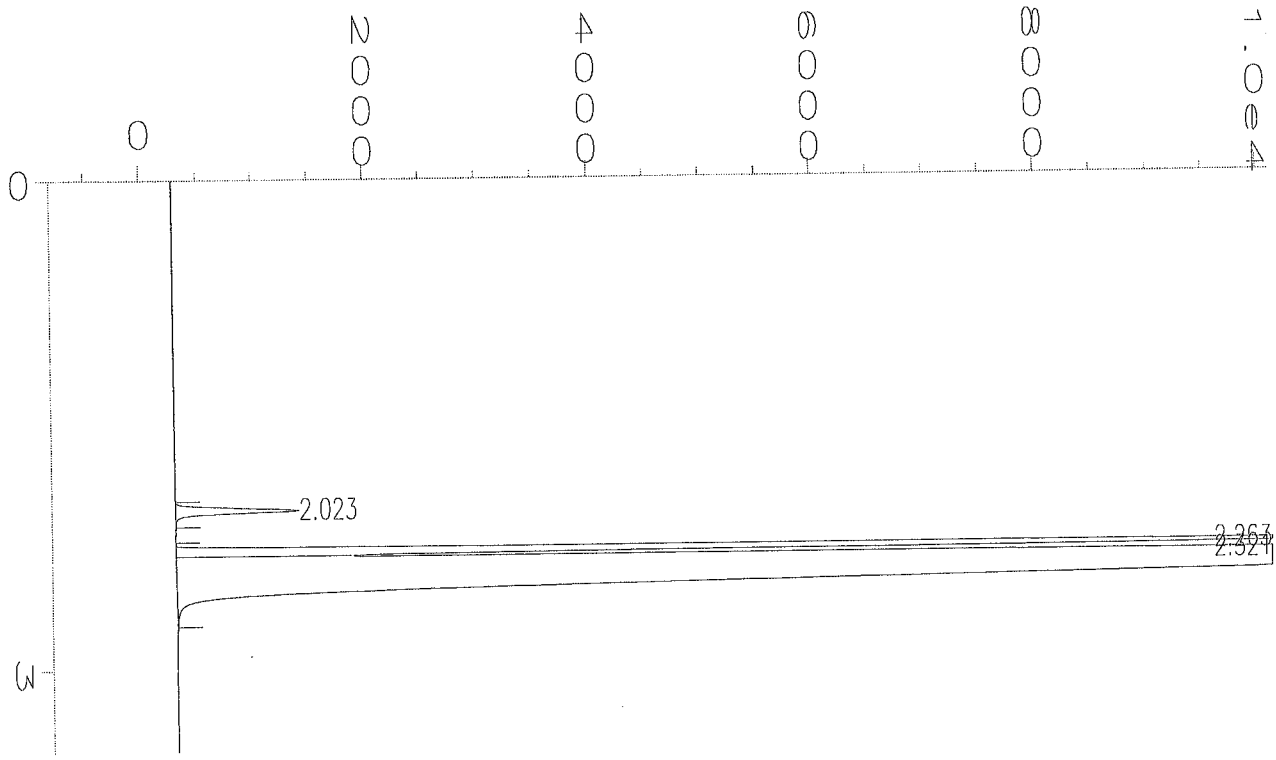
Sample Type:

WE WILL NEED A DATA PACKAGE:
TO-15 Full List - Process with BAQMD 95 Excel Template + Acrolein (some projects)
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

TO-15 Full List - Process with BAQMD 95 Excel Template
TO-12 TNMHC Process with Detailed Hydrocarbon Analysis Template - Report TNMHC C2-C12
ASTM D1945 Helium Carrier Gas - Run Permanent Gas List including H2. Normaliaze for N2 result
ASTM D1945 Helium and Hydrogen Confirmation - Check to see if there is a singnificant H2 peak if so process and add to Helium template

Report Instructions | EAS QC Criteria
Report Types: PDF Only

EDD Instructions | EDD Type:



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443546MA.D
Operator : DA
Instrument : GCL
Sample Name : T-614
Run Time Bar Code:
Acquired on : 09 Dec 24 04:37 PM
Report Created on: 09 Dec 24 04:41 PM
Sample Info : SCHMIDT

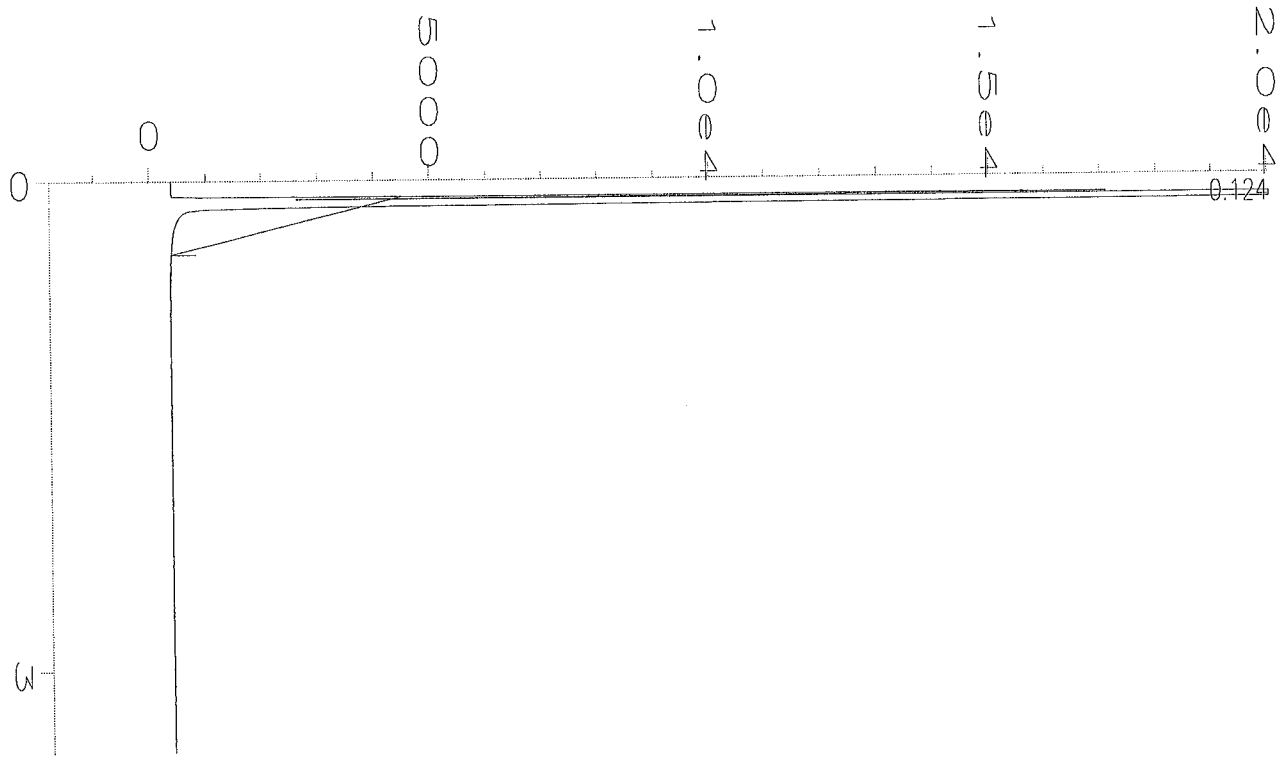
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\443546MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.023	2402	1116	BB	0.034	1.1769
2	2.263	26455	14693	BV	0.030	12.9643
3	2.321	175204	27045	VB	0.087	85.8588

Total area = 204060

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\443546PA.D
Operator : DA
Instrument : GCL
Sample Name : T-614
Run Time Bar Code:
Acquired on : 09 Dec 24 04:37 PM
Report Created on: 09 Dec 24 04:41 PM
Sample Info : SCHMIDT

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\443546PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.124	258899	260228	BB S	0.016	100.0000

Total area = 258899

==========

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**2443546A**			Method:	**D1945**
SDG:	**224435**			Cal Update:	**4/19/24**
Lab Id:	**46**			SF:	**2**
Description:	**T-614**			Not Detected Flag:	**ND**
Date Sampled:	**11/21/24**	Time:	**11:36**	Matrix	**AA**
Date Received:	**11/21/24**	Time:	**13:00**	Type	**TRG**
Date Analyzed:	**12/09/24**	Time:	**16:37**	Instrument	**GCO**
QCBatch	**120924-GCO**			Flux Factor:	0.385 mg/m2*min
Can Number	**880**				
Can Factor	**1.38**				
Volume:	**0.5**				
Type	**SA**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**26455**
7727-37-9	Nitrogen	03	2.07	**175204**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

SDG: 224435
Laboratory Number: 46

File Name:	2443546A		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.38				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.38		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.041	0.124	0.041	0.123	414	1,242	U
Oxygen	32.00	15.84	15.84	15.84	158,368	15.84	15.84	500	0.069	0.207	0.069	0.207	690	2,070	
Nitrogen	28.01	84.16	84.16	84.16	841,632	84.16	84.16	1000	0.138	0.414	0.138	0.414	1,380	4,140	
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.014	0.041	0.014	0.042	138	414	U
Sum - N2		15.84	100.00												
Sum		\													
Total Nitrogen		97.07													

EPA Qual	Det Qual	Rpt
	ND	Y
	=	Y
	=	Y
	ND	Y
	ND	Y

ANALYTICAL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: 224435
Laboratory Number: 46

File Name: 2443546A
Description: T-614
Can/Tube#: 880
QC_Batch: 120924-GCO

Date Sampled: 11/21/24 **Time:** 11:36
Date Analyzed: 12/09/24 **Time:** 16:37
Can Dilution Factor: 1.38

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.041	0.123	ND	414	1,242	ND	ND
7782-44-7	Oxygen	0.069	0.207	15.84	690	2,070	158,368	
630-08-0	Carbon Monoxide	0.014	0.042	ND	138	414	ND	ND
124-38-9	Carbon Dioxide	0.014	0.042	ND	138	414	ND	ND

Method Blank Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Method Blank QC Batch report for each DAB in this SDG.

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METHOD BLANK REPORT

ENVIRONMENTAL
Analytical Service, Inc.

ASTM D 1945 GC/TCD

Analytical Method: D1945

SDG: LABQC
Laboratory Number: B12094B

File Name: B12094B
Description: METHOD BLANK
Can/Tube#:
QC_Batch: 120924-GCO

Date Sampled: **Time:**
Date Analyzed: 12/09/24 **Time:** 12:47
Can Dilution Factor: 1.00

CAS#	Compound	MDL %	RL %	Result %	MDL ppmv	RL ppmv	Result ppmV	Flag
1333-74-0	Hydrogen	0.030	0.090	ND	300	900	ND	ND
7782-44-7	Oxygen	0.050	0.150	ND	500	1,500	ND	ND
74-82-8	Methane	0.010	0.030	ND	100	300	ND	ND
630-08-0	Carbon Monoxide	0.010	0.030	ND	100	300	ND	ND
124-38-9	Carbon Dioxide	0.010	0.030	ND	100	300	ND	ND

QUANTITATION REPORT

ASTM D1945 GC/TCD

File Name:	**B12094B**		Method:	**D1945**	
SDG:	**LABQC**		Cal Update:	**4/19/24**	
Lab Id:	**B12094B**		SF:	**2**	
Description:	**METHOD BLANK**		Not Detected Flag:	**ND**	
Date Sampled:	**NA**	Time: **NA**	Matrix	**AA**	
Date Received:	**NA**	Time: **NA**	Type	**TRG**	
Date Analyzed:	**12/09/24**	Time: **12:47**	Instrument	**GCO**	
QCBatch	**120924-GCO**		Flux Factor:	0.385	mg/m2*min
Can Number	**NA**				
Can Factor	**1.00**				
Volume:	**0.5**				
Type	**MB**				

CAS#	Compound	Num	STD RT	Sample Area
1333-74-0	Hydrogen	01	1.72	**0**
7782-44-7	Oxygen	02	1.97	**0**
7727-37-9	Nitrogen	03	2.07	**627**
74-82-8	Methane	04	2.66	**0**
630-08-0	Carbon Monoxide	05	2.43	**0**
124-38-9	Carbon Dioxide	06	0.33	**0**

The Hydrogen Area is from the GCO run for Helium and Hydrogen done with Nitrogen carrier gas

For Data Package Print: QUANT, CALC, REPORT

CALCULATIONS

ASTM D1945 GC/TCD

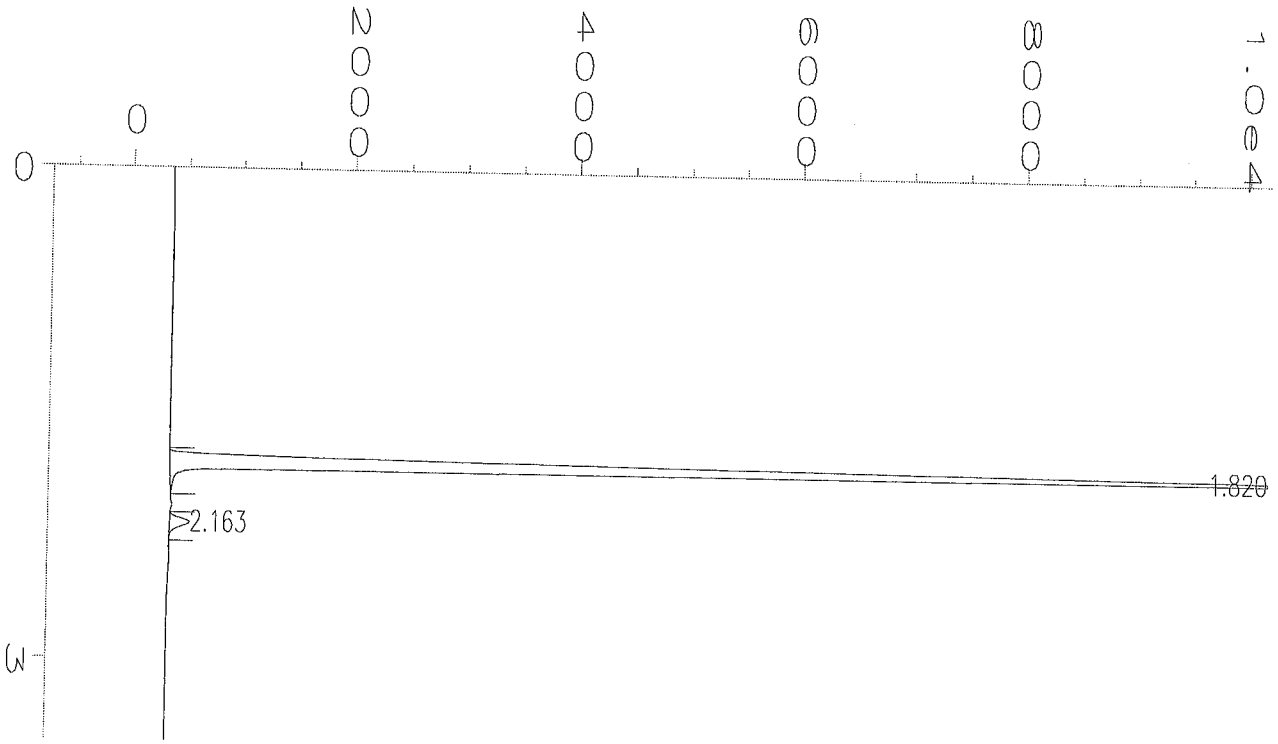
SDG: LABQC

Laboratory Number: B12094E

File Name:	B12094B		Detect Flag:	ND	
QCBatch	120924-GCO		Report Normalized:	**No**	
Can Factor	1.00				
Air Volume:	0.50	ml	Temp	**25**	C
Base Volume	0.50	ml	Atm P	**760.0**	torr
Dilution Factor	1.00		Gas Constant	24.4	
Gas Constant:	24.4		RL Factor	**3**	
Decimal Places:	2				

Compound	MW	Calc Result %	Result %Norm	Fixed Result %	Fixed ResultV ppmv	Fixed ResultQ %	ResultG %	MDL ppmv	MDL %	RL %	Calc Fixed MDL %	Fixed RL %	Fixed MDL ppmv	Fixed RL ppmv	Lab Qual
Hydrogen	2.02	0.00	0.00	ND	ND	0.00		300	0.030	0.090	0.030	0.090	300	900	U
Oxygen	32.00	0.00	0.00	ND	ND	0.00		500	0.050	0.150	0.050	0.150	500	1,500	U
Nitrogen	28.01	100.00	100.00	100.00	1,000,000	100.00	100.00	1000	0.100	0.300	0.100	0.300	1,000	3,000	
Methane	16.04	0.00	0.00	ND	ND	0.00		100	0.010	0.030	0.010	0.030	100	300	U
Carbon Monoxide	28.01	0.00	0.00	ND	ND	0.00		100	0.010	0.030	0.010	0.030	100	300	U
Carbon Dioxide	44.01	0.00	0.00	ND	ND	0.00		100	0.010	0.030	0.010	0.030	100	300	U
Sum - N2		0.00	100.00												
Sum		100.0													
Total Nitrogen		0.25													

EPA Qual	Det Qual	Rpt
	ND	Y
	ND	Y
	=	Y
	ND	Y
	ND	Y
	ND	Y



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\B12094MB.D
Operator : DA
Instrument : GCL
Sample Name : METHOD BLANK
Run Time Bar Code:
Acquired on : 09 Dec 24 12:47 PM
Report Created on: 09 Dec 24 12:51 PM
Sample Info :

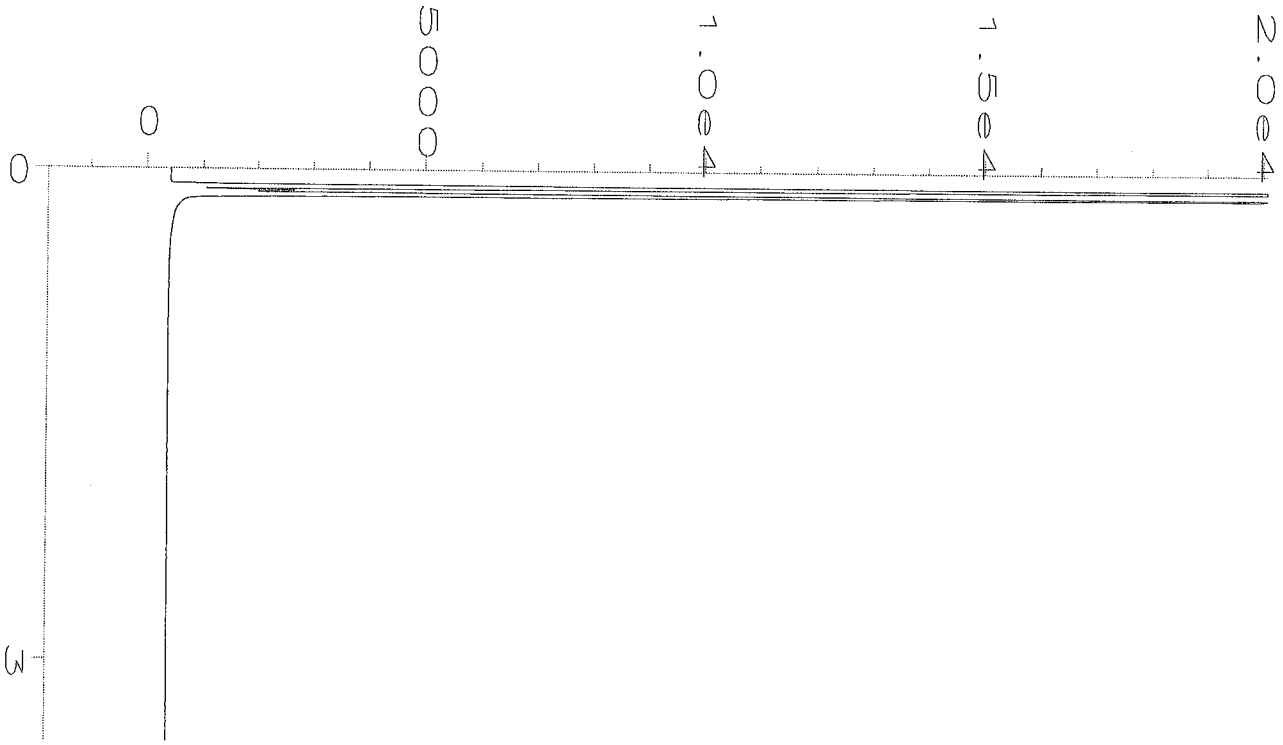
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\B12094MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.820	32503	11884	BB	0.041	98.1062
2	2.163	627	176	BB	0.055	1.8938

Total area = 33130

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\B12094PB.D
Operator : DA
Instrument : GCL
Sample Name : METHOD BLANK
Run Time Bar Code:
Acquired on : 09 Dec 24 12:47 PM
Report Created on: 09 Dec 24 12:51 PM
Sample Info :

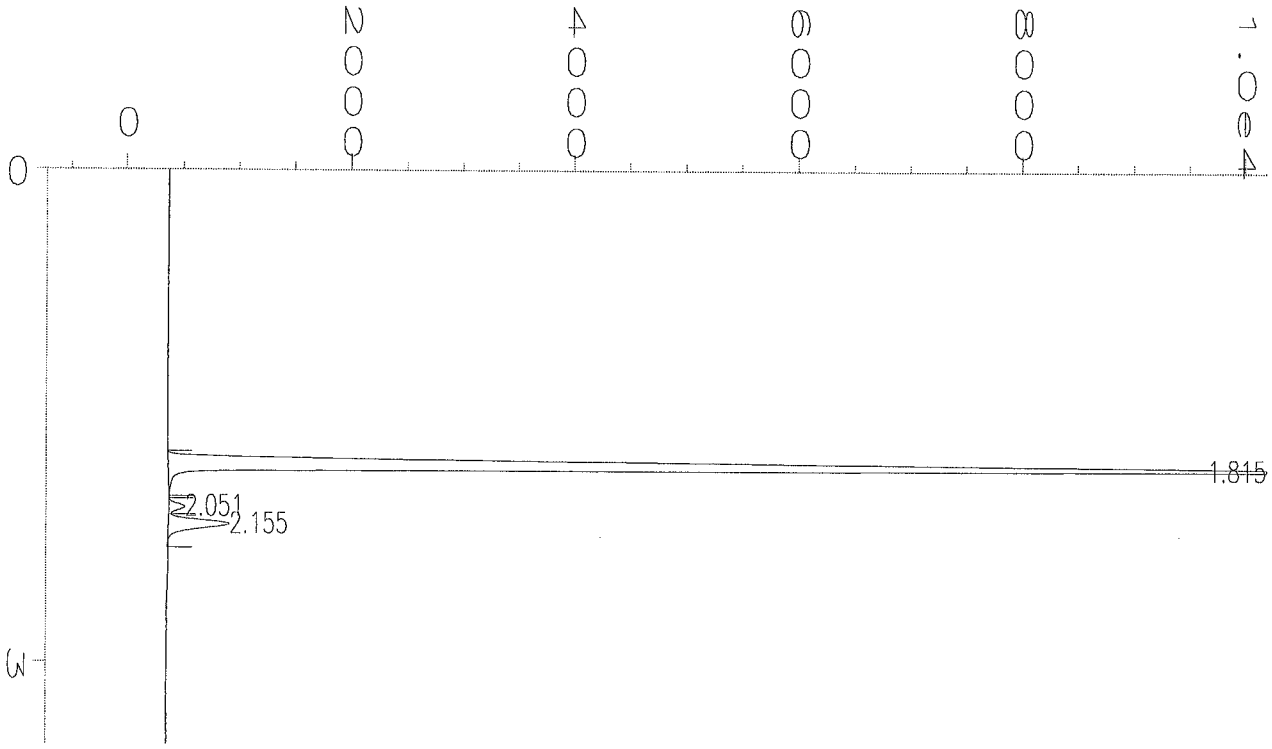
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\B12094PB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %

Total area = 0

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\B12094MA.D
Operator : DA
Instrument : GCL
Sample Name : METHOD BLANK
Run Time Bar Code:
Acquired on : 09 Dec 24 12:43 PM
Report Created on: 09 Dec 24 12:47 PM
Sample Info :

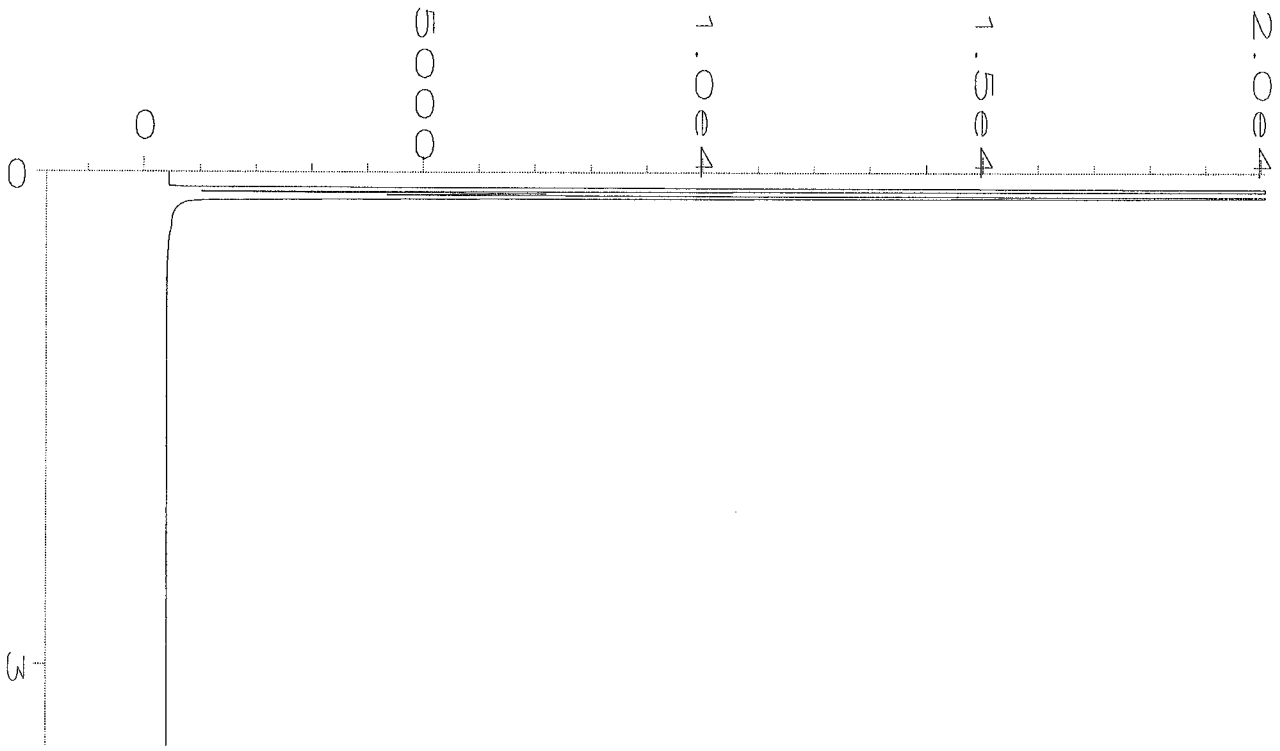
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\B12094MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.815	32148	12135	BB	0.054	93.0847
2	2.051	394	145	BV	0.043	1.1418
3	2.155	1994	548	VB	0.056	5.7736

Total area = 34536

==========



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Area Percent Report

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Data File Name	: C:\GCCHEM\1\DATA\12094GCO\B12094PA.D		
Operator	: DA	Page Number	: 1
Instrument	: GCL	Vial Number	:
Sample Name	: METHOD BLANK	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 09 Dec 24 12:43 PM	Instrument Method	: ASTM1946.MTH
Report Created on	: 09 Dec 24 12:47 PM	Analysis Method	: ASTM1946.MTH
Sample Info	:		

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\B12094PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %

Total area = 0

==========

LCS/LCD Data Packages

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument.
The DAB identifier is on each analytial report in the field called QC Batch.
There will be one LCS/LCD report for each QC Batch (DAB) in this SDG.

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QUALITY CONTROL REPORT

ENVIRONMENTAL
Analytical Service, Inc.

Laboratory Control Spike and Laboratory Control Duplicate

ASTM D 1945 GC/TCD

Analytical Method: D1945

Date: 12/09/24

QC_Batch: 120924-GCO

CAS#	Compound	LCS Recovery %	Flag	LCD Recovery %	Flag	Spike Limit LCL %	Spike Limit UCL %	Duplicate %	Duplicate Limit %	Flag
7782-44-7	Oxygen	109		113		70	130	4	25	
7727-37-9	Nitrogen	114		126		70	130	11	25	
74-82-8	Methane	110		109		70	130	1	25	
630-08-0	Carbon Monoxide	109		110		70	130	1	25	
124-38-9	Carbon Dioxide	93		100		70	130	7	25	

QUANTITATION REPORT

ASTM D 1945 GC/TCD

	LCS		LCD			
File Name:	**QC12094B**		**QC12094C**	Method:	**D1945**	D1945
SDG:	**LABQC**		**LABQC**	SF:	**2**	D1946
Lab Id:	**QC12094B**		**QC12094C**	Detect Flag:	**ND**	3C
Description:	**ST61561**		**ST61561**	Matrix:	**AA**	
Time:	**12:07**	Time:	**12:12**	Type:	**TRG**	
Date Analyzed:	**12/09/24**			Instrument:	**GCO**	
QC Batch	**120924-GCO**					

						ST63400	B	C
			Column	STD	STD	Standard	LCS	LCD
CAS#	Compound	Num		RT	Conc.	Area	Area	Area
7782-44-7	Oxygen	01	MS	1.97	2.49	**4978**	24010	25015
7727-37-9	Nitrogen	02	MS	2.07	4.84	**10940**	30773	34207
74-82-8	Methane	03	MS	2.66	3.97	**7054**	18853	18700
630-08-0	Carbon Monoxide	04	MS	2.43	5.15	**11008**	26721	26894
124-38-9	Carbon Dioxide	05	PQ	0.33	4.80	**25595**	54528	58443

CALCULATIONS

ASTM D 1945 GC/TCD

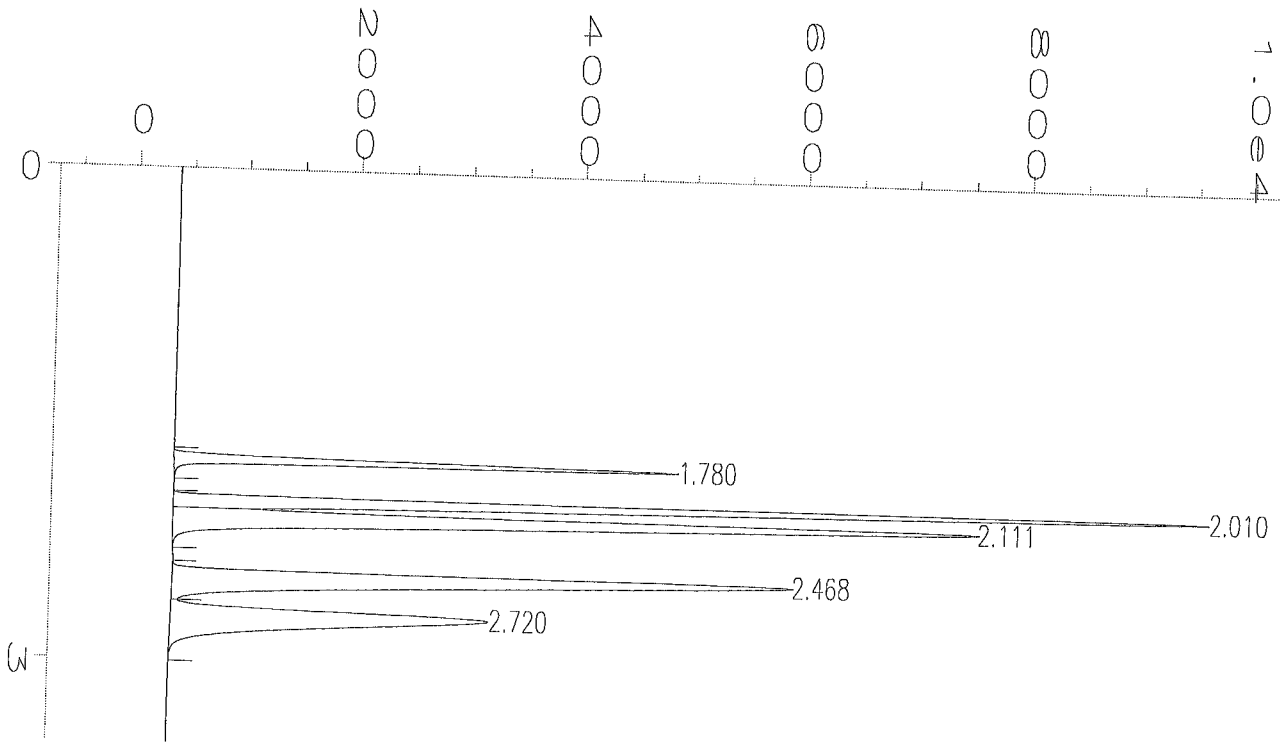
File Name:	QC12094B			
QCBatch	120924-GCO			
Can Factor	1.00			
Volume:	0.5			
Air Volume:	0.5		LCS	
Base Volume	0.5			
Dilution Factor	1.00	RL Factor	3	
Gas Constant:	24.4			
Decimal Places:	0	1		

SDG: LABQC
Laboratory Number: QC12094B

Compound	ResultV %	Spike %	LCS %	LCS % Rec	LCL %	UCL %	FLAG	RPD %	RPD UCL	FLAG
Oxygen	12.01	11.04	12.01	109	70	130		4.1	25	
Nitrogen	13.61	11.99	13.61	114	70	130		10.6	25	
Methane	10.61	9.62	10.61	110	70	130		0.8	25	
Carbon Monoxide	12.50	11.47	12.50	109	70	130		0.6	25	
Carbon Dioxide	10.23	10.99	10.23	93	70	130		6.9	25	

460 of 503

Compound	ResultV %	Spike %	LCS %	LCS % Rec	LCL %	UCL %	FLAG
Oxygen	12.51	11.04	12.51	113	70	130	
Nitrogen	15.13	11.99	15.13	126	70	130	
Methane	10.52	9.62	10.52	109	70	130	
Carbon Monoxide	12.58	11.47	12.58	110	70	130	
Carbon Dioxide	10.96	10.99	10.96	100	70	130	



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\QC1209MC.D
Operator : DA
Instrument : GCL
Sample Name : ST61561
Run Time Bar Code:
Acquired on : 09 Dec 24 12:38 PM
Report Created on: 09 Dec 24 12:42 PM
Sample Info :

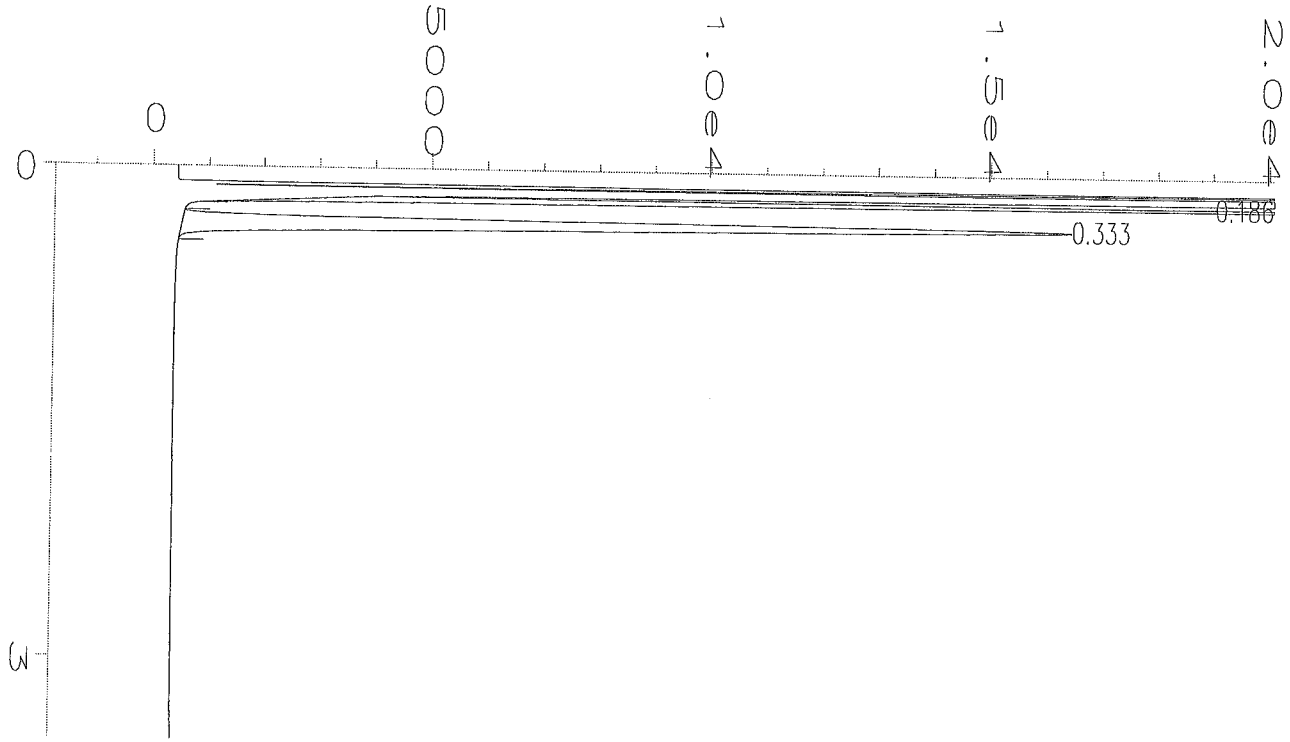
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\QC1209MC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.780	9106	4537	BB	0.031	8.7040
2	2.010	22990	9279	BV	0.038	21.9751
3	2.111	28186	7239	VB	0.059	26.9420
4	2.468	25874	5575	BV	0.068	24.7319
5	2.720	18462	2848	VB	0.098	17.6471

Total area = 104617

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\QC1209PC.D
Operator : DA
Instrument : GCL
Sample Name : ST61561
Run Time Bar Code:
Acquired on : 09 Dec 24 12:38 PM
Report Created on: 09 Dec 24 12:42 PM
Sample Info :

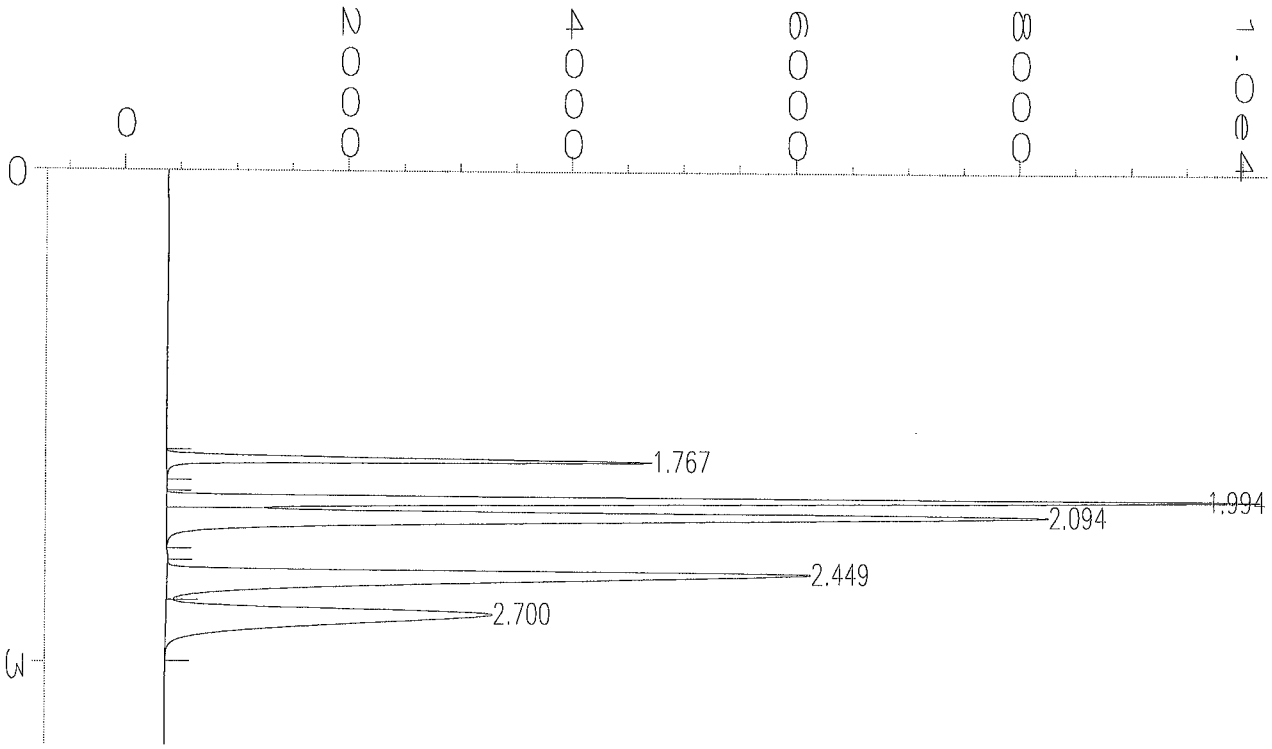
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\QC1209PC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.186	31450	25641	BB T	0.020	36.8793
2	0.333	53828	15936	BB T	0.053	63.1207

Total area = 85279

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\QC1209MB.D
Operator : DA
Instrument : GCL
Sample Name : ST61561
Run Time Bar Code:
Acquired on : 09 Dec 24 12:31 PM
Report Created on: 09 Dec 24 12:35 PM
Sample Info :

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\QC1209MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.767	8609	4368	BB	0.030	7.9010
2	1.994	24010	9792	BV	0.037	22.0345
3	2.094	30773	7886	VB	0.059	28.2406
4	2.449	26721	5752	BV	0.069	24.5226
5	2.700	18853	2919	VB	0.099	17.3013

Total area = 108967

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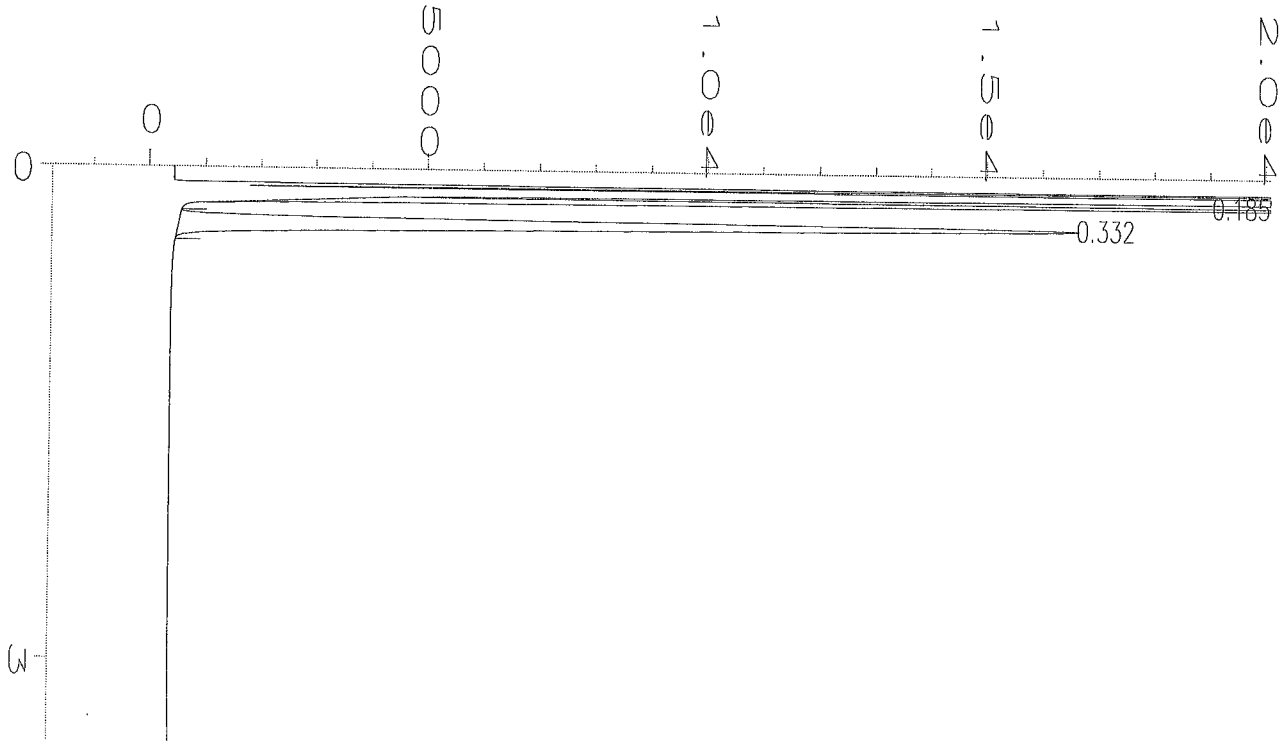

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\QC1209PB.D
Operator : DA
Instrument : GCL
Sample Name : ST61561
Run Time Bar Code:
Acquired on : 09 Dec 24 12:31 PM
Report Created on: 09 Dec 24 12:35 PM
Sample Info :

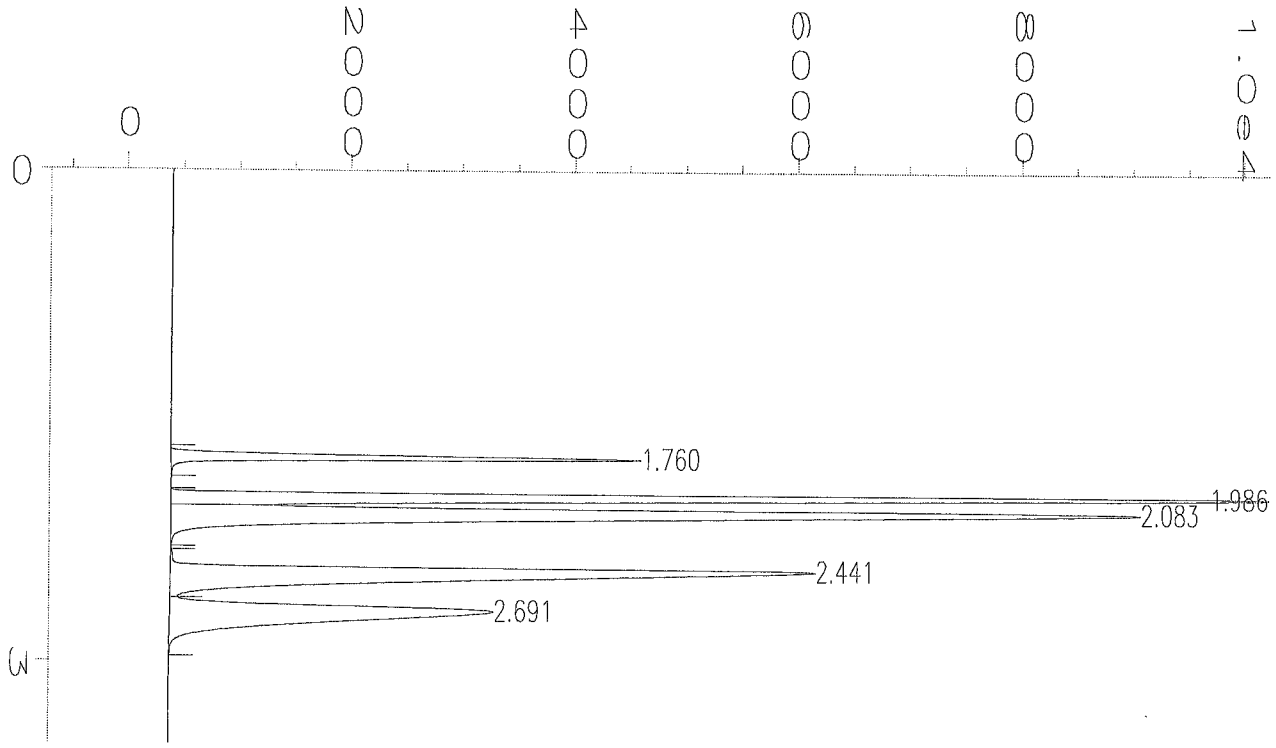
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\QC1209PB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.185	31356	25619	BB T	0.020	36.5096
2	0.332	54528	16146	BB T	0.053	63.4904

Total area = 85885

==========



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\QC1209MA.D
Operator : DA
Instrument : GCL
Sample Name : ST61561
Run Time Bar Code:
Acquired on : 09 Dec 24 12:27 PM
Report Created on: 09 Dec 24 12:30 PM
Sample Info :

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\QC1209MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.760	8223	4241	BB	0.030	7.2746
2	1.986	25015	10208	BV	0.037	22.1297
3	2.083	34207	8682	VB	0.059	30.2612
4	2.441	26894	5779	BV	0.070	23.7914
5	2.691	18700	2907	VB	0.098	16.5432

Total area = 113039

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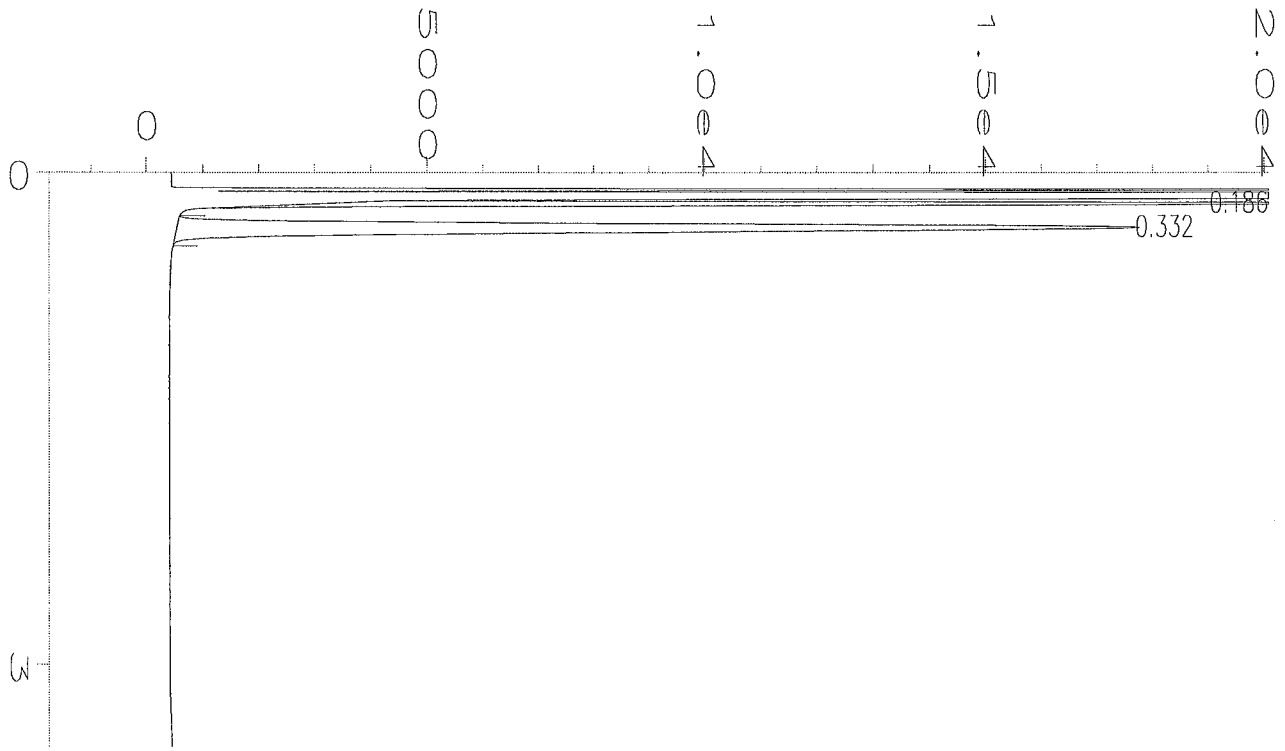

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\12094GCO\QC1209PB.D
Operator : DA
Page Number : 1
Instrument : GCL
Vial Number :
Sample Name : ST61561
Injection Number :
Run Time Bar Code:
Sequence Line :
Acquired on : 09 Dec 24 12:27 PM
Instrument Method: ASTM1946.MTH
Report Created on: 09 Dec 24 12:30 PM
Analysis Method : ASTM1946.MTH
Sample Info :

Sig. 2 in C:\GCCHEM\1\DATA\12094GCO\QC1209PB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.186	31096	25476	BB T	0.020	34.7292
2	0.332	58443	17245	BB T	0.054	65.2708

Total area = 89540

==========

Continuing Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

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CONTINUING CALIBRATION REPORT

ASTM D1945 GC/TCD

SDG: LABQC
QC_Batch: **120924-GCO**
Sample Analysis Date: 12/09/24
Initial Calibration Date: 04/19/24

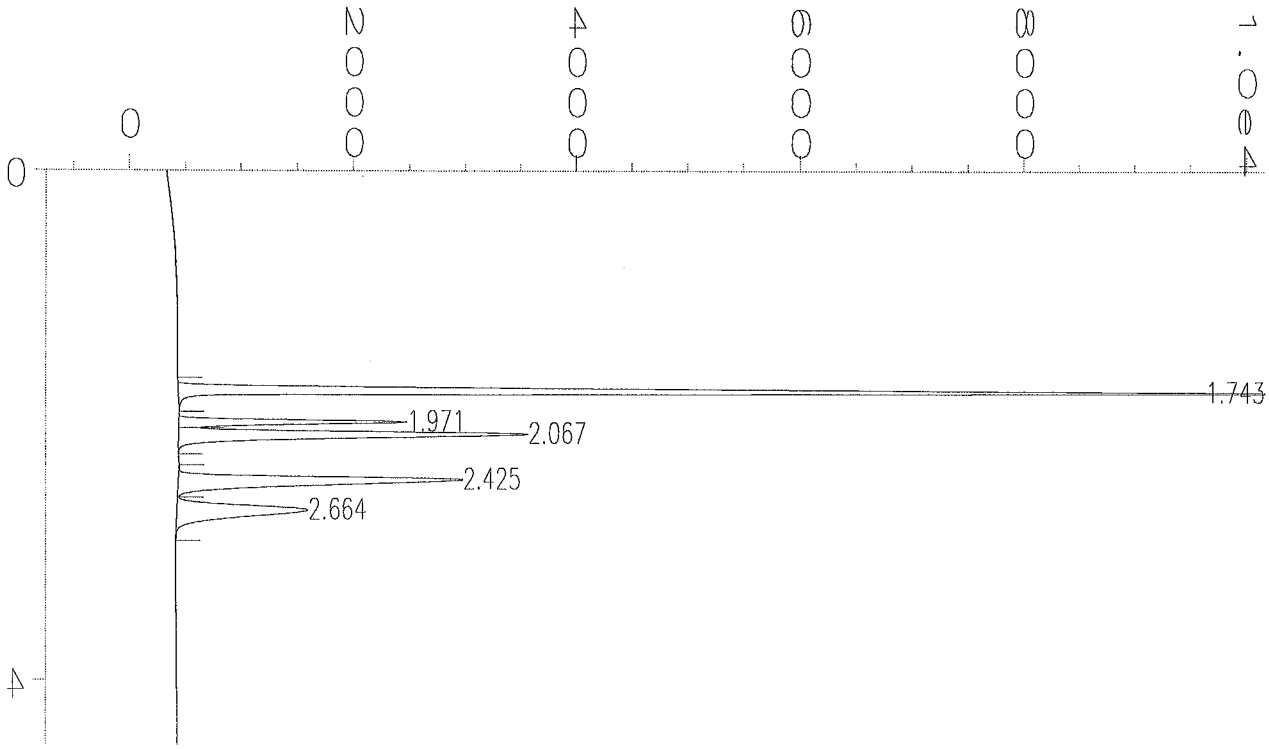
Sample Calculation:

1) $CCRRF = \left| \frac{(Astdni)}{(Cstdni)} \right|$

2) Avg $RFn = Sum \left| \frac{(Astdni)}{(Cstdni)} \right|$

Calibration Level Level 9

Compound	Area Astdi	Cal Level Cstdi %	CCRRF	RFn	%Dev	%Dev Limit	%Dev Flag
Hydrogen	164636	10.00	16464	15714	5	20	IN
Oxygen	4978	2.49	1999	2305	-13	20	IN
Nitrogen	10940	4.84	2260	2491	-9	20	IN
Methane	7054	3.97	1777	1826	-3	20	IN
Carbon Monoxide	11008	5.15	2137	2268	-6	20	IN
Carbon Dioxide	25595	4.800	5332	5045	6	20	IN



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\12094GCO\C12094MA.D
Operator : DA
Instrument : GCL
Sample Name : ST63400
Run Time Bar Code:
Acquired on : 09 Dec 24 12:09 PM
Report Created on: 09 Dec 24 12:17 PM

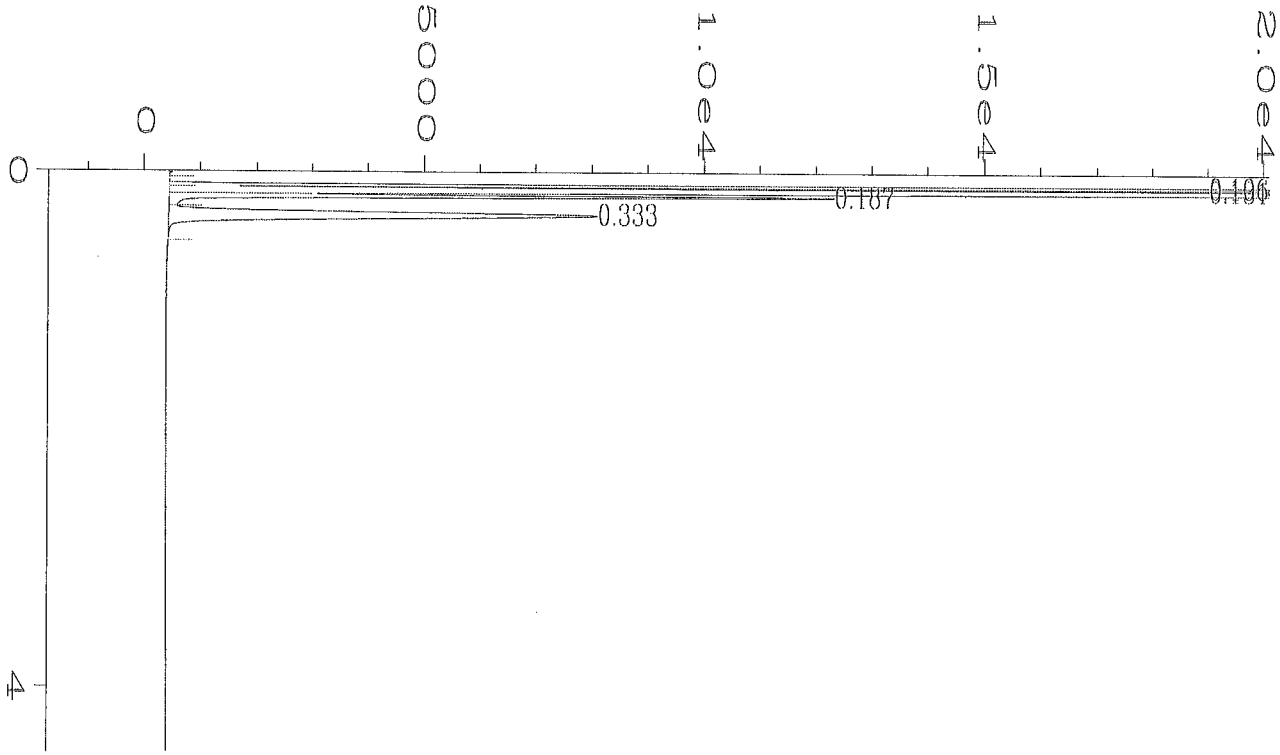
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\12094GCO\C12094MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.743	24055	10301	BB	0.034	41.4491
2	1.971	4978	2035	BV	0.038	8.5778
3	2.067	10940	3128	VB	0.054	18.8511
4	2.425	11008	2543	BV	0.066	18.9681
5	2.664	7054	1167	VB	0.095	12.1539

Total area = 58035

==========



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\GCO\12094GCO\C12094PA.D
Operator : DA
Instrument : GCL
Sample Name : ST63400
Run Time Bar Code:
Acquired on : 09 Dec 24 12:09 PM
Report Created on: 01 Jan 02 06:03 PM

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : DEFAULT.MTH

Sig. 2 in C:\GCCHEM\1\DATA\GCO\12094GCO\C12094PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.106	51722	74871	BV	0.012	28.7889
2	0.131	86328	50693	VV	0.027	48.0506
3	0.187	16015	11942	VV	0.021	8.9142
4	0.333	25595	7665	VB	0.052	14.2464

Total area = 179661

==========

Initial Calibration Data Packages

Samples were analyzed using the methods listed in Section 3. For each of the methods there is an Initial Calibration Curve that meets the criteria defined in Section 2 on Quality Control for the modified method.

Index

Response Factors
Instrument Quant Report
Chromatogram

Secondary Calibration Data Package

Samples are analyzed in a Daily Analytical Batch (DAB) on an instrument. The DAB identifier is on each analytial report in the field called QC Batch. There will be one Continuing Calibration QC Batch report for each DAB in this SDG.

Index

Analytical Report
Quantitation Report
Calculations
Sample Calculations
Instrument Quant Report
Chromatogram

INITIAL CALIBRATION REPORT: Response Factors

Curve Date: 04/19/24
Analysis Date: 04/19/24

Sample Calculation:

$$1)\ \text{Avg RFn} = \text{Sum}\left|\frac{(\text{Astdni})}{(\text{Cstdni})}\right|_{i}$$

Response Factors

Compound	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRFn	%RSD
Hydrogen							19354	16464	11323	15714	25.89
Oxygen			2102	2032			2678	2378	2133	2305	12.49
Nitrogen			2201	2143			2945	2590	2285	2491	14.28
Methane						1800	1877	1851	1776	1826	2.53
Carbon Monoxide							2314	2275	2215	2268	2.20
Carbon Dioxide				4220	4904		5510	5371	5221	5045	10.18

INITIAL CALIBRATION REPORT

ASTM D1945 GC/TCD

Curve Date: 04/19/24
Analysis Date: 04/19/24

Calibration Amount CA, %

Compound	Level 1 Amt	Level 2 Amt	Level 3 50% AIR ST63413	Level 4 AIR ST63412	Level 5 25% CO2 ST63410	Level 6 25% CH4 ST63411	Level 7 ST63405 ST63409	Level 8 ST36406 ST63408	Level 9 ST63407 ST63400
Hydrogen							5.00	10.00	20.00
Oxygen			10.77	21.54			0.62	1.25	2.49
Nitrogen			39.31	78.62			1.21	2.42	4.84
Methane						25	0.99	1.99	3.97
Carbon Monoxide							1.29	2.58	5.15
Carbon Dioxide				0.0410	25.00		1.20	2.40	4.80
Percentage of Pure Gas			50%	100%	25%	25%	25%	50%	100%

INITIAL CALIBRATION REPORT

ASTM D1945 GC/TCD

Curve Date: 04/19/24
Analysis: 01/00/00

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9
		C0419MG	C0419MF	C0419MD	C0419ME	C04164MA	C04164MC	C04164MF
						C04194MA	C04194MB	C04194MA
		ST63413	ST63412	ST63410	ST63411	ST63405	ST36406	ST63407
						ST63409	ST63408	ST63400
		22634	43767			96772	164636	226464
		86503	168513			1667	2961	5311
						3564	6267	11058
					45001	1863	3675	7052
						2980	5858	11409
			173	122598		6611	12888	25056

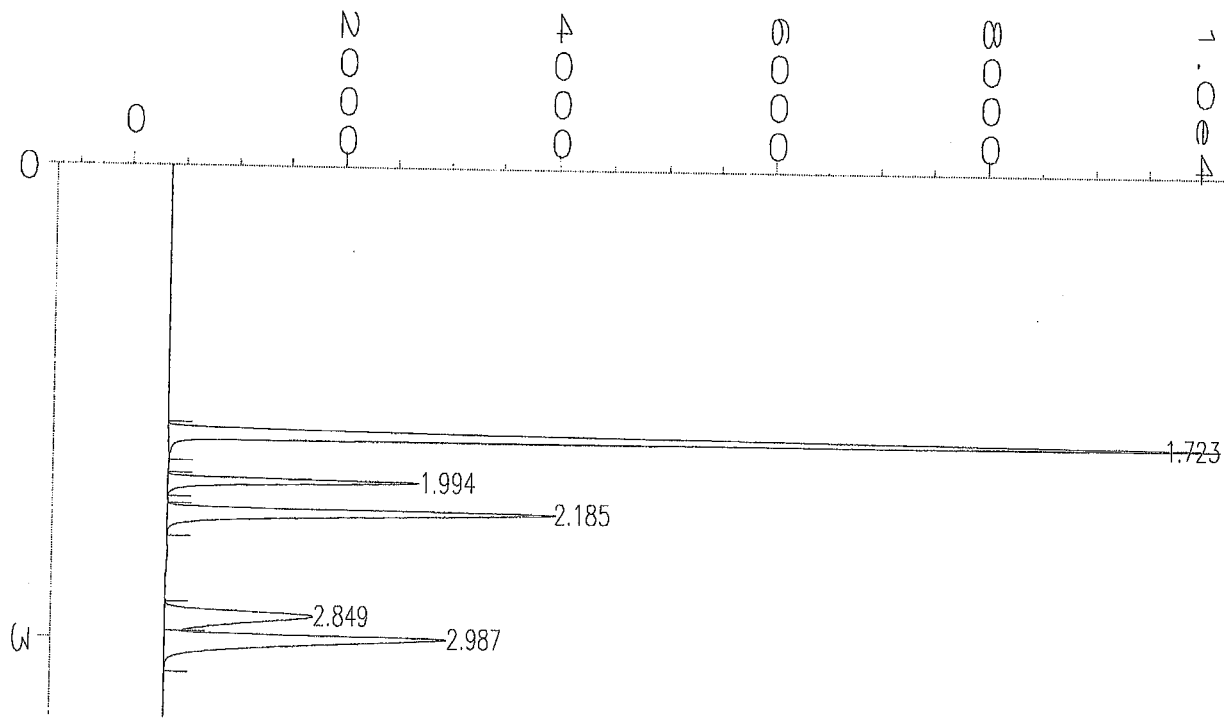
Daily Analytical Batch

DAB: 041924-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit:	Proc:
041924-GCO	01	GCO	STD			C04194A		ST63400	100% AIR STAN	0.5	DA		ASTM194			
041924-GCO	02	GCO	STD			C04194B		ST63408	50% AIR STAND	0.5	DA		ASTM194			
041924-GCO	03	GCO	STD			C04194C		ST63409	25% AIR STAND	0.5	DA		ASTM194			
041924-GCO	04	GCO	STD			C04194D		ST63410	25% CO2 STAND	0.5	DA		ASTM194			
041924-GCO	05	GCO	STD			C04194E		ST63411	25% CH4 STAND	0.5	DA		ASTM194			
041924-GCO	06	GCO	STD			C04194F		ST63412	100% ABT OUTD	0.5	DA		ASTM194			
041924-GCO	07	GCO	STD			C04194G		ST63413	50% ABT OUTD	0.5	DA		ASTM194			
041924-GCO	08	GCO	SPK			QC0419A		ST61561		0.5	DA		ASTM194			
041924-GCO	09	GCO	SPK			QC0419B		ST61561		0.5	DA		ASTM194			
041924-GCO	10	GCO	SPK			QC0419C		ST61561		0.5	DA		ASTM194			
041924-GCO	11	GCO	BLK			B04194A		METHOD BLANK		0.5	DA		ASTM194			
041924-GCO	12	GCO	BLK			B04194B		METHOD BLANK		0.5	DA		ASTM194			
041924-GCO	13	GCO	SA	224109	01	2410901A	688	T-101	SCHMIDT	0.5	DA		ASTM194			
041924-GCO	14	GCO	SA	224109	02	2410902A	695	T-102	SCHMIDT	0.5	DA		ASTM194			
041924-GCO	15	GCO	SA	224109	03	2410903A	644	T-103	SCHMIDT	0.5	DA		ASTM194			
041924-GCO	16	GCO	SA	224109	04	2410904A	634	T-104	SCHMIDT	0.5	DA		ASTM194			
041924-GCO	17	GCO	SA	224109	05	2410905A	182	T-105	SCHMIDT	0.5	DA		ASTM194			
041924-GCO	18	GCO	SA	224109	06	2410906A	529	T-106	SCHMIDT	0.5	DA		ASTM194			
041924-GCO	19	GCO	SA	224109	07	2410907A	690	T-107	SCHMIDT	0.5	DA		ASTM194			

REVIEWED



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194MA.D
Operator : DA
Instrument : GCL
Sample Name : ST63400
Run Time Bar Code:
Acquired on : 19 Apr 24 10:44 AM
Report Created on: 19 Apr 24 10:48 AM
Sample Info : 100% AIR STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.723	24400	10140	BB	0.033	41.1957
2	1.994	5311	2378	BB	0.034	8.9664
3	2.185	11058	3655	BB	0.046	18.6702
4	2.849	7052	1398	BV	0.078	11.9057
5	2.987	11409	2652	VB	0.061	19.2620

Total area = 59229

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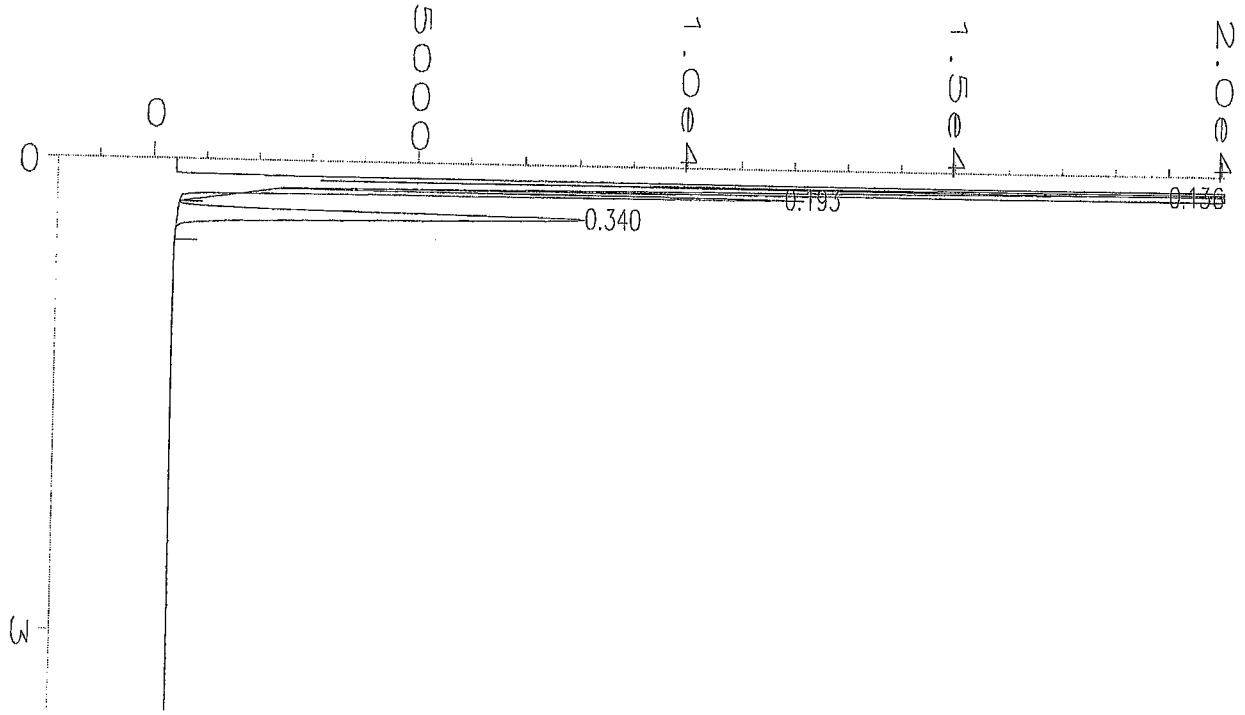

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PA.D
Operator : DA
Instrument : GCL
Sample Name : ST63400
Run Time Bar Code:
Acquired on : 19 Apr 24 10:44 AM
Report Created on: 19 Apr 24 10:48 AM
Sample Info : 100% AIR STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.136	42246	35257	BV	0.020	54.8804
2	0.193	9677	10210	PV	0.016	12.5706
3	0.340	25056	7646	PB	0.052	32.5490

Total area = 76979

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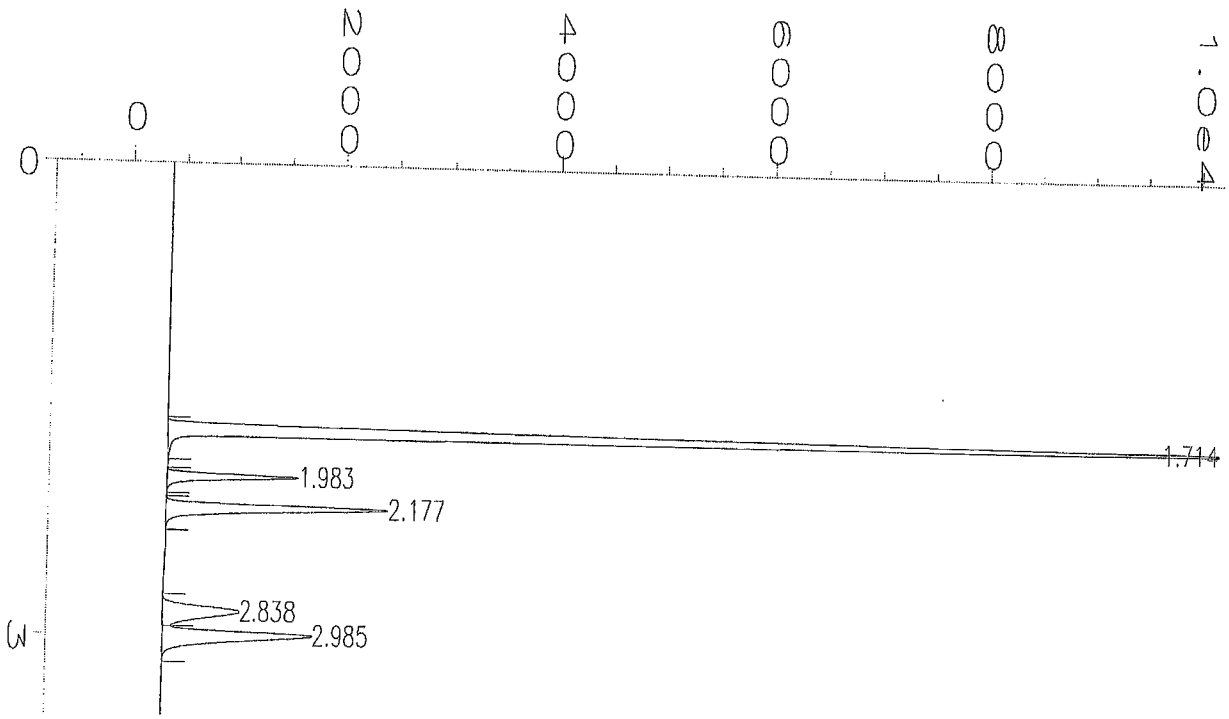


Area Percent Report

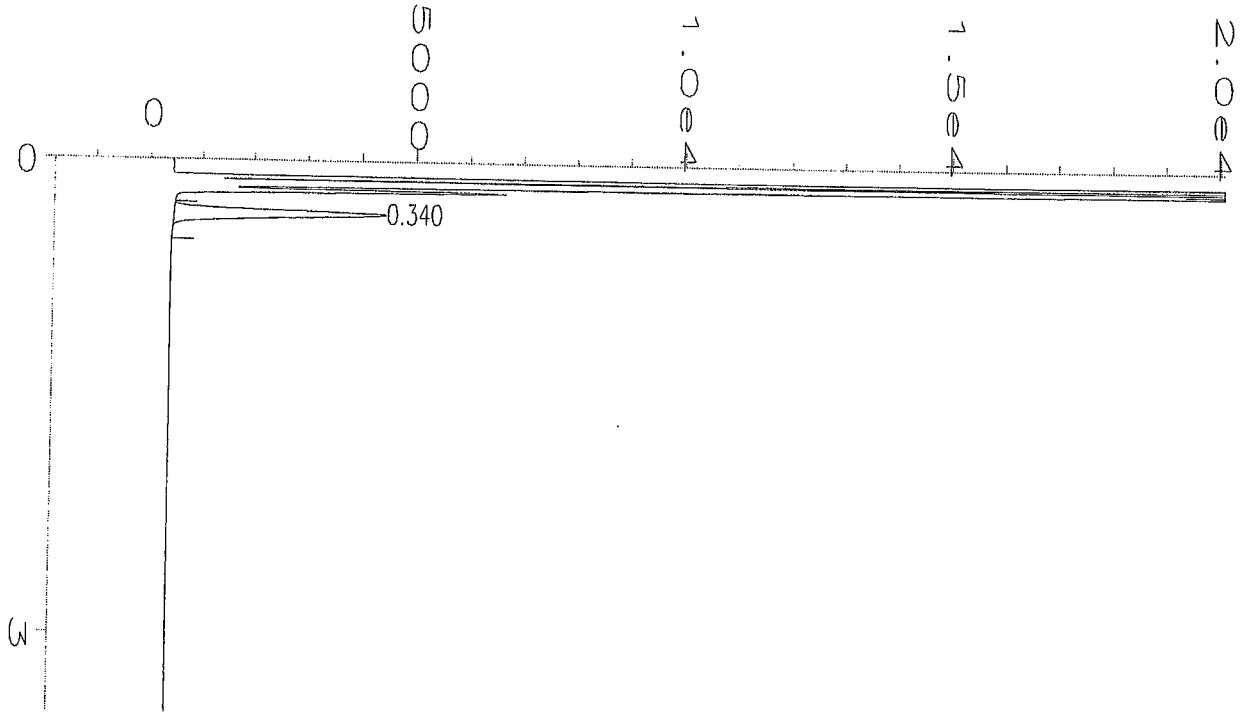
Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194MB.D
Operator : DA
Instrument : GCL
Sample Name : ST63408
Run Time Bar Code:
Acquired on : 19 Apr 24 11:10 AM
Report Created on: 19 Apr 24 11:13 AM
Sample Info : 50% AIR STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194MB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.714	28769	11349	BB	0.034	60.5287
2	1.983	2961	1250	BB	0.037	6.2294
3	2.177	6267	2087	BB	0.046	13.1849
4	2.838	3675	739	BV	0.078	7.7317
5	2.985	5858	1421	VB	0.062	12.3253

Total area = 47530



Area Percent Report

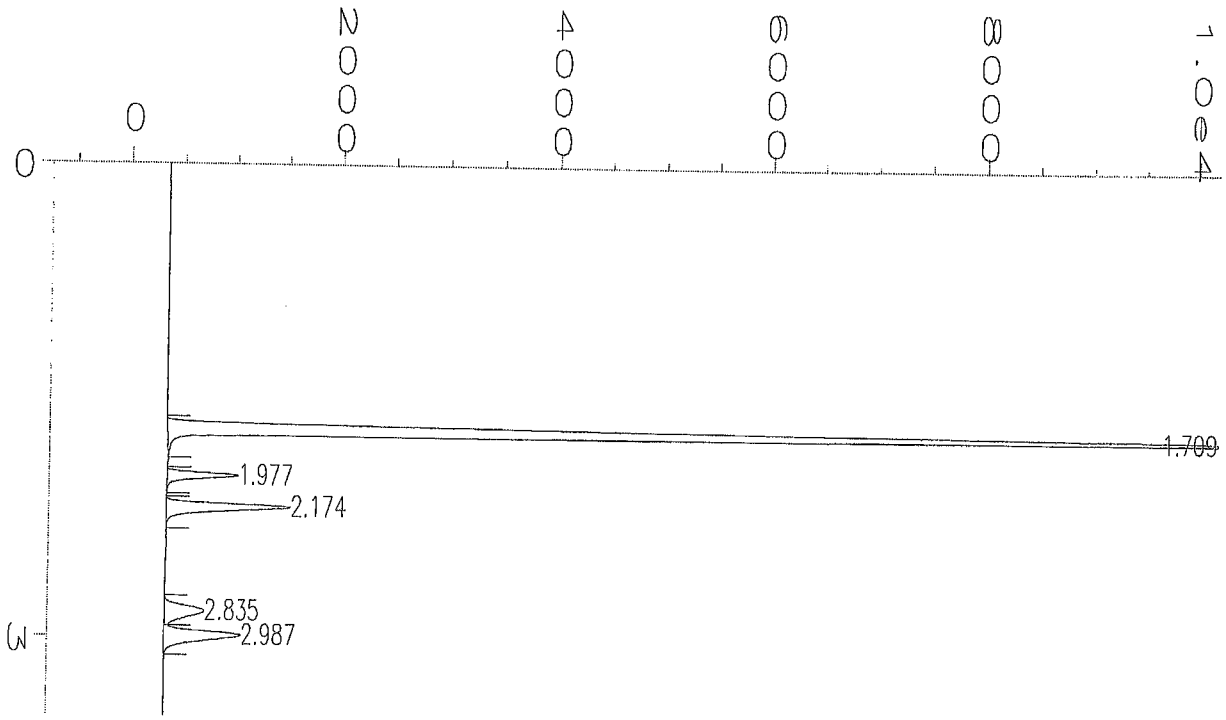
Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PB.D
Operator : DA
Instrument : GCL
Sample Name : ST63408
Run Time Bar Code:
Acquired on : 19 Apr 24 11:10 AM
Report Created on: 19 Apr 24 11:13 AM
Sample Info : 50% AIR STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PB.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.340	12888	4000	PB	0.051	100.0000

Total area = 12888



Area Percent Report

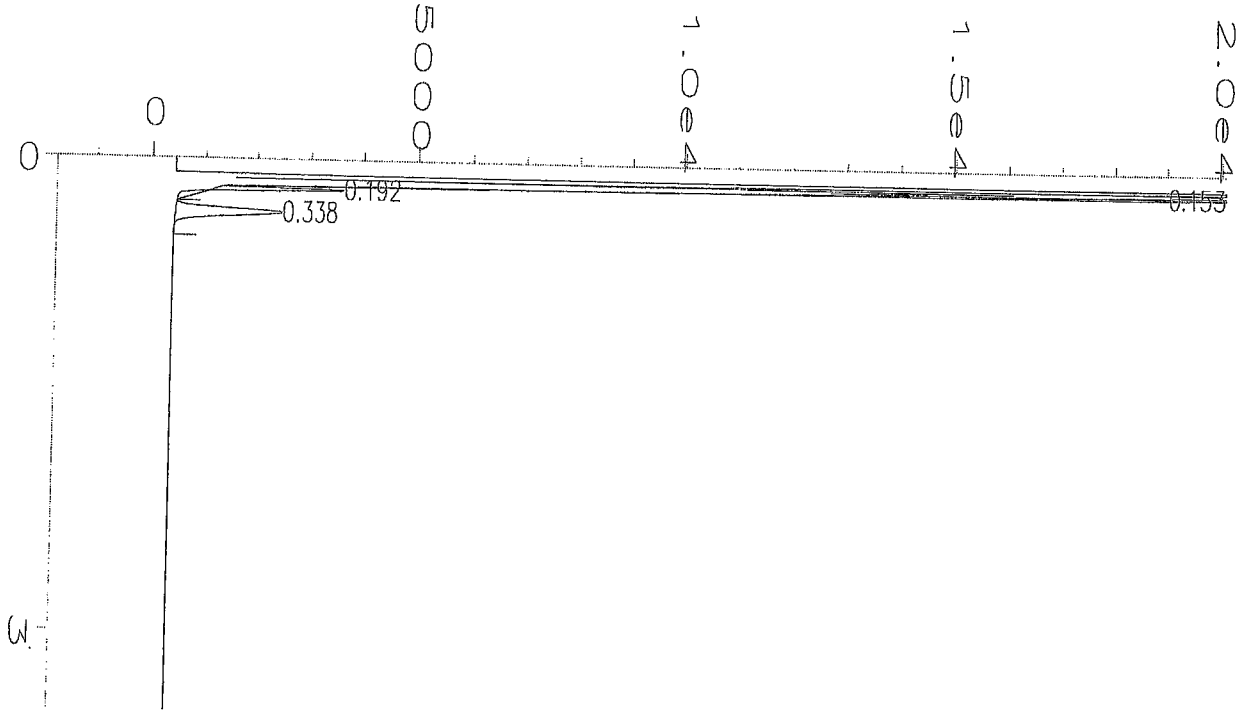
Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194MC.D
Operator : DA
Instrument : GCL
Sample Name : ST63409
Run Time Bar Code:
Acquired on : 19 Apr 24 11:19 AM
Report Created on: 19 Apr 24 11:23 AM
Sample Info : 25% AIR STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194MC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.709	31044	12190	BB	0.035	75.5005
2	1.977	1667	676	BB	0.038	4.0536
3	2.174	3564	1183	BB	0.046	8.6666
4	2.835	1863	379	BV	0.078	4.5318
5	2.987	2980	732	VB	0.063	7.2475

Total area = 41118



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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PC.D
Operator : DA
Instrument : GCL
Sample Name : ST63409
Run Time Bar Code:
Acquired on : 19 Apr 24 11:19 AM
Report Created on: 19 Apr 24 11:23 AM
Sample Info : 25% AIR STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.153	4247	9820	BV	0.007	33.8261
2	0.192	1696	2499	PV	0.013	13.5099
3	0.338	6611	2040	PB	0.051	52.6640

Total area = 12554

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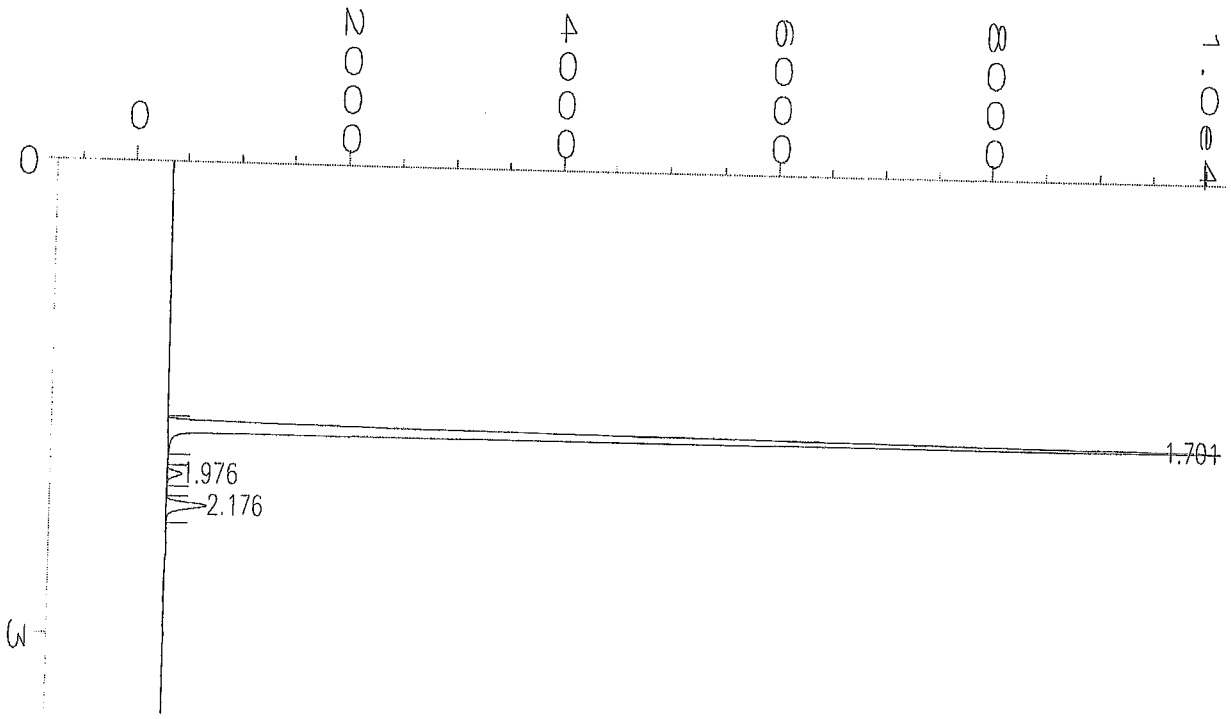

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194MD.D
Operator : DA
Instrument : GCL
Sample Name : ST63410
Run Time Bar Code:
Acquired on : 19 Apr 24 11:32 AM
Report Created on: 19 Apr 24 11:35 AM
Sample Info : 25% CARBON DIOXIDE STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194MD.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.701	24456	10392	BB	0.032	94.1480
2	1.976	353	147	BB	0.037	1.3601
3	2.176	1167	396	BB	0.045	4.4919

Total area = 25976

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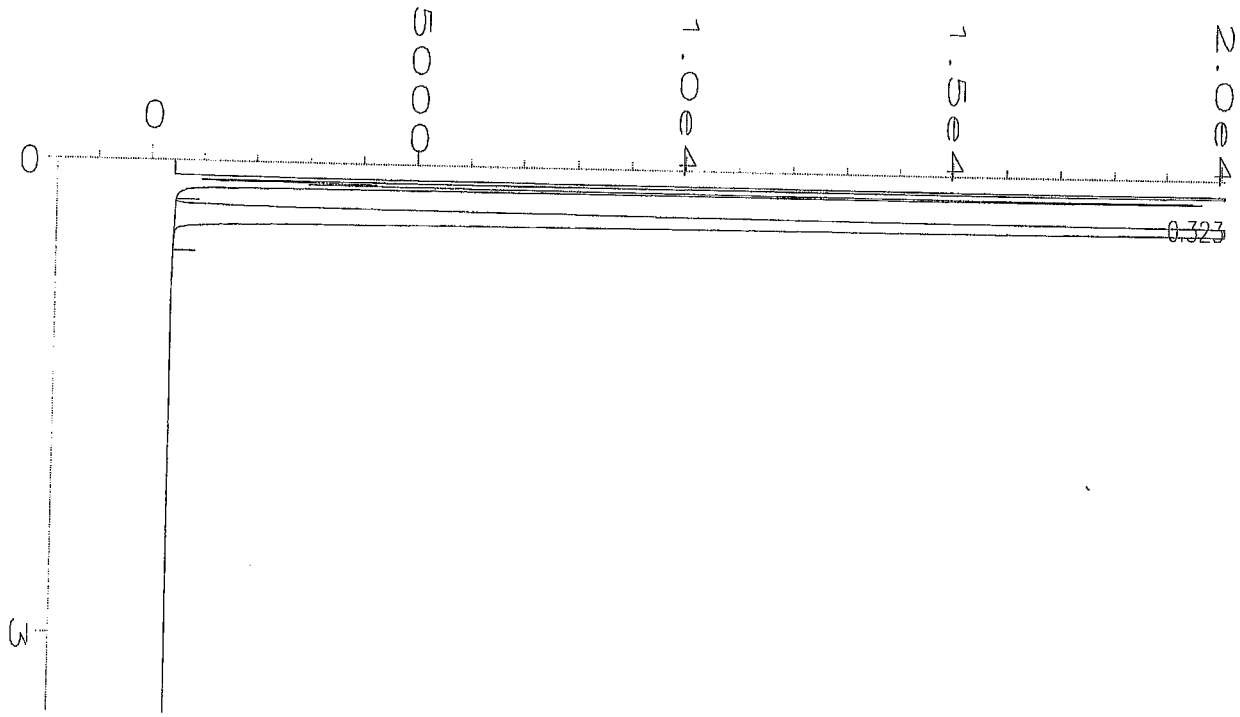


Area Percent Report

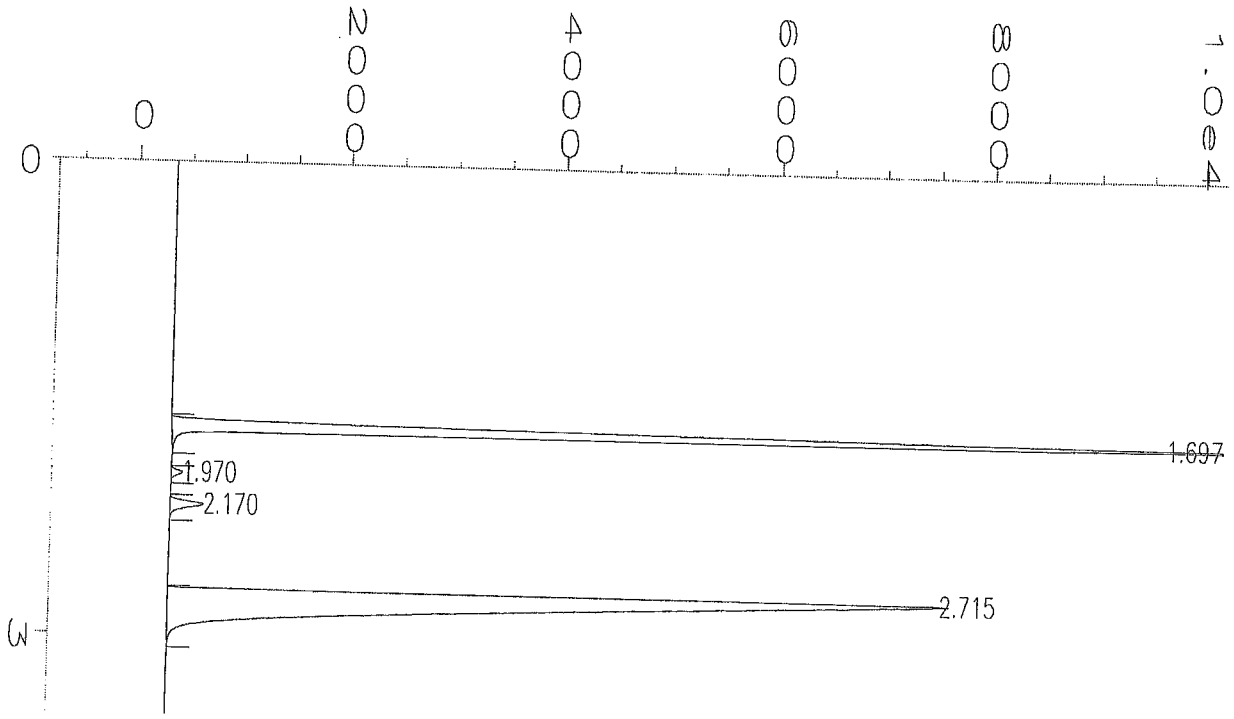
Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PD.D
Operator : DA
Instrument : GCL
Sample Name : ST63410
Run Time Bar Code:
Acquired on : 19 Apr 24 11:32 AM
Report Created on: 19 Apr 24 11:35 AM
Sample Info : 25% CARBON DIOXIDE STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PD.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.323	122598	33880	PB	0.057	100.0000

Total area = 122598



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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194ME.D
Operator : DA
Instrument : GCL
Sample Name : ST63411
Run Time Bar Code:
Acquired on : 19 Apr 24 11:41 AM
Report Created on: 19 Apr 24 11:45 AM
Sample Info : 25% METHANE STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194ME.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.697	24784	10514	BB	0.032	34.9554
2	1.970	226	99.7	BB	0.036	0.3189
3	2.170	890	314	BB	0.044	1.2550
4	2.715	45001	7288	BB	0.084	63.4708

Total area = 70901

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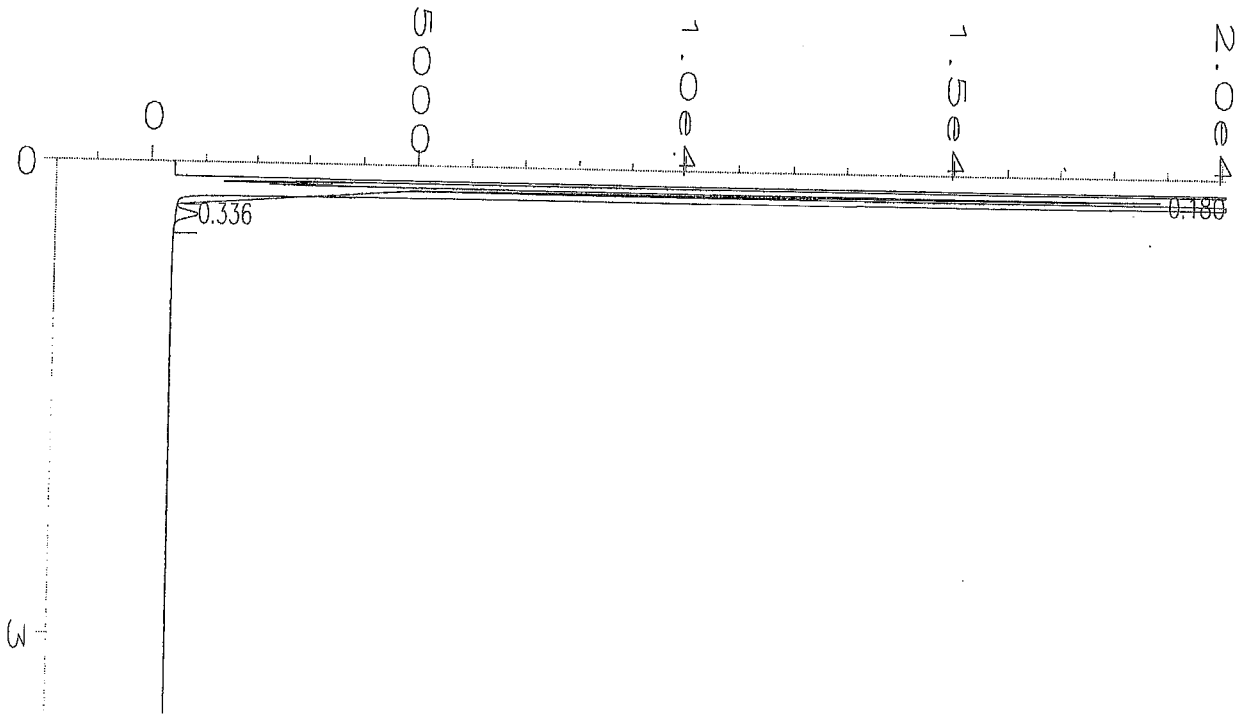

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PE.D
Operator : DA
Instrument : GCL
Sample Name : ST63411
Run Time Bar Code:
Acquired on : 19 Apr 24 11:41 AM
Report Created on: 19 Apr 24 11:45 AM
Sample Info : 25% METHANE STANDARD

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PE.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.180	67099	53887	PV	0.020	98.1615
2	0.336	1257	406	PB	0.049	1.8385

Total area = 68356

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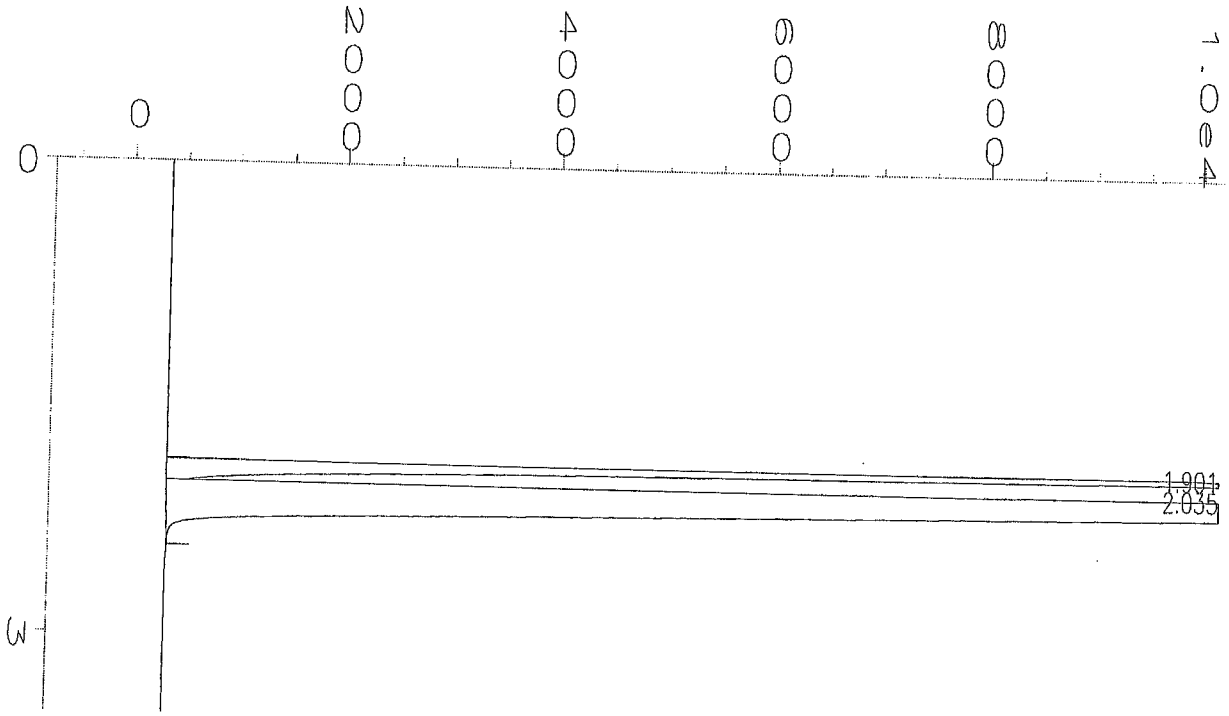

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194MF.D
Operator : DA
Instrument : GCL
Sample Name : ST63412
Run Time Bar Code:
Acquired on : 19 Apr 24 11:48 AM
Report Created on: 19 Apr 24 11:52 AM
Sample Info : 100% AMBIENT OUTDOOR AIR SYRINGE DRAW

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194MF.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.901	43767	20120	BV	0.034	20.6177
2	2.035	168513	26583	VB	0.083	79.3823

Total area = 212280

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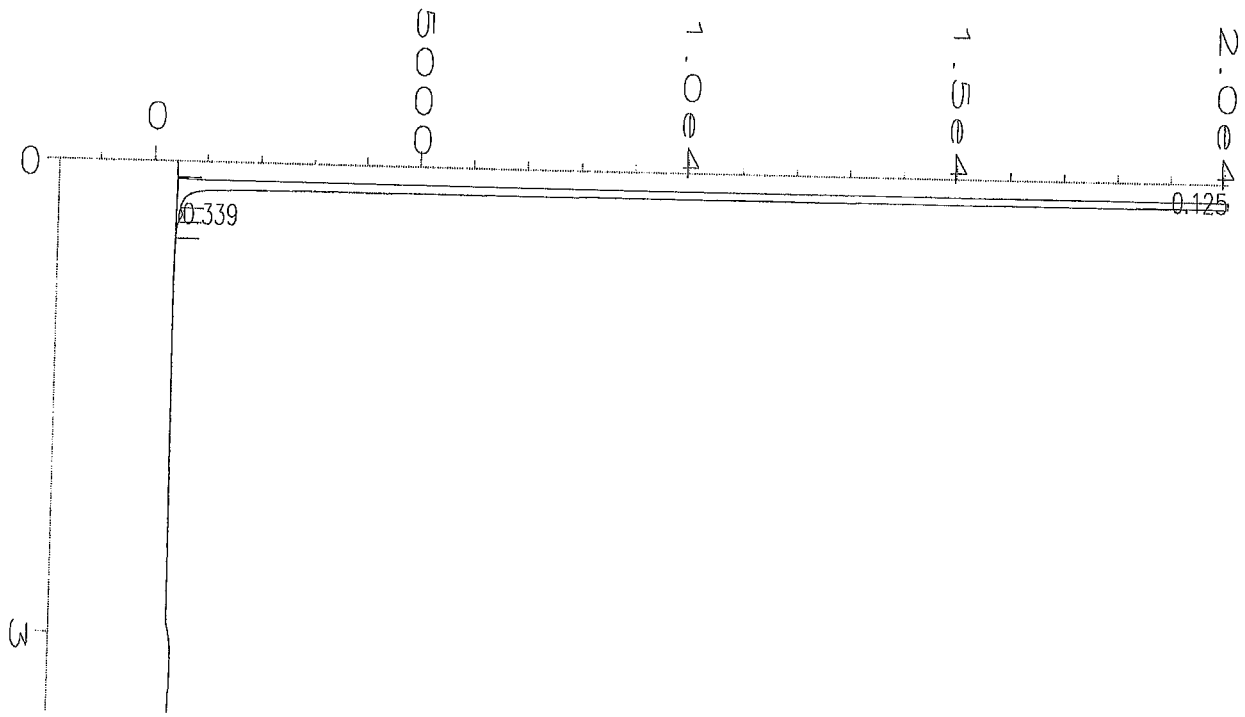

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PF.D
Operator : DA
Instrument : GCL
Sample Name : ST63412
Run Time Bar Code:
Acquired on : 19 Apr 24 11:48 AM
Report Created on: 19 Apr 24 11:52 AM
Sample Info : 100% AMBIENT OUTDOOR AIR SYRINGE DRAW

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PF.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.125	324997	280549	BB S	0.018	99.9469
2	0.339	173	65	BB T	0.040	0.0531

Total area = 325170

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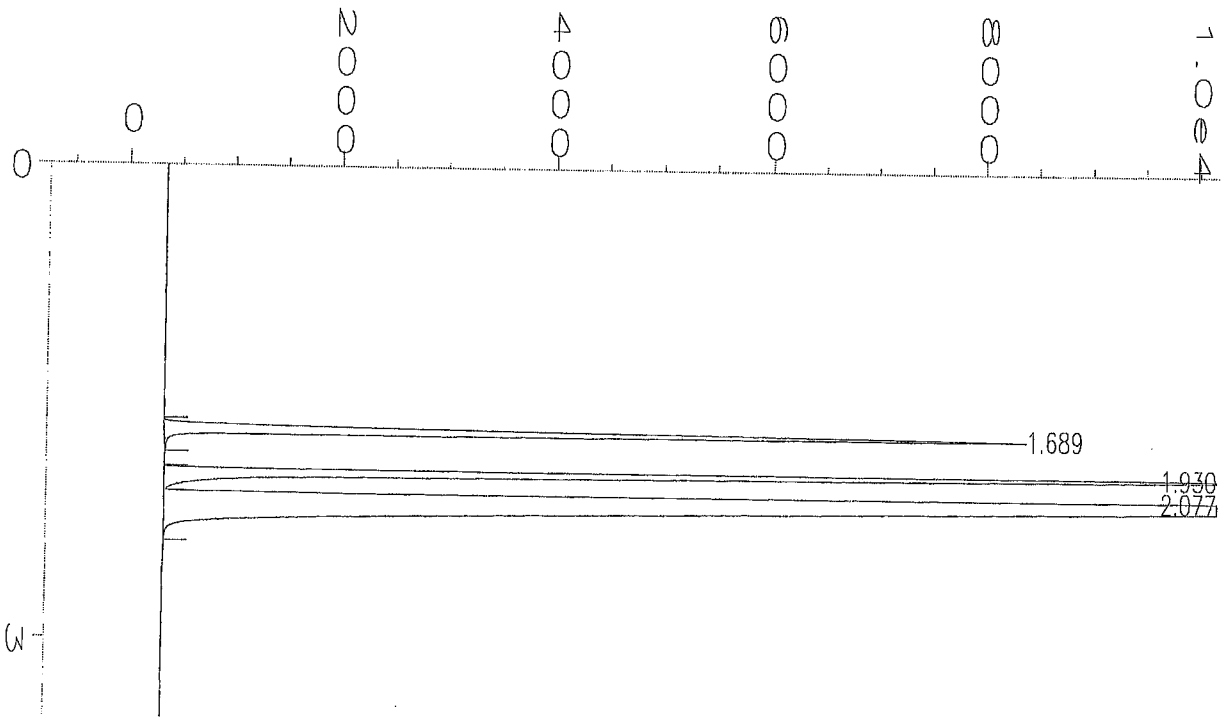

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Area Percent Report

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Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04194MG.D
Operator : DA
Instrument : GCL
Sample Name : ST63413
Run Time Bar Code:
Acquired on : 19 Apr 24 11:53 AM
Report Created on: 19 Apr 24 11:56 AM
Sample Info : 50% AMBIENT OUTDOOR AIR SYRINGE DRAW

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04194GCO\C04194MG.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	1.689	16462	8161	BB	0.041	13.1067
2	1.930	22634	11332	BV	0.033	18.0212
3	2.077	86503	17985	VB	0.063	68.8721

Total area = 125599

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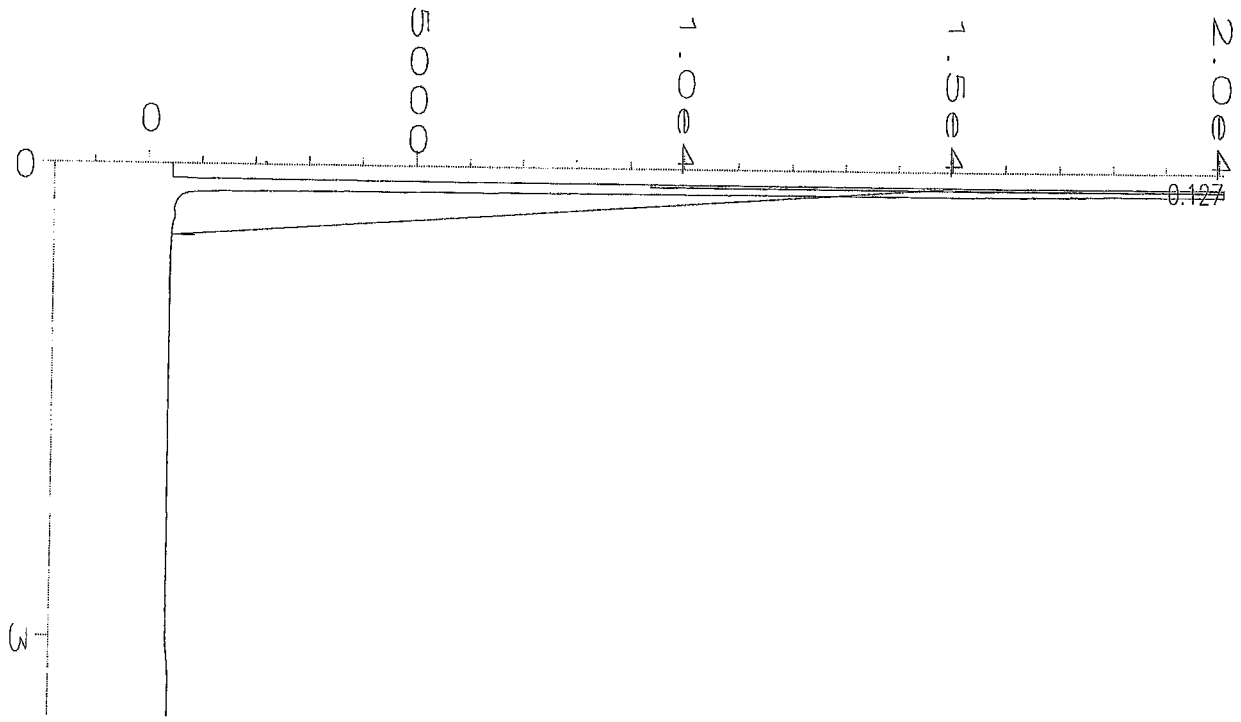

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Area Percent Report

==========

Data File Name : C:\GCCHEM\1\DATA\04194GCO\C04193PG.D
Operator : DA
Instrument : GCL
Sample Name : ST63413
Run Time Bar Code:
Acquired on : 19 Apr 24 11:53 AM
Report Created on: 19 Apr 24 11:56 AM
Sample Info : 50% AMBIENT OUTDOOR AIR SYRINGE DRAW

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: ASTM1946.MTH
Analysis Method : ASTM1946.MTH

Sig. 2 in C:\GCCHEM\1\DATA\04194GCO\C04193PG.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.127	59088	158805	BB S	0.008	100.0000

Total area = 59088

==========

INITIAL CALIBRATION REPORT: Response Factors

Curve Date: 04/15/24
Analysis Date: 04/15/24

Sample Calculation:

1) Avg RFn = Sum $\left| \frac{(Astdni)}{(Cstdni)} \right|_i$

Response Factors

Compound	RF1	RF2	RF3	AvgRFn	%RSD
Helium	14249	14144	12255	13549	8.28

INITIAL CALIBRATION REPORT

ASTM D 1945 GC/TCD

Curve Date: 04/15/24
Analysis Date: 04/15/24

	Calibration Amount CA, %							Calibration Response, Area					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level6		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
SYRINGE %	5.0%	10%	20%					C004154A	C004154C	C004154E			
Compound								ST63401	ST63402	ST63403			
Helium	5.00	10.00	20.00					71247	141438	245094			

Section 5 Standard Calibration Certificates

This section contains the Standard Calibration Certificates for the Standards and Internal Standards.

Section Contents

Standard Calibration Certificates

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

ST63400

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer:	ENV ANALYTICAL SVCS		
Part Number:	X07HE74CP14C000	Reference Number:	160-403006142-1
Cylinder Number:	ST0000232990	Cylinder Volume:	14.0 LG
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	240 PSIG
Analysis Date:	Mar 26, 2024	Valve Outlet:	160
Lot Number:	160-403006142-1		

Expiration Date: Mar 26, 2027

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
OXYGEN	2.500 %	2.490 %	+/- 2%
HYDROGEN	4.000 %	4.124 %	+/- 2%
METHANE	4.000 %	3.970 %	+/- 2%
CARBON DIOXIDE	5.000 %	4.799 %	+/- 2%
CARBON MONOXIDE	5.000 %	5.151 %	+/- 2%
NITROGEN	5.000 %	4.840 %	+/- 2%
HELIUM	Balance		

Notes: RESTEK P/N 34543

Paul Pea

Approved for Release

Daily Analytical Batch

DAB: 041524-GCO

GCO

#150 041624-GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit:	Proc:
041524-GCO	39	GCO	SA	224109	31	2410931A	886	T-213	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	40	GCO	SA	224109	32	2410932A	556	T-214	SCHMIDT	0.5	DA		AST1946H			
041524-GCO	41	GCO	SA	224109	33	2410933A	896	T-301	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	42	GCO	SA	224109	34	2410934A	726	T-302	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	43	GCO	SA	224109	35	2410935A	636	T-303	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	44	GCO	SA	224109	36	2410936A	764	T-304	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	45	GCO	SA	224109	37	2410937A	442	T-305	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	46	GCO	SA	224109	38	2410938A	436	T-306	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	47	GCO	SA	224109	39	2410939A	446	T-307	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	48	GCO	SA	224109	40	2410940A	444	T-308	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	49	GCO	SA	224109	41	2410941A	433	T-309	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	50	GCO	SA	224109	42	2410942A	815	T-310	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	51	GCO	SA	224109	43	2410943A	829	T-311	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	52	GCO	SA	224109	44	2410944A	439	T-312	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	53	GCO	SA	224109	45	2410945A	445	T-313	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	54	GCO	SA	224109	46	2410946A	820	T-314	SCHMIDT	0.5	SS		AST1946H			
041524-GCO	56	GCO	STD			C04164A		ST63405	5% Hydrogen	0.5	DA		AST1946H			
041524-GCO	57	GCO	STD			C04164B		ST63405	5% Hydrogen	0.5	DA		AST1946H			
041524-GCO	58	GCO	STD			C04164C		ST63406	10% Hydrogen	0.5	DA		AST1946H			

REVIEWED

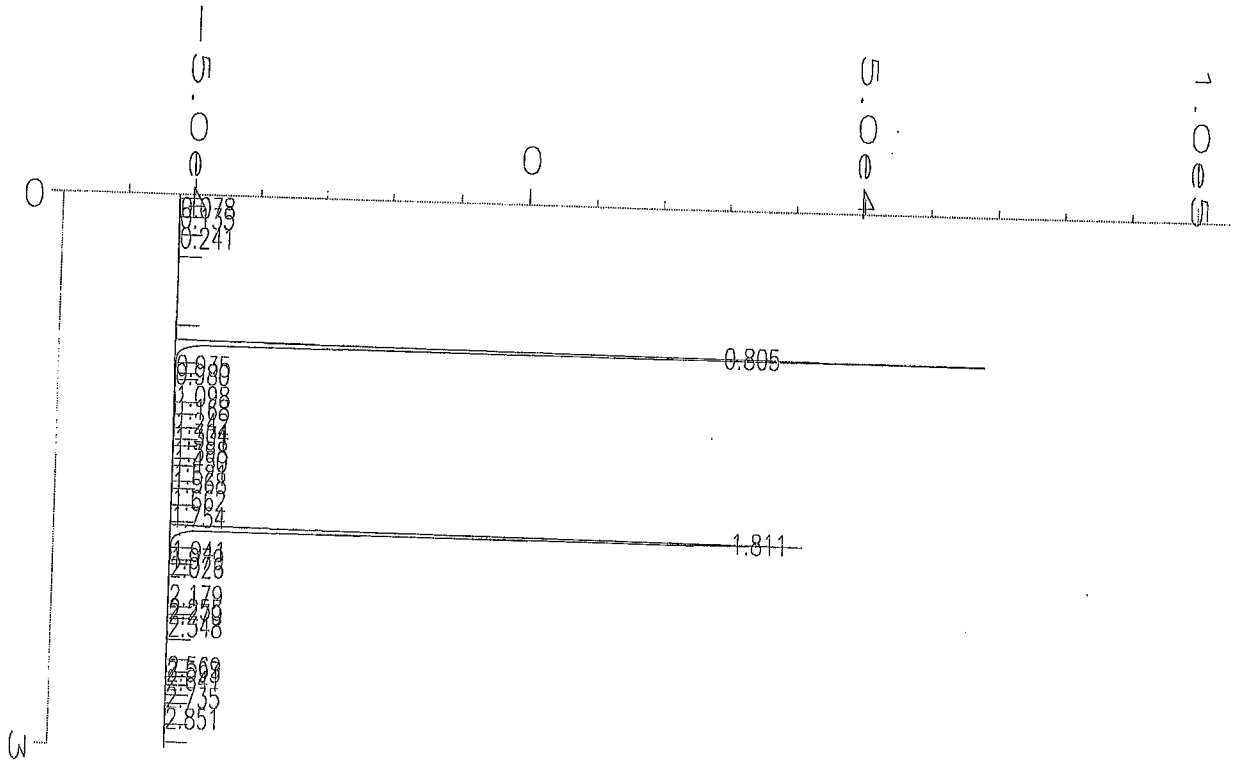
Daily Analytical Batch

DAB: 041524-GCO

GCO

DAB	RUN	INST:	TYPE	SDG	ID	File ID	Can	Description	Client	Vol	Tech	Qual	Method	Comments	Qedit:	Proc:
041524-GCO	59	GCO	STD			C04164D		ST63406	10% Hydrogen	0.5	DA		AST1946H			
041524-GCO	60	GCO	STD			C04164E		ST63407	20% Hydrogen	0.5	DA		AST1946H			
041524-GCO	61	GCO	STD			C04164F		ST63407	20% Hydrogen	0.5	DA		AST1946H			

REVIEWED



Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\04164GCO\C04164MA.D
Operator : DA
Instrument : GCL
Sample Name : ST63405
Run Time Bar Code:
Acquired on : 16 Apr 24 02:05 PM
Report Created on: 16 Apr 24 02:08 PM
Sample Info : 5% HYDROGEN

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04164GCO\C04164MA.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.078	596	146	BV	0.058	0.2835
2	0.135	679	134	VV	0.084	0.3231
3	0.241	757	140	VV	0.079	0.3603
4	0.805	105403	126959	HH S	0.048	50.1579
5	0.935	156	86	BV T	0.030	0.0741
6	0.980	24	27	VV T	0.015	0.0113
7	1.098	548	148	PV T	0.052	0.2609
8	1.168	568	173	VV T	0.054	0.2704
9	1.242	492	122	VV T	0.067	0.2342
10	1.304	402	129	VV T	0.052	0.1913
11	1.331	208	102	VV T	0.034	0.0989
12	1.398	325	109	VV T	0.049	0.1546
13	1.450	182	93	VV T	0.029	0.0865

14	1.521	302	85	VV T	0.050	0.1438
15	1.568	116	70	VV T	0.028	0.0551
16	1.662	212	59	VV T	0.060	0.1008
17	1.754	65	38	VV T	0.028	0.0309
18	1.811	96772	84336	HBAS	0.019	46.0504
19	1.941	238	156	BV T	0.025	0.1134
20	1.979	22	13	VV T	0.028	0.0107
21	2.026	90	43	PV T	0.034	0.0430
22	2.179	552	79	PV T	0.116	0.2627
23	2.255	166	80	VV T	0.034	0.0790
24	2.279	72	72	VV T	0.017	0.0344
25	2.348	470	101	VV T	0.073	0.2237
26	2.569	229	139	PV T	0.027	0.1088
27	2.593	75	67	VV T	0.019	0.0359
28	2.641	156	77	PV T	0.034	0.0745
29	2.735	117	67	VV T	0.029	0.0555
30	2.851	148	37	VV T	0.066	0.0704

Total area = 210143

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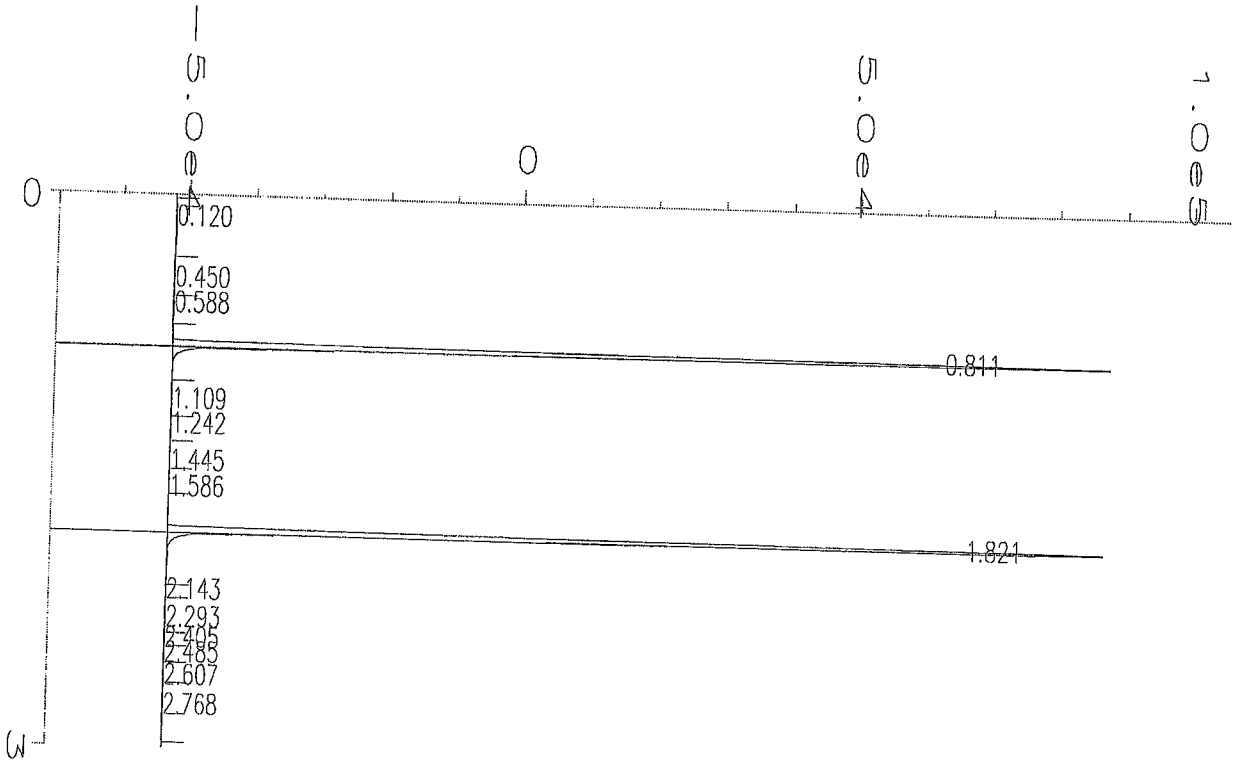


Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\04164GCO\C04164MC.D
Operator : DA
Instrument : GCL
Sample Name : ST63406
Run Time Bar Code:
Acquired on : 16 Apr 24 02:17 PM
Report Created on: 16 Apr 24 02:20 PM
Sample Info : 10% HYDROGEN

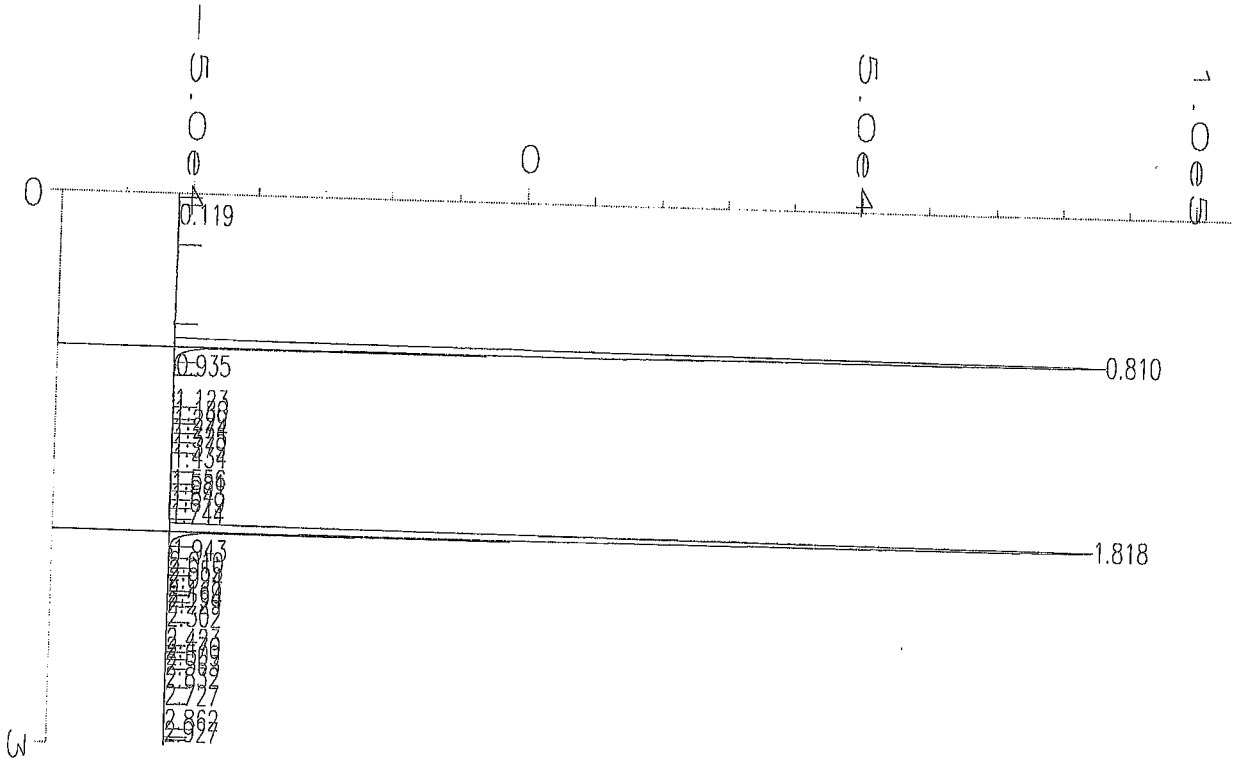
Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04164GCO\C04164MC.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.120	2277	158	BV	0.204	0.6864
2	0.450	1390	144	VV	0.149	0.4188
3	0.588	999.5	233	VV	0.072	0.3012
4	0.811	158108	120939	HH S	0.022	47.6500
5	1.109	1239	162	BV T	0.099	0.3734
6	1.242	796	140	VV T	0.095	0.2398
7	1.445	375	86	VV T	0.072	0.1129
8	1.586	324	67	PV T	0.081	0.0975
9	1.821	164636	132911	HBAS	0.054	49.6172
10	2.143	45	31	BV T	0.024	0.0134
11	2.293	614	114	PV T	0.090	0.1849
12	2.405	172	62	VV T	0.046	0.0519
13	2.485	234	67	VV T	0.059	0.0706

14	2.607	308	91	PV T	0.056	0.0928
15	2.768	296	72	VV T	0.078	0.0893

Total area = 331812



Area Percent Report

Data File Name : C:\GCCHEM\1\DATA\04164GCO\C04164MF.D
Operator : DA
Instrument : GCL
Sample Name : ST63407
Run Time Bar Code:
Acquired on : 16 Apr 24 02:35 PM
Report Created on: 16 Apr 24 02:38 PM
Sample Info : 20% HYDROGEN

Page Number : 1
Vial Number :
Injection Number :
Sequence Line :
Instrument Method: AST1946H.MTH
Analysis Method : AST1946H.MTH

Sig. 1 in C:\GCCHEM\1\DATA\04164GCO\C04164MF.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	0.119	971	115	BV	0.128	0.2085
2	0.810	231486	139018	HH S	0.058	49.7098
3	0.935	321	198	BV T	0.027	0.0690
4	1.123	722	122	PV T	0.088	0.1550
5	1.180	429	129	VV T	0.055	0.0921
6	1.229	143	110	VV T	0.022	0.0306
7	1.274	313	101	VV T	0.052	0.0672
8	1.325	311	108	VV T	0.045	0.0667
9	1.379	323	88	VV T	0.061	0.0694
10	1.434	670	105	VV T	0.093	0.1439
11	1.556	568	120	VV T	0.079	0.1221
12	1.581	333	170	VV T	0.033	0.0716
13	1.643	373	121	VV T	0.044	0.0801

14	1.668	546	224	VV T	0.040	0.1211
15	1.817	223535	138921	HBAS	0.027	49.5740
16	2.020	57	44	BV T	0.022	0.0127
17	2.069	17	28	PV T	0.010	0.0038
18	2.209	244	64	PV T	0.064	0.0542
19	2.249	87	35	VV T	0.041	0.0194
20	2.335	193	63	VV T	0.051	0.0429
21	2.359	131	43	VV T	0.051	0.0291
22	2.461	173	59	VV T	0.040	0.0383
23	2.579	230	62	VV T	0.067	0.0510
24	2.747	248	54	VV T	0.062	0.0550
25	2.793	29	28	PV T	0.017	0.0064

Total area = 450912

14	1.679	306	151	VV T	0.034	0.0658
15	1.744	99	46	PV T	0.035	0.0214
16	1.818	226464	138042	HBAS	0.027	48.6313
17	1.943	567	354	BV T	0.027	0.1217
18	2.010	20	4	PV T	0.082	0.0043
19	2.055	52	24	PV T	0.037	0.0111
20	2.094	154	53	VV T	0.049	0.0330
21	2.169	45	50	VV T	0.015	0.0096
22	2.194	50	27	VV T	0.030	0.0106
23	2.229	26	44	PV T	0.010	0.0055
24	2.302	98	38	VV T	0.043	0.0210
25	2.423	88	32	PV T	0.043	0.0190
26	2.470	56	54	VV T	0.017	0.0119
27	2.509	54	29	VV T	0.031	0.0116
28	2.563	59	42	PV T	0.023	0.0126
29	2.632	146	52	PV T	0.050	0.0315
30	2.727	111	46	VV T	0.045	0.0237
31	2.862	272	76	PV T	0.060	0.0584
32	2.927	47	23	PV T	0.034	0.0100

Total area = 465675

CE Schmidt, Ph.D.
Environmental Consultant

ATTACHMENT D

CALIBRATION DATA

19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878

REAL TIME INSTRUMENT CALIBRATION FORM

DATE 11/19/24 SAMPLERS CS

LOCATION CCLF

INSTRUMENT TYPE 1631 I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE 1631 & 1462

PROJECT QC: BLANK DETERMINATION ☐ PRE-USE SPAN CHECK ☐ POST-USE SPAN CHECK ☐
AMBIENT CONCENTRATIONS _____

PRE-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

1053 INPUT ZERO AIR RESPONSE 0.0 / 0.0 AIR

SPAN GAS TYPE NA INPUT CONCENTRATION _____ RESPONSE _____

RECALIBRATION: YES _____ NO _____

ACCEPANCE ZERO H/L BOTH

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

COMMENT _____

POST-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

1412 INPUT ZERO AIR RESPONSE 0.005 #1631 ✓ #1662 0.000 ppm

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

COMMENT _____

REAL TIME INSTRUMENT CALIBRATION FORM

DATE 11/19/24 SAMPLERS CRS

LOCATION CCLF

INSTRUMENT TYPE TVA-1000 ID. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE 4.4

PROJECT QC: BLANK DETERMINATION ☐ PRE-USE SPAN CHECK ☐ POST-USE SPAN CHECK ☐

AMBIENT CONCENTRATIONS _____

0653

PRE-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 4.0 ~~PPM~~ 55 PPM

SPAN GAS TYPE CH4 INPUT CONCENTRATION 100 PPM RESPONSE _____

RECALIBRATION: YES X NO _____

ACCEPANCE 50ppm ZERO — 102 ppm SPAN (COLD)

0802

INPUT- ZERO AIR RESPONSE 0.2 PPM

SPAN GAS TYPE 100ppm CH4 INPUT CONCENTRATION 100 PPM RESPONSE 78 PPM

ACCEPTANCE ✓ OK

COMMENT _____

POST-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

1417

INPUT ZERO AIR RESPONSE 14 PPM

SPAN GAS TYPE CH4 INPUT CONCENTRATION 100 PPM RESPONSE 95 133 PPM

ACCEPTANCE OK

RECALIBRATION: YES _____ NO X] RECAL TOMORROW AM (COLD TEMP)

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

COMMENT _____

REAL TIME INSTRUMENT CALIBRATION FORM

DATE 11/20/24 SAMPLERS CES

LOCATION CCLF

INSTRUMENT TYPE H2S I.D. NO. 1631 TYPE 1462 ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BLANK DETERMINATION ☐ PRE-USE SPAN CHECK ☒ POST-USE SPAN CHECK ☐
AMBIENT CONCENTRATIONS _____

0900

PRE-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 0.000 / 0.000 OK

SPAN GAS TYPE NA INPUT CONCENTRATION _____ RESPONSE _____

RECALIBRATION: YES _____ NO X

ACCEPANCE H/LCAUS ADK

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

COMMENT _____

1330

POST-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 1631 0.002 ppm 1462 0.000 ppm

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE OK

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

COMMENT _____

REAL TIME INSTRUMENT CALIBRATION FORM

DATE 11/20/24 SAMPLERS CS

LOCATION VCLF

INSTRUMENT TYPE TA 1000 I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BLANK DETERMINATION ☐ PRE-USE SPAN CHECK ☒ POST-USE SPAN CHECK ☐
AMBIENT CONCENTRATIONS _____

0700

PRE-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 23 ppmv COLD

SPAN GAS TYPE CH4 INPUT CONCENTRATION 100 ppm RESPONSE 133 ppmv

RECALIBRATION: YES _____ NO _____

0800 ACCEPANCE ~110 RESP OK

INPUT- ZERO AIR RESPONSE AMB 5 PPMV

SPAN GAS TYPE 100 CH4 INPUT CONCENTRATION 100 ppm RESPONSE 89 ✓

ACCEPTANCE A OK 89%

COMMENT _____

1010 RECALIBR

POST-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 0.5 ppmv ✓

SPAN GAS TYPE CH4 INPUT CONCENTRATION 100 ppmv RESPONSE 105 ppmv

ACCEPTANCE A-OK

RECALIBRATION: YES ✓ NO _____

POST USE 1300

INPUT- ZERO AIR RESPONSE UHP AIR 3.1 ppmv

SPAN GAS TYPE CH4 INPUT CONCENTRATION 100 ppmv RESPONSE 111 ppmv

ACCEPTANCE 111% OK

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

COMMENT NOTE: COLD IN AM AN ISSUE

* MUST ALLOW TO WARM UP ~30 MINUTES

REAL TIME INSTRUMENT CALIBRATION FORM

DATE 11/21/24 SAMPLERS CES

LOCATION CCLF

INSTRUMENT TYPE TBIX I.D. NO. 1462/1631 TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BLANK DETERMINATION ☐ PRE-USE SPAN CHECK ☐ POST-USE SPAN CHECK ☐
AMBIENT CONCENTRATIONS _____

0800

PRE-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 0.000

SPAN GAS TYPE NA INPUT CONCENTRATION _____ RESPONSE _____

RECALIBRATION: YES _____ NO X

ACCEPANCE _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

COMMENT _____

1400

POST-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 1631 0.020 ppmV / 1462 0.000 ppmV

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

COMMENT _____

REAL TIME INSTRUMENT CALIBRATION FORM

DATE 0754 / 11/21/24 SAMPLERS CAES

LOCATION CCLF

INSTRUMENT TYPE TVA 1000 I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BLANK DETERMINATION ☐ PRE-USE SPAN CHECK ☒ POST-USE SPAN CHECK ☒
AMBIENT CONCENTRATIONS _____

PRE-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

0800

INPUT ZERO AIR RESPONSE 14 ppmv

SPAN GAS TYPE CH4 INPUT CONCENTRATION 150 ppmv RESPONSE 102 ✓

RECALIBRATION: YES _____ NO _____

ACCEPANCE OK

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

COMMENT _____

100

POST-USE CALIBRATION; ZERO AIR RESPONSE AND SPAN GAS RESPONSE

INPUT ZERO AIR RESPONSE 1.2 ppmv

SPAN GAS TYPE CH4 INPUT CONCENTRATION 100 ppmv ✓ RESPONSE 89 ppmv

ACCEPTANCE AOK ✓

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

INPUT- ZERO AIR RESPONSE _____

SPAN GAS TYPE _____ INPUT CONCENTRATION _____ RESPONSE _____

ACCEPTANCE _____

RECALIBRATION: YES _____ NO _____

COMMENT _____

EQUIPCO RENTALS

JEROME 631-X Verification Certificate

SERVICE TECHNICIAN: GPB **DATE:** 11/13/2024

INSTRUMENT

MODEL#: 631X

INSTRUMENT SERIAL#: 1462

CALIBRATION CHECK

BATTERY CHARGED __X__ METER ZEROED __X__

Verification Results:

	Actual	Calibration Gas	Allowable Range
Range 1	0.20 ppm H2S	0.25 ppm H2S	+/- 5%
Range 2	0.24 ppm H2S	0.25 ppm H2S	+/- 5%
Range 3	0.24 ppm H2S	0.25 ppm H2S	+/- 5%

Calibration Device:

Metronics DynaCal Permeation Device, Total Rate: 265.50 ng/min +/- 1.41% @ 30°C

Serial No. 59-57787 **CAS#** 7783-06-4

VICI Metronics DynaCalibrator Model 505-18-R-N

Serial No. M-2741 **Cert#** 21-4055
Calibration Date: 09/08/2021
Date Due: 09/08/2022

Bump Test @ 25 ppm H2S **Reading:**

Lot# ALM022057 22 ppm

EQUIPCO RENTALS

JEROME 631-X Verification Certificate

SERVICE TECHNICIAN: GPB **DATE:** 11/13/2024

INSTRUMENT **MODEL#:** 631X

INSTRUMENT SERIAL#: 1631

CALIBRATION CHECK

BATTERY CHARGED __X__ METER ZEROED __X__

Verification Results:

	Actual	Calibration Gas	Allowable Range
Range 1	0.25 ppm H2S	0.25 ppm H2S	+/- 5%
Range 2	0.26 ppm H2S	0.25 ppm H2S	+/- 5%
Range 3	0.23 ppm H2S	0.25 ppm H2S	+/- 5%

Calibration Device:

Metronics DynaCal Permeation Device, Total Rate: 265.50 ng/min +/- 1.41% @ 30°C

Serial No. 59-57787 **CAS#** 7783-06-4

VICI Metronics DynaCalibrator Model 505-18-R-N

Serial No. M-2741 **Cert#** 21-4055
Calibration Date: 09/08/2021
Date Due: 09/08/2022

Bump Test @ 25 ppm H2S **Reading:**

Lot# ALM022057 22 ppm

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Fax: 714-542-6689

Customer & Order Information:

CE SCHMIDT
19200 LIVE OAK RD,
RED BLUFF, CA 96080

Linde Order Number: **41590609**
Customer PO Number: **VERBAL CHUCK**

Certificate Issuance Date: **8/30/2024**
Revision Number: **0**
Certification Date: **8/30/2024**
Lot Number: **70086424109**
Part Number: **AI HE10ZP-AS**
DocNumber: **780499**
Expiration Date: **8/29/2029**

CERTIFICATE OF ANALYSIS

Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Helium	**10 %**	**9.99 %**	**1**	**± 1%**
Air	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70: **2000 psig**
Cylinder Volume: **143 ft3**
Valve Outlet Connection: **CGA 590**
Cylinder Number(s): **DT0051785**

Fill Date: **8/28/2024**
Analysis Date: **8/29/2024**

Filling Method: **Gravimetric**

Comments: **This mixture was blended with Natural Air.**
For Reference Only: **Carbon Dioxide <1.0 ppm**

Analyst: **Amalia Real**

Approved Signer: **Ying Yu**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	CAI GPA-2000 Gas Purity Analyzer - Resonant Acoustic Cell

The gas calibration cylinder standard prepared by Linde Gas & Equipment Inc. is considered a certified standard. It is prepared by gravimetric, volumetric, or partial pressure techniques. The calibration standard provided is certified against Linde Gas & Equipment Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by mole unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

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RED BLUFF, CA 96080
Linde Order Number: **41590609**
Customer PO Number: **VERBAL CHUCK**

Certificate Issuance Date: **8/30/2024**
Revision Number: **0**
Certification Date: **8/30/2024**
Lot Number: **70086424116**
Part Number: **AI HE10ZP-AS**
DocNumber: **780508**
Expiration Date: **8/29/2029**

CERTIFICATE OF ANALYSIS

Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Helium	**10 %**	**10.01 %**	**1**	**± 1%**
Air	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70: **2000 psig**
Cylinder Volume: **143 ft3**
Valve Outlet Connection: **CGA 590**
Cylinder Number(s): **DT0051896**

Fill Date: **8/28/2024**
Analysis Date: **8/29/2024**

Filling Method: **Gravimetric**

Comments: **This mixture was blended with Natural Air.**
For Reference Only: **Carbon Dioxide <1.0 ppm**

Analyst: **Amalia Real**

Approved Signer: **Ying Yu**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	CAI GPA-2000 Gas Purity Analyzer - Resonant Acoustic Cell

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Customer & Order Information:

CE SCHMIDT
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RED BLUFF, CA 96080

Linde Order Number: **30809348**
Customer PO Number: **CE Schmidt**

Certificate Issuance Date: **4/10/2024**
Revision Number: **0**
Certification Date: **4/10/2024**
Lot Number: **70086408913**
Part Number: **Al HE10ZP-AS**
DocNumber: **749570**
Expiration Date: **4/9/2029**

CERTIFICATE OF ANALYSIS

Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Helium	**10 %**	**10.14 %**	**1**	**± 1 %**
Air	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **143 ft3**
Valve Outlet Connection: **CGA 590**
Cylinder Number(s): **EB0160963**

Fill Date: **3/29/2024**
Analysis Date: **4/9/2024**

Filling Method: **Gravimetric**

Comments: **This mixture was blended with Natural Air.**
For Reference Only: **Carbon Dioxide < 1.0 ppm**

Analyst: **Amalia Real**

Approved Signer: **Suchana Gurung-Chemist**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	Mettler ID5 - Gravimetric Method

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Customer & Order Information:

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RED BLUFF, CA 96080

Linde Order Number: **30809348**
Customer PO Number: **CE Schmidt**

Certificate Issuance Date: **4/10/2024**
Revision Number: **0**
Certification Date: **4/10/2024**
Lot Number: **70086408909**
Part Number: **AI HE10ZP-AS**
DocNumber: **749566**
Expiration Date: **4/9/2029**

CERTIFICATE OF ANALYSIS

Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Helium	**10 %**	**10.07 %**	**1**	**± 1 %**
Air	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **143 ft3**
Valve Outlet Connection: **CGA 590**
Cylinder Number(s): **EB0160945**

Fill Date: **3/29/2024**
Analysis Date: **4/9/2024**

Filling Method: **Gravimetric**

Comments: **This mixture was blended with Natural Air.**
For Reference Only: **Carbon Dioxide < 1.0 ppm**

Analyst: **Amalia Real**

Approved Signer: **Suchana Gurung-Chemist**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	Mettler ID5 - Gravimetric Method

The gas calibration cylinder standard prepared by Linde Gas & Equipment Inc. is considered a certified standard. It is prepared by gravimetric, volumetric, or partial pressure techniques. The calibration standard provided is certified against Linde Gas & Equipment Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

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Attachment 2
Source Test Protocol

Chiquita Canyon Landfill
Castaic, California

Additional Assessment of Air Emissions From Landfill Surfaces

Sampling Protocol

Revision 0

December 2023

Prepared by

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1. SCS Site Specific Health and Safety Plan

1. Introduction

Landfill Surface Nomenclature

For the purposes of this protocol, the surface of the Chiquita Canyon Landfill (CCL or Landfill) was divided into the following areas:

Non-Reaction Area

This will be the portion of the Landfill that is not affected by the landfill reaction and that does not exceed the South Coast Air Quality Management District (SCAQMD) Rule 1150.1 integrated data limit of 25 parts per million by volume (ppmv) on the most recent surface emissions monitoring (SEM) event.

Reaction Area

This will be the portion of the Landfill designated as being affected by the landfill reaction and that does not exceed the SCAQMD Rule 1150.1 integrated data limit of 25 ppmv on the most recent SEM event.

Exceedance Area

This will be the portion of the Landfill designated as being affected by the landfill reaction and that exceeds the SCAQMD Rule 1150.1 integrated data limit of 25 ppmv on the most recent SEM event. This portion of the Landfill will be considered separately to assess any impact that the grid cells that exceeded the Rule 1150.1 integrated data criteria might have on total site surface emissions. Note that these grid cells are subject to a strict remediation schedule, so any emissions from these cells, over and above those from a reaction area cell not in exceedance, would be a temporary phenomenon.

Background

CCL is a municipal solid waste (MSW) landfill located in northern Los Angeles County. It recently has had an area in the landfill experiencing elevated gas temperatures and surface subsidence, with accompanying high SEM values, due to a subsurface reaction.

In accordance with Condition 12.d of the Stipulated Order for Abatement (SOFA) (Case No. 6177-4) between the SCAQMD and Chiquita Canyon, LLC (Chiquita), Chiquita is required to conduct an additional flux chamber study as a follow-up to a flux chamber study previously completed under the direction of the Los Angeles County Department of Public Health, which was submitted to the SCAQMD by October 31, 2023. Procedures for this additional study, as detailed in Condition 12.d, are provided below:

> *Respondent shall conduct an additional landfill gas flux study for methane, non-methane organic compounds ("NMOC"), total reduced sulfur ("TRS"), and speciated sulfur compounds to determine the surface flux throughout the landfill. The study shall be conducted through the use of static flux chambers oriented at various locations throughout the landfill site. Respondent shall prepare a proposed protocol for the study based on the results of the initial study and shall submit the protocol to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)] for review and approval by December 31, 2023. A report documenting the differences in the findings between the initial study and the additional study shall be submitted by no later than 90 days after South Coast AQMD approves the protocol to South Coast AQMD [Baitong Chen, Air Quality Engineer, (bchen@aqmd.gov); Nathaniel Dickel, Senior Air Quality Engineer, (ndickel@aqmd.gov), and Christina Ojeda, Air Quality Inspector, (cojeda@aqmd.gov)].*

This protocol is intended to address the requirements in the SOFA as well as provide an emissions assessment to determine the landfill emissions of odor and other substances for both the "non-reaction area" and "reaction area" of the Landfill.

Regarding the testing technologies to be used, as with the initial flux chamber study, the U.S. Environmental Protection Agency (USEPA) surface emission isolation flux chamber (flux chamber) technology will be used. This preferred USEPA technology as modified and described by SCAQMD Rule 1133.3, Attachment A is a dynamic chamber method for direct measurement on advective area sources. This approach is further described in Section 5.

In addition, data will be collected that will allow for the accurate estimation of past and future emissions based on past and future SEM events.

Site Location

The test site is the Chiquita Canyon Landfill, which is located at 29201 Henry Mayo Drive, Castaic, California, 91384.

Figure 1.1 – Site Location Map.

Facility Description

Chiquita Canyon Landfill is an active MSW disposal facility.

Objective

The objective of this additional emission assessment is to quantify by field measurement, the air emissions of odors, fixed gases (including methane, carbon dioxide, and carbon monoxide), reduced sulfur compounds, and speciated volatile organic compounds (VOCs) from the areas of the Landfill affected by the reaction and areas not affected by the reaction.

The air emissions will be directly measured using the USEPA Surface Emission Isolation Flux Chamber (flux chamber) following the USEPA User's Guidance document. Whole air samples will be collected

from the flux chamber by lined Summa® canister and Tedlar® bag with analysis by the following methods:

- American Society for Testing and Materials (ASTM) E-679 for olfactory odor,
- ASTM D-1945/USEPA Method 3C for fixed gases (including methane, carbon dioxide, and carbon monoxide),
- USEPA Method 3C for helium,
- SCAQMD Method 307-91 for hydrogen sulfide (H_2S)/organic reduced sulfur (ORS),
- USEPA Method TO-15 for speciated VOCs, and
- USEPA Method TO-12 for total non-methane VOC with functional group/molecular weight distribution.

Flux from soil surfaces can either be diffusive (driven by molecular action), advective (driven by gas movement), or a combination of both.

Given that it is expected that the landfill surface will have an advective flow at some or many locations, the flux chamber assessment will include the use of a tracer (10% helium) in the chamber sweep air gas as per SCAQMD Rule 1133.3, Attachment A. The dilution of the tracer taken from the evacuated canister samples will be used to calculate total flow in the flux chamber for the emissions assessment. Note that TO-12, TO-15, and ASTM D-1945/USEPA Method 3C samples will be collected and analyzed from the same sample canister.

2. Sampling Scope

This study will focus on the assessment of air emissions from areas of the Landfill affected by the reaction and areas not affected by the reaction. Each landfill area will be tested using the flux chamber technology. Flux chamber measurement data performed at representative locations within grid cells will be used to estimate odor/NMOC/sulfur compound/toxic air contaminant (TAC)/fixed gases emissions from the Landfill.

Cell grouping (see Table 2.1) is proposed to test high, medium, and low emitting cells (based on screening data) for both the non-reaction area surfaces and the reaction area surfaces. In addition, in order to better understand variability, replicate medium emission cells will be tested along with one cell that will be tested twice, with at least 24 hours between tests.

The product of the measurement program, which is based on the screening or monitoring data for air emission potential, is an average flux of odor/NMOC/sulfur/TAC emissions per category of grid cell. These grid cell flux data multiplied by the number of grid cells in these categories when summed, will represent the air emissions of compounds from the landfill operation.

Table 2.1 Landfill Emissions Flux Chamber Testing Scope.

SOURCE	Flux Chamber Tests	Odor/TAC/Fixed Gas/VOC Sampling	Comment
Non-Reaction Area Landfill Surfaces			
High Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Medium Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Second Medium Emission Category Grid Cell	4	4	Replicate cell for QA/QC
Low Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Reaction Area Landfill Surfaces (Footprint)			
High Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Medium Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Second Medium Emission Category Grid Cell	4	4	Replicate cell for QA/QC
Low Emission Category Grid Cell	4	4	Samples distributed within levels of emission potential within category of grid cell
Exceedance Area Surfaces			
Intent to quantify difference in grid testing	4	4	Samples taken at same or distributed within levels of emission potential within category of grid cell
Repeat Area Surfaces			
Intent to quantify difference in grid testing	4	4	Samples taken at initial, marked test locations within levels of emission potential within category of grid cell
QC Blank Samples		4	Minimum of 5% Blank Samples
QC Replicate Samples		4	Minimum of 5% Blank Samples
Total	40	48	

3. Quality Control

Quality control (QC) procedures that are used to assure data quality from flux chamber measurement are listed and described below. USEPA recommends no specific QC requirements except that a flow meter is used to introduce the sweep air at a rate of 5.0 liters per minute (l/min), which requires calibration (i.e., multiple trials at single point of use calibration using a primary standard current for the year). The rotometer used as part of the emission measurement test should not be used for other applications, ensuring the clean operation of the air introduction system. Operation of the chamber should follow the specific protocol for use described in the USEPA User's Guide. This includes using a 5.0 l/min sweep airflow rate and allowing for five residence times to achieve equilibration prior to sample collection. Other sampling quality control procedures are listed below.

- Media Blank Sample -- A media blank sample is obtained by filling sampling media with ultra high purity air, water, or impinger solution in the field, and handling the media blank samples as field samples. The frequency of media blank samples is a minimum of 5%, or one per trip. Media blank samples will be collected daily, and these data will be used to establish the system baseline.

- Replicate Sample -- Sample precision is determined by collecting a replicate sample immediately after a sample is collected and analyzing both the field sample and the field replicate sample. The frequency of replicate sample collection will be a minimum of 5%; a replicate sample will be collected daily. The criteria for acceptable field precision is ±50% relative percent difference (RPD).

- Specific Method Performance -- Specific method QC is conducted as per analytical method requirements. This includes laboratory blanks, species recovery, and adherence to other method performance objectives such as calibration and retention time identifications. The laboratories will follow the method QA requirements for all listed methods.

- Sample Management -- Sample management is defined by the specific sampling method used to satisfy the program objectives. Sample management typically includes all activities, including the recording, preserving, storing, handling, and shipping of the field samples. A summary of the sample management information for the proposed field measurement activities is given in Tables 3.1 and 3.2.

Table 3.1 Summary of Sample Management Information

Analytical Method	Sample Container	Hold Time	Preservation	Special Considerations	Comment
ASTM E-679	10-Liter Tedlar® Bag	30 hours	None	Ship in Cardboard	None
USEPA Method TO-15/TO-12	6-Liter Canister	28 days	None	Ship in Cardboard	None
SCAQMD 307-91	1-Liter Tedlar® Bag	24 hours	None	Ship in Cardboard	None
ASTM D-1945/USEPA Method 3C	6-Liter Canister	30 days	None	Ship in Cardboard	None

Data qualifiers that will be used to assist in data usage include:

- J -- estimated value or below method reporting limit (MRL);
- B -- value found in blank sample and baseline corrected; and
- E -- value found at level that exceeds calibration range.

Laboratory recovery and precision data, as well as field precision data, will be used to qualify data usage for the site flux chamber program.

The field QC activities scheduled for the field testing are summarized in Table 3.2. Deviation in schedule or frequency of QC activities will require corrective action, including documentation of corrective action in the field notebook and notifying an SCS project manager of the deviation and corrective action.

Table 3.2. Summary of Field Quality Control Information

Sampling Method	Activity	Frequency	Criteria	Comment
Flux Chamber	Rotometer Single-Point Calib.	Once per year	Define Rotometer Setting	None
Field Blank	All media	Minimum of 5%	None	Use As Baseline Data
Replicate Sample	All media	Minimum of 5%	± 50% RPD	Qualify Exceedances

4. Sampling Strategy

Sample locations will be selected based on SEM data obtained under the SCAQMD Rule 1150.1 SEM program. The SEM program consists of surveying the landfill surface on a track using a field portable, calibrated instrument sensitive to methane and total non-methane hydrocarbon (TNMHC). Using this methodology, landfill grid cells will be selected for flux chamber testing. The landfill grid pattern, showing the current designated reaction area grid cells, is shown in Figure 4.1.

Test Cell Selection Methodology

This emissions assessment will be conducted by analyzing the Rule 1150.1 SEM data and categorizing the landfill areas based on surface emissions. At this site, SEM events are conducted as often as every two weeks.

The SEM events are conducted using an instrument fit with a flame ionization detector (FID) along with global positioning system (GPS) location recording to map fugitive surface hydrocarbon concentrations following a pattern in each grid cell for the site. Instantaneous fugitive concentration data is determined by walking a serpentine path across each nominal 50,000 square foot (ft^2) landfill grid cell. Integrated concentration data is determined by averaging the instrument readings obtained while traversing the serpentine path as illustrated in Figure 4.2.

Emissions concentration data and location information will be collected and stored for the purpose of ranking grid cells on the Landfill by emissions concentration. The integrated concentration data will be used to 'rank' the grid cells into categories of high, medium, and low emissions. The instantaneous fugitive concentration data will be used to select representative locations for flux chamber testing where flux data for odors/VOCs/sulfur/TACs will be collected. The flux from these representative locations will be used to estimate air emissions from the entire surface of these cells.

Tables 4.1 through 4.3 show the sorted integrated SEM data for the non-reaction area cells for the period May 1, 2023 through July 25, 2023. Table 4.4 shows the sorted integrated SEM data for the reaction area cells for the period May 1, 2023 through July 25, 2023. The data included in Tables 4.1 through 4.4 are from the first test event and are solely provided here for illustrative purposes. For the actual test event, all data available will be used, with the most recent data receiving the most emphasis.

Column 1 will show the grid cell number designation.

Column 2 will show the surface area of each grid cell (each grid cell is nominally 50,000 ft^2, but for this analysis, the exact area of each grid cell will be used).

Columns 3 through 8 will show the integrated SEM values (FID response as ppmv methane) for each SEM event. The most recent SEM event will be shown in red.

Column 9 will show the average of all the SEM events.

Column 10 will show the cumulative average of all the cells above the cell in question.

Figure 4.1 Chiquita Canyon Landfill Cell Gridding (reaction area cells highlighted).

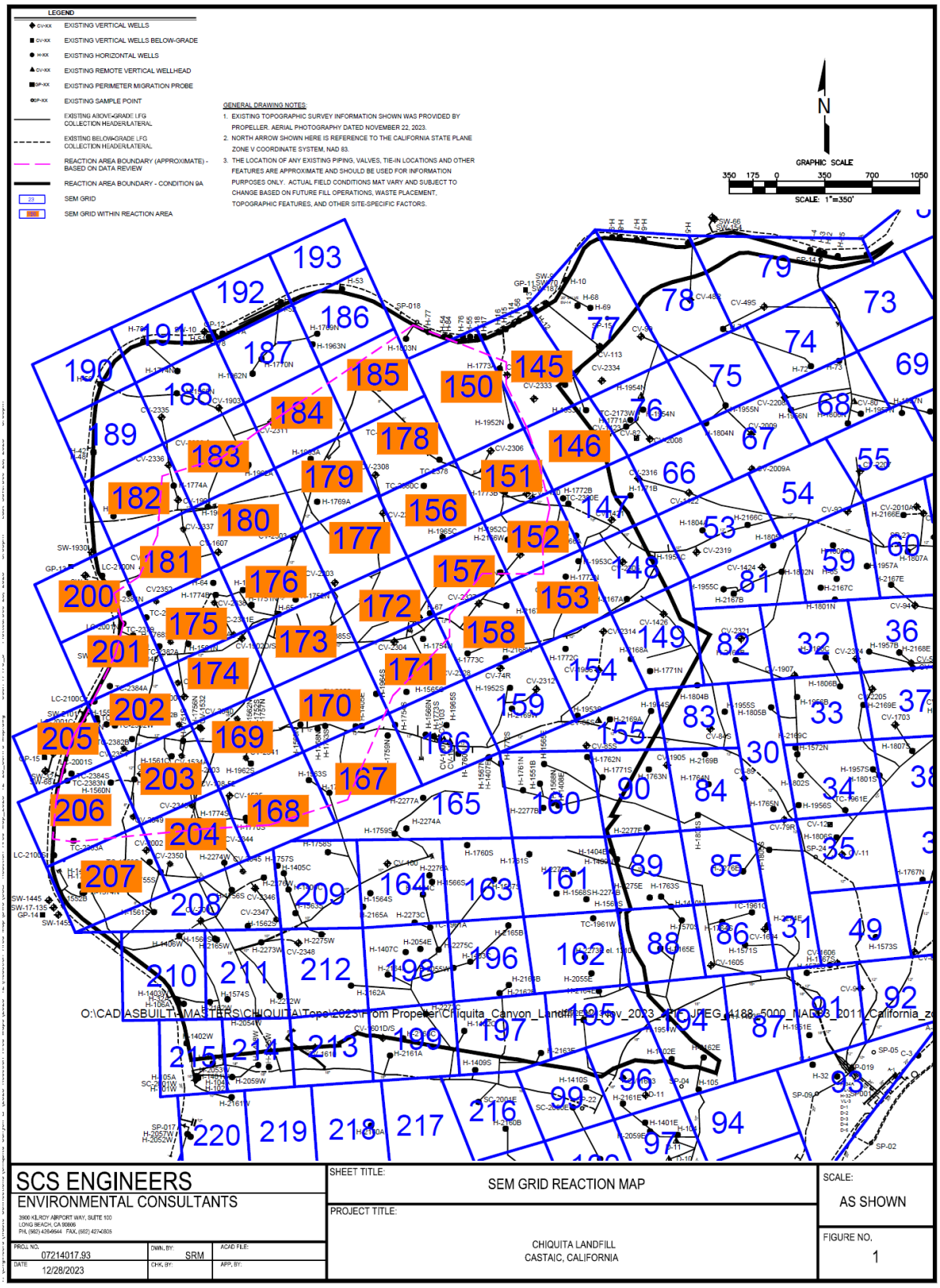

Figure 4.2 Typical Serpentine Landfill Walk Pattern for a 50,000 Square Foot Grid (from Rule 1150.1).

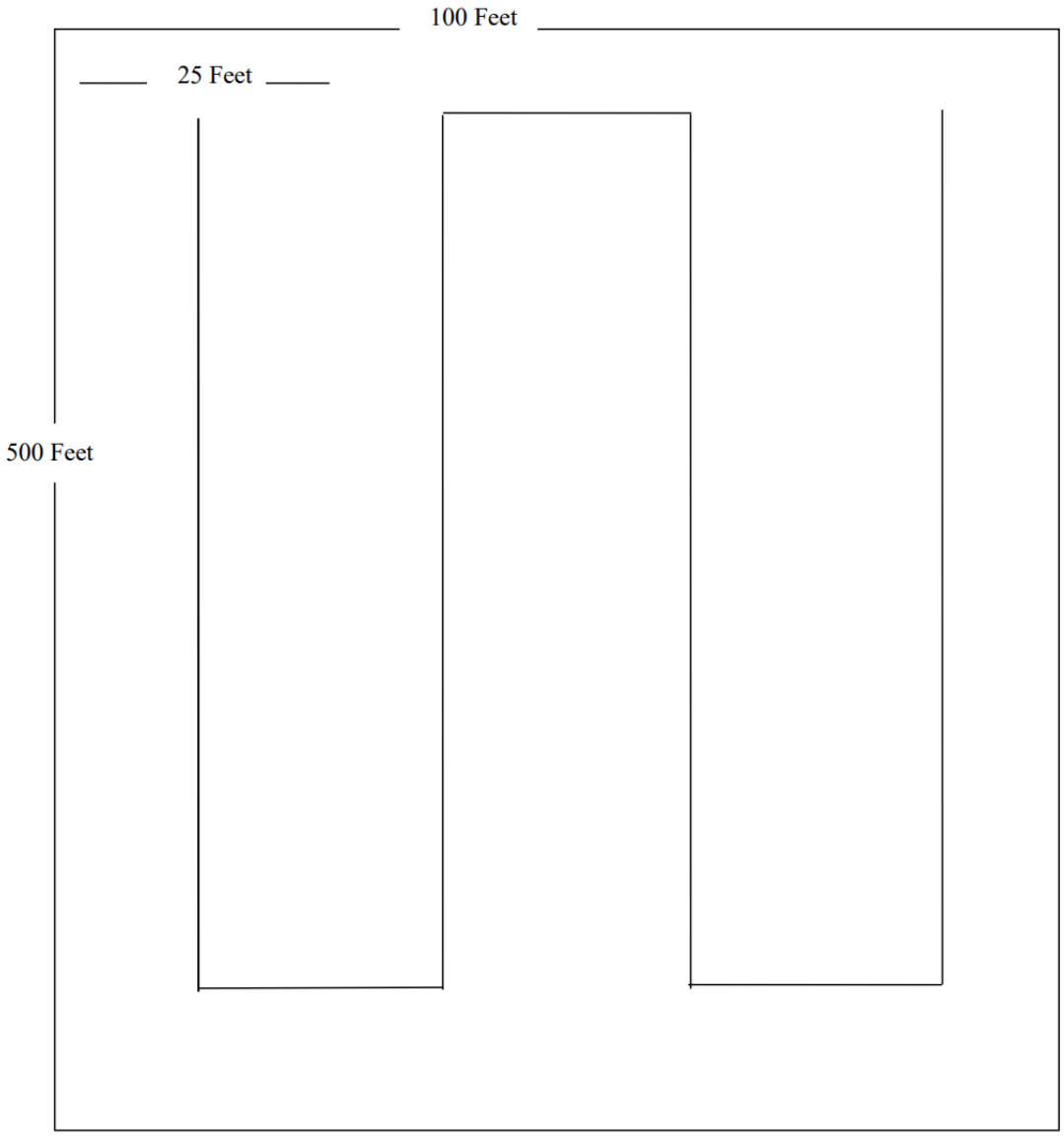

Table 4.1 Summary of Non-Reaction Area Cell Sorted Integrated Grid Data (5/1/2023 – 7/25/2023 used as an example) (ppmv FID as methane). High Emission Cells

Grid		SEM Data								Average	
ID	Area (ft2)	5/1/2023	5/15/2023	5/31/2023	6/14/2023	6/28/2023	7/12/2023	7/25/2023	8/24/2023	FID	Cumulative
77	99,941	HE	8	8	10	15	13	5	13	10.29	10.29
150	70,989	5	7	7	12	10	14	6	17	9.75	20.04
188	50,699	10	9	7	18	9	7	3	15	9.75	29.79
158	49,522	6	14	16	7	8	4	7	12	9.25	39.04
186	46,611	8	4	18	15	6	10	4	9	9.25	48.29
78	82,334	HE	7	12	9	16	5	4	10	9.00	57.29
80	46,342	HE	3	3	10	18	7	HE	13	9.00	66.29
182	52,362	8	3	6	12	10	14	6	12	8.88	75.16
185	50,993	7	8	10	9	10	10	6	11	8.88	84.04
183	54,617	7	6	15	11	8	8	5	10	8.75	92.79
145	60,197	4	9	5	12	11	10	6	12	8.63	101.41
184	51,245	7	5	11	12	4	11	5	14	8.63	110.04
190	44,958	7	3	10	10	10	10	6	12	8.50	118.54
193	38,070	8	5	4	15	7	14	6	8	8.38	126.91
210	62,428	26	5	6	8	5	6	7	4	8.38	135.29
79	87,028	HE	3	6	11	15	3	HE	12	8.33	143.62
228	32,278	8	AT	AT	AT	AT	AT	AT	AT	8.00	151.62
187	47,666	6	8	12	10	3	8	3	13	7.88	159.49
192	40,754	5	7	9	11	9	10	3	9	7.88	167.37
146	**45,166**	**6**	**6**	**12**	**3**	**7**	**4**	**4**	**19**	**7.63**	**174.99**
191	44,606	6	4	7	12	9	9	4	10	7.63	182.62
148	50,546	AT	7	10	9	5	8	5	9	7.57	190.19
152	42,032	AT	8	7	10	5	3	5	13	7.29	197.48
82	42,779	AT	8	7	4	4	7	13	AT	7.17	204.64
55	58,851	5	6	9	12	5	8	8	3	7.00	211.64
83	38,592	5	3	8	4	5	4	20	AT	7.00	218.64
147	45,961	AT	4	8	14	1	7	4	11	7.00	225.64
229	49,011	7	AT	AT	AT	AT	AT	AT	AT	7.00	232.64
230	49,427	7	AT	AT	AT	AT	AT	AT	AT	7.00	239.64
234	42,867	7	AT	AT	AT	AT	AT	AT	AT	7.00	246.64
75	51,225	6	7	5	8	5	8	6	8	6.63	253.27
189	49,163	7	2	3	17	4	6	5	9	6.63	259.89
236	41,876	7	9	4	4	6	4	12	7	6.63	266.52
153	45,864	AT	8	12	7	2	3	5	9	6.57	273.09
53	60,197	8	5	13	4	8	2	6	6	6.50	279.59
84	48,990	7	7	2	4	2	8	14	8	6.50	286.09
54	53,298	7	3	10	8	7	4	8	4	6.38	292.46
167	62,172	6	8	5	12	2	7	5	6	6.38	298.84
168	59,314	10	6	8	10	5	2	5	5	6.38	305.21
76	48,758	6	9	5	4	5	5	6	10	6.25	311.46
217	53,205	6	8	5	4	4	4	16	3	6.25	317.71
58	46,507	AT	6	8	7	6	6	HE	4	6.17	323.88
60	58,550	16	6	5	6	5	5	4	2	6.13	330.01
89	47,690	6	8	4	6	7	7	6	5	6.13	336.13
72	59,809	5	5	3	6	7	9	HE	7	6.00	342.13

Notes for Tables 3.1 through 3.4:

1. "HE" means that the grid cell was not monitored due to heavy equipment operating in the grid cell.
2. "AT" means that the grid cell was not monitored due to active trash disposal in the grid cell.

Table 4.2 Summary of Non-Reaction Area Cell Sorted Integrated Grid Data (5/1/2023 – 7/25/2023 used as an example) (ppmv FID as methane). Medium Emission Cells

Grid		SEM Data								Average	
ID	Area (ft2)	5/1/2023	5/15/2023	5/31/2023	6/14/2023	6/28/2023	7/12/2023	7/25/2023	8/24/2023	FID	Cumulative
81	48,343	6	9	2	5	3	4	15	3	5.88	348.01
85	45,482	9	7	5	3	1	3	10	9	5.88	353.88
101	42,395	9	4	9	2	5	8	4	6	5.88	359.76
219	49,910	5	7	5	2	8	5	14	1	5.88	365.63
220	49,909	6	5	7	7	3	4	10	5	5.88	371.51
40	56,878	6	2	6	9	4	8	5	6	5.75	377.26
97	42,564	7	4	8	5	5	6	10	1	5.75	383.01
160	66,546	7	6	6	5	6	5	6	5	5.75	388.76
35	56,295	6	6	8	5	2	9	6	3	5.63	394.38
166	56,594	6	8	4	8	3	5	5	6	5.63	400.01
209	60,969	7	7	2	8	7	4	6	4	5.63	405.63
216	50,931	7	4	4	3	9	2	14	2	5.63	411.26
57	58,263	9	4	3	7	AT	AT	5	AT	5.60	416.86
73	55,815	6	5	8	5	2	7	HE	6	5.57	422.43
66	45,494	7	7	3	10	2	2	5	8	5.50	427.93
67	47,130	7	5	5	8	2	6	4	7	5.50	433.43
71	43,736	AT	4	4	6	6	5	HE	8	5.50	438.93
98	41,663	9	2	6	7	7	3	6	4	5.50	444.43
87	58,663	9	6	7	4	4	1	6	6	5.38	449.80
99	46,820	9	3	6	6	6	4	5	4	5.38	455.18
161	60,199	5	9	3	4	2	7	6	7	5.38	460.55
213	46,753	6	5	3	4	5	6	6	8	5.38	465.93
235	19,742	6	AT	8	1	6	8	AT	3	5.33	471.26
32	55,304	AT	3	9	8	3	3	5	6	5.29	476.55
42	57,899	7	4	AT	7	4	5	5	5	5.29	481.83
48	55,467	10	2	2	8	7	4	HE	4	5.29	487.12
31	55,775	7	11	3	2	7	2	4	6	5.25	492.37
86	43,299	10	5	5	3	3	3	10	3	5.25	497.62
163	50,009	6	3	5	5	3	5	8	7	5.25	502.87
95	49,782	6	7	2	9	3	4	HE	HE	5.17	508.03
103	**44,432**	**6**	**4**	**3**	**6**	**3**	**5**	**12**	**2**	**5.13**	**513.16**
104	42,522	6	5	10	3	3	2	6	6	5.13	518.28
149	56,413	AT	5	6	3	2	11	3	AT	5.00	523.28
214	40,386	9	3	4	2	7	3	5	7	5.00	528.28
218	52,805	6	7	4	1	2	4	13	3	5.00	533.28
69	52,221	4	4	6	9	3	2	6	5	4.88	538.16
70	55,632	9	6	2	8	4	2	5	3	4.88	543.03
100	44,490	6	8	5	8	2	3	4	3	4.88	547.91
198	58,685	4	3	5	5	6	4	5	7	4.88	552.78
221	45,169	7	5	3	5	3	4	10	2	4.88	557.66
93	88,479	8	2	4	2	6	7	HE	HE	4.83	562.49
34	55,632	7	4	3	8	2	4	6	4	4.75	567.24
63	57,567	AT	6	3	4	AT	AT	6	AT	4.75	571.99
88	47,618	7	2	7	3	2	1	8	8	4.75	576.74
102	45,969	6	3	6	3	8	4	3	5	4.75	581.49
165	79,844	8	2	3	7	5	2	4	7	4.75	586.24
196	52,053	7	8	2	7	3	2	3	6	4.75	590.99
215	40,916	8	3	1	6	6	3	4	7	4.75	595.74
227	45,403	6	2	9	2	2	1	12	4	4.75	600.49
155	44,022	9	4	3	6	3	2	6	AT	4.71	605.21
62	60,736	8	3	3	5	AT	AT	4	5	4.67	609.87
65	58,090	AT	2	2	12	4	5	HE	3	4.67	614.54
38	60,634	7	2	9	7	3	2	5	2	4.63	619.17
39	62,100	9	5	6	5	2	4	5	1	4.63	623.79
43	55,491	8	1	6	5	5	6	4	2	4.63	628.42
44	35,715	7	5	4	10	2	4	4	1	4.63	633.04
50	61,680	8	5	5	6	1	5	3	4	4.63	637.67
56	61,386	7	1	4	4	3	6	6	6	4.63	642.29
59	53,384	9	3	4	3	3	3	4	8	4.63	646.92
68	47,853	4	2	7	5	5	4	3	7	4.63	651.54
90	53,791	8	8	3	4	2	3	5	4	4.63	656.17
162	60,853	4	8	4	5	4	2	5	5	4.63	660.79
211	59,725	9	4	4	7	1	5	5	2	4.63	665.42
226	48,737	8	6	4	1	4	1	10	3	4.63	670.04
41	58,579	7	3	AT	6	2	5	6	3	4.57	674.61
36	60,138	5	3	6	7	2	3	6	4	4.50	679.11
64	51,169	AT	6	6	5	3	4	HE	3	4.50	683.61
94	57,008	7	6	2	5	4	3	HE	HE	4.50	688.11

Table 4.3 Summary of Non-Reaction Area Cell Sorted Integrated Grid Data (5/1/2023 – 7/25/2023, used as an example) (ppmv FID as methane). Low Emission Cells

Grid		SEM Data								Average	
ID	Area (ft2)	5/1/2023	5/15/2023	5/31/2023	6/14/2023	6/28/2023	7/12/2023	7/25/2023	8/24/2023	FID	Cumulative
159	56,972	6	4	5	5	6	2	6	2	4.50	692.61
212	58,054	6	5	3	5	6	3	3	5	4.50	697.11
225	38,630	7	5	2	3	5	8	5	1	4.50	701.61
33	50,273	AT	3	6	3	4	6	3	6	4.43	706.04
74	50,957	6	4	2	7	3	4	HE	5	4.43	710.47
11	55,395	3	3	7	1	5	5	6	5	4.38	714.84
19	57,192	3	4	4	7	5	4	2	6	4.38	719.22
96	45,229	7	4	3	2	3	8	6	2	4.38	723.59
30	53,460	AT	5	2	4	5	4	6	AT	4.33	727.93
154	54,536	AT	7	3	3	7	2	4	AT	4.33	732.26
8	57,675	3	3	4	5	5	6	3	5	4.25	736.51
37	57,548	6	4	5	8	1	3	5	2	4.25	740.76
49	55,750	6	7	3	3	5	4	4	2	4.25	745.01
126	48,416	3	4	7	3	7	2	5	3	4.25	749.26
127	48,271	3	4	3	3	4	5	4	8	4.25	753.51
164	61,548	7	5	2	3	5	3	6	3	4.25	757.76
195	44,221	6	3	3	3	8	1	6	4	4.25	762.01
223	48,150	8	2	7	2	1	3	8	3	4.25	766.26
5	56,526	4	2	4	5	4	6	HE	HE	4.17	770.43
2	45,352	2	3	3	6	5	8	4	2	4.13	774.55
3	50,019	2	5	5	6	2	7	4	2	4.13	778.68
28	39,741	3	3	4	4	5	7	4	3	4.13	782.80
91	47,895	6	4	8	3	2	3	5	2	4.13	786.93
92	47,660	4	2	7	2	3	6	4	5	4.13	791.05
120	46,799	5	4	7	3	2	3	4	5	4.13	795.18
130	34,533	3	1	1	7	2	6	5	8	4.13	799.30
197	56.626	7	4	6	3	3	1	6	3	4.13	803.43
1	42,205	3	4	6	5	4	3	3	4	4.00	807.43
4	53,410	3	4	2	3	3	9	4	4	4.00	811.43
18	42,901	3	3	5	4	5	2	6	4	4.00	815.43
26	54,472	3	3	4	2	5	6	3	6	4.00	819.43
47	56,104	6	1	3	7	6	2	5	2	4.00	823.43
52	55,676	7	3	2	5	3	2	HE	6	4.00	827.43
61	58,640	7	5	2	2	2	2	5	7	4.00	831.43
129	46,067	4	3	2	5	5	3	6	4	4.00	835.43
116	39,267	4	3	3	5	5	6	3	2	3.88	839.30
121	46,453	4	4	4	5	1	5	4	4	3.88	843.18
138	46,590	3	5	1	2	3	6	4	7	3.88	847.05
199	**52,647**	**5**	**7**	**2**	**5**	**3**	**4**	**4**	**1**	**3.88**	**850.93**
45	58,267	5	3	AT	5	5	2	4	3	3.86	854.78
46	57,683	4	4	AT	3	6	1	6	3	3.86	858.64
6	55,760	3	4	5	4	2	5	HE	HE	3.83	862.48
106	50,785	3	3	6	1	3	5	2	7	3.75	866.23
111	54,270	3	6	3	4	5	3	4	2	3.75	869.98
222	47,335	7	1	4	2	4	2	9	1	3.75	873.73
224	47,895	6	2	7	4	2	2	6	1	3.75	877.48
13	54,190	3	4	8	2	2	3	HE	HE	3.67	881.14
51	62,750	9	2	2	3	2	3	6	2	3.63	884.77
113	31,853	4	1	4	1	5	4	3	7	3.63	888.39
114	58,149	3	1	8	4	2	8	2	1	3.63	892.02
117	42,797	3	4	2	1	3	8	2	6	3.63	895.64
123	37,280	3	2	4	5	3	4	2	6	3.63	899.27
131	41,070	3	4	4	5	2	5	4	2	3.63	902.89
134	43,452	4	2	5	6	4	1	4	3	3.63	906.52
194	71,501	7	2	3	8	1	2	3	3	3.63	910.14
23	56,405	3	6	1	3	1	3	3	8	3.50	913.64
124	43,289	2	5	3	6	6	1	3	2	3.50	917.14
125	46,593	3	6	1	2	3	5	4	4	3.50	920.64
128	48,480	4	2	5	2	2	1	5	7	3.50	924.14
132	43,711	5	4	4	4	1	5	3	2	3.50	927.64
136	33,845	3	3	6	1	1	4	5	5	3.50	931.14
15	55,063	3	1	5	5	1	6	4	2	3.38	934.52
21	72,168	2	4	4	1	3	4	3	6	3.38	937.89
22	58,442	3	4	3	2	4	5	4	2	3.38	941.27
24	55,473	2	5	2	5	2	4	3	4	3.38	944.64
108	52,575	4	1	7	4	1	2	4	4	3.38	948.02
133	44,845	4	1	6	2	4	5	4	1	3.38	951.39
135	43,154	3	4	2	4	2	3	6	3	3.38	954.77
137	45,071	4	1	5	1	4	2	5	5	3.38	958.14
142	46,169	4	5	4	2	2	2	6	2	3.38	961.52
118	45,475	3	2	3	2	1	9	4	2	3.25	964.77
140	42,878	4	2	2	3	6	4	2	3	3.25	968.02
143	48,041	2	5	2	3	4	1	5	4	3.25	971.27
144	68,243	2	2	6	3	1	4	5	3	3.25	974.52
12	55,625	3	2	3	3	2	6	HE	HE	3.17	977.68
29	43,858	3	2	3	6	2	2	5	2	3.13	980.81
109	55,703	4	1	6	2	3	2	5	2	3.13	983.93
119	46,712	4	1	3	1	5	4	4	3	3.13	987.06
7	50,364	4	2	2	2	2	6	HE	HE	3.00	990.06
110	55,586	4	3	2	2	3	1	3	6	3.00	993.06
139	46,331	4	2	1	4	4	3	3	3	3.00	996.06
14	57,525	2	2	2	2	3	3	5	4	2.88	998.93
20	53,895	3	2	4	3	2	4	4	1	2.88	1,001.81
105	47,304	2	4	2	5	4	1	3	2	2.88	1,004.68
107	22,162	3	3	2	3	1	3	4	4	2.88	1,007.56
141	41,413	3	5	4	2	2	1	4	2	2.88	1,010.43
10	66,970	2	2	2	4	3	4	HE		2.83	1,013.27
17	54,072	2	3	2	6	2	1	3	3	2.75	1,016.02
25	58,414	2	2	4	1	2	4	3	4	2.75	1,018.77
112	46,549	3	2	3	2	1	4	5	2	2.75	1,021.52
122	45,247	3	3	1	4	1	1	3	6	2.75	1,024.27
9	54,331	3	4	3	1	2	3	HE	HE	2.67	1,026.93
115	52,538	3	1	1	3	5	3	4	1	2.63	1,029.56
16	60,337	2	1	3	1	3	2	4	2	2.25	1,031.81
27	59,711	2	1	5	2	1	2	2	2	2.13	1,033.93

Table 4.4 Summary of Exceedance Area Cell Sorted Integrated Grid Data (5/1/2023 – 7/25/2023, used as an example) (ppmv FID as methane). All Cells

Grid			SEM Data								Average	
ID	RG?	Area (ft^2)	5/1/2023	5/15/2023	5/31/2023	6/14/2023	6/28/2023	7/12/2023	7/25/2023	8/24/2023	FID	Cum.
Exceedance Area												
206	Y	61,365	21	18	36	13	4	3	21	120	29.50	29.50
176	y	52,356	9	10	7	8	40	5	10	76	20.63	50.13
175	**y**	**50,430**	**9**	**15**	**4**	**15**	**9**	**4**	**45**	**68**	**21.13**	**71.25**
201	Y	47,960	17	30	9	14	9	5	13	48	18.13	89.38
202	y	45,736	29	20	10	9	8	4	21	31	16.50	105.88
181	y	49,379	8	15	30	10	16	8	22	29	17.25	123.13
174	y	48,344	7	18	11	11	11	8	35	28	16.13	139.25
Reaction Area												
151	y	43,622	AT	6	83	13	7	4	5	21	19.86	19.86
203	**y**	**51,487**	**19**	**27**	**12**	**9**	**9**	**25**	**20**	**18**	**17.38**	**37.23**
156	y	47,581	AT	12	10	27	9	6	5	18	12.43	49.66
172	y	44,946	8	13	28	30	25	9	3	17	16.63	66.29
200	Y	46.964	17	17	11	8	11	8	13	17	12.75	79.04
180	y	51,775	9	14	12	4	12	12	10	17	11.25	90.29
177	**y**	**47,454**	**9**	**8**	**8**	**120**	**4**	**3**	**6**	**15**	**21.63**	**111.91**
173	y	49,960	7	35	10	10	27	35	8	15	18.38	130.29
178	y	50,014	9	12	8	9	13	16	5	15	10.88	141.16
170	y	55,737	8	14	95	14	6	9	8	13	20.88	162.04
179	y	48,176	7	16	15	25	35	50	8	12	21.00	183.04
157	y	45,578	AT	11	5	9	9	4	6	12	8.00	191.04
169	y	54,459	11	25	15	10	25	7	4	11	13.50	204.54
171	**y**	**49,687**	**7**	**12**	**20**	**10**	**3**	**6**	**6**	**10**	**9.25**	**213.79**
205	Y	42,679	19	26	8	10	7	27	18	6	15.13	228.91
204	y	54,296	20	16	3	18	1	3	15	4	10.00	238.91
207	Y	62,754	54	14	2	17	4	4	16	2	14.13	253.04
208	Y	70,031	43	7	6	2	2	7	5	2	9.25	262.29

The non-reaction area test cells (see Tables 4.1 through 4.3) will be initially selected by organizing the integrated SEM data by average (Column 9) and splitting the resulting data into three categories: high, medium, and low emissions. From there, the mean cell(s) from each group will be initially selected for testing. These cells will be highlighted in blue in the data tables.

A similar process will be used for the reaction area test cells (see Table 4.4). One grid cell will be selected to be tested from the exceedance area. This cell will be highlighted in red. The non-exceedance reaction area test cells will be initially selected by splitting the data into high, medium, and low emission groups. The mean cell(s) from each group will be initially selected for testing. These cells will be highlighted in blue in the data tables.

Table 4.5 shows the anticipated integrated FID readings for each of these cell selection groups.

The Landfill will then be evaluated for the final cell selection. This will be done because sometimes a selected cell may not be accessible for testing or may not otherwise be representative. This cell will be highlighted in red, signifying that it is the actual test cell for that group. This procedure will be replicated for each of the landfill area/sub-area groups.

Note that any cell can be tested and pro-rated using this methodology. However, the mean emissions cells will be used because they should result in the most accurate results.

Table 4.5 Target Cell SEM Integrated Values for Each Test Condition.

Condition	Target Integrated Screening Value (ppmv)
Non-Reaction Area Low	4
Non-Reaction Area Medium	5
Non-Reaction Area High	8
Exceedance Area Low	12
Exceedance Area Medium	16
Exceedance Area High	22

Selecting Test Points in a Cell

Using survey flags, the serpentine route prescribed by Rule 1150.1 in a cell will be walked and FID readings will be periodically noted on planted flags and on the field screening data forms as shown in Figure 4.3. Flux chamber samples will be taken at the following target locations:

1. Highest Emission - Peak FID reading on serpentine walk.
2. High Emission - Mid-point of the highest 10% of readings.
3. Medium Emission - Mid-point of the next 40% of readings.
4. Low Emission – Mid-point of lowest one-half of readings.

During the testing event, areas will be assigned to each of the above four groups by the portion of data points (flags) in each group. Cells will be screened twice, once at least 24 hours but no more than 48 hours prior to the screening event, and again immediately prior to sampling. Results will be recorded on the same form using different ink colors. Photo 4.1 shows typical field screening activity.

Figure 4.3 Grid Cell Screening Form

Chiquita Canyon Landfill
Cell Screening Form

Grid ID _____

Instrument _____

Baseline _____

Date _____

Time _____

Windpeed/Dir _____

Samplers _____

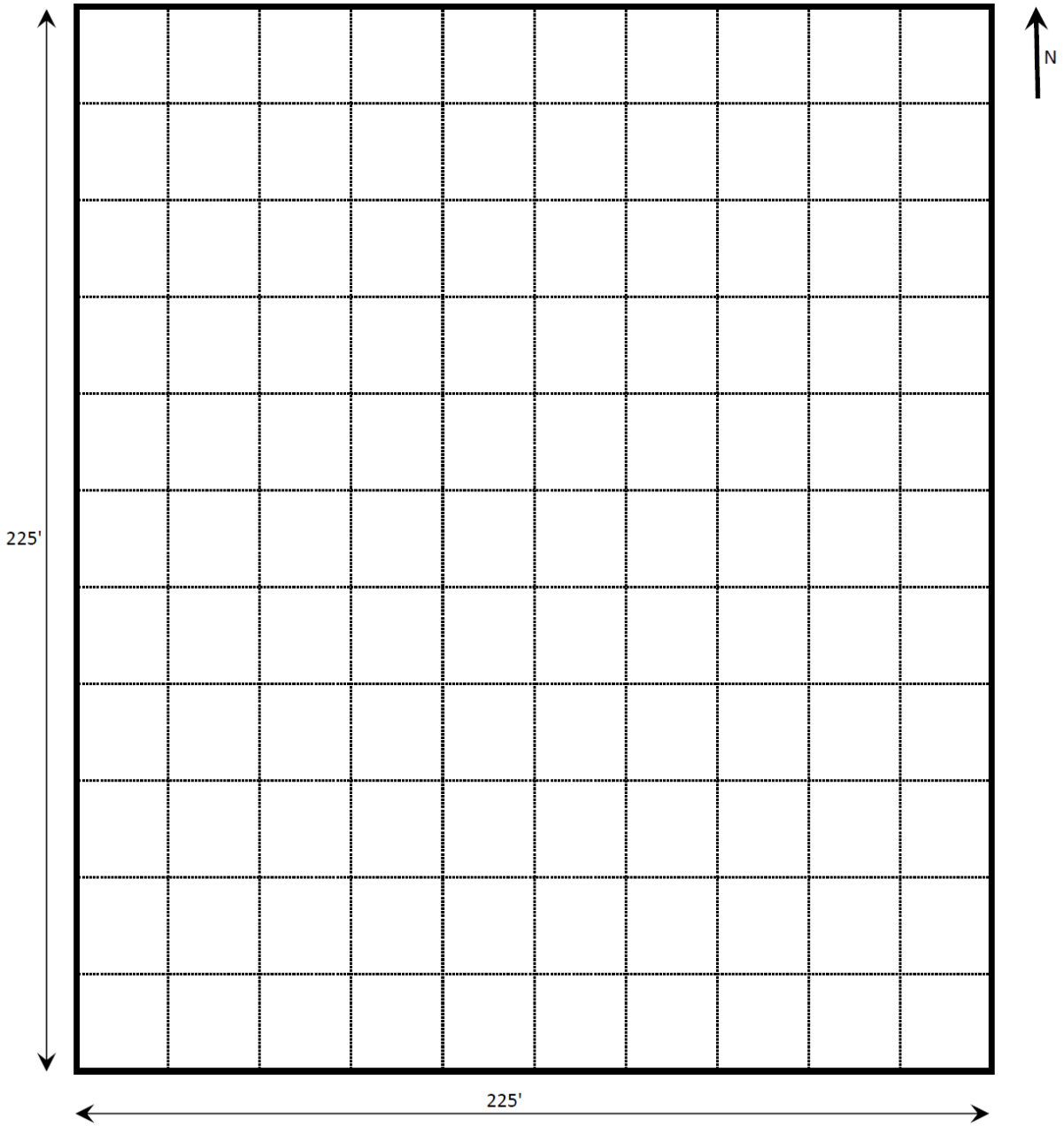

Photo 4.1 Typical Field Screening to Determine Flux Chamber Sampling Locations.

5. Sampling Methods

Flux Chamber Sampling

As described in the USEPA User's Guide (February 1986), the flux chamber is an environmental or portable chamber also known as a mixed-tank reactor that is used to measure the 'flux' (mass transfer of study compounds per surface area of area source per time). Ultra-high purity air (sweep air) from a compressed air cylinder is regulated and added to the flux chamber at a flow of 5 liters per minute (lpm) until the chamber contents are well mixed. The chamber is a 'vented' chamber which releases or exhausts the chamber gas through the pressure equalization port in the top of the chamber to the atmosphere which keeps the chamber contents at atmospheric pressure during the measurement. Chamber mixing is described by a number of 'residence times.' A residence time in the chamber is determined by dividing the chamber volume by the sweep air flow rate. Following the User's Guide and with a chamber volume of 30 liters, the residence time is 6 minutes. Proper mixing in the chamber is achieved after five residence times or 30 minutes. After mixing, or after the chamber contents (sweep air plus compounds emitted into the chamber) are at equilibrium, gas samples are collected per regulatory approved methods. Knowing the sweep air flow rate (5 lpm), the area of the flux chamber on the test site (0.13 square meters), and the concentration of the study compounds, the flux of study compounds can be calculated (units of milligrams per square meter per minute, mg/m2,min).

Dynamic vs. Static Chamber Technologies

Direct measurement using portable environmental chambers has been around now for many decades. USEPA and the Environmental Monitoring Systems Laboratory (EMSL-Las Vegas) in the early 1980s were interested in providing a direct emission measurement technology for 'area' sources that would complement point source assessment and mobile source assessment technologies. Both 'static' and 'dynamic' chambers were explored, looking at the efficacy of both approaches for use on hazardous and non-hazardous sites with area sources. The evaluation included criteria such as accuracy, precision, repeatability, cost, and ease of operation or level of expertise needed.

Looking at both static and dynamic chamber technologies, static chamber technologies were generally considered for screening applications versus quantitative assessment of emissions. The dynamic chamber technology approach was selected for research and method development. Although static chambers are considered low-tech in that they do not need a sweep gas and are easy to use by comparison, the problems associated with collecting valid data focused USEPA and EMSL-Las Vegas's attention on dynamic chambers.

Basically, a static chamber on an area source will collect surface emissions until an equilibrium is achieved in the chamber. That equilibration time is different with various compounds and type of source being tested. The key parameter in measuring 'flux' of compounds (mass transfer of compounds from the surface- mass/time, surface area), which is equilibration 'time' from an area surface, was unknown and would have to be assumed when the air sample from the static chamber was made. In addition, static chambers have significant wall effects from compound interaction. Further, as chamber air is pulled out of a static chamber, which is a sealed vessel, a vacuum is created in the chamber, resulting in a bias in the measurement.

These problems with static chamber technologies are overcome by using a dynamic chamber that is well mixed by design, uses a sweep air, and, given that the dynamic chamber is vented to the atmosphere,

prevents unwanted pressure effects on collecting samples from the chamber. This results in an accurate, precise, and reliable assessment of surface flux from area sources.

The USEPA flux chamber technology, which provides a protocol for this technology standardizing the design and use of the method as described in the USEPA Guidance document, is considered a preferred, in-depth assessment technology. This Guidance and technology overcomes the issues with static chambers (recommended only for screening purposes) by using a standard chamber design, construction materials, sweep air, and standard operating protocol. The sweep air added to the chamber reduces or eliminates chamber wall effects, and allows for sampling the air in the chamber at steady state conditions (equilibration time constant) without influencing the flux event--sample collection is maintained by protocol at a rate in a vented chamber so that the pressure (negative or positive) in the dynamic chamber does not exceed 0.1 pascal.

Even though the dynamic flux chamber requires a higher level of expertise to use, is more cumbersome to use, and requires a companion compressed air cylinder of ultra high purity air as a sweep gas, the dynamic flux chamber is an agency approved technology for this application, providing the most reliable assessment of area sources available. In addition, as modified by the SCAQMD (Rule 1133.3, Attachment A), this dynamic area source assessment technology has been approved for use with advective sources that allow, by use of a trace gas (10% helium), quantitation of the advective flow for each location tested.

Flux Chamber Methodology Used for This Study

The surface emission isolation flux chamber (flux chamber) can be used on any liquid surface and on solid surfaces. The only requirement regarding application is that there must be access to the surface for testing. If the surface cannot support the chamber, the chamber must be suspended or equipped with a flotation device or suspended from overhead.

For sampling natural or uncontrolled systems, the location and number of locations for testing must be sufficient so that these data can be used to calculate the total emissions from the emitting surface area. Photographs of the flux chamber used to measure odor/VOC/sulfur/TAC emissions from landfill operations are shown in Photo 5.1.

Photo 5.1 USEPA Flux Chamber Sampling Solid Surface

The basic operation of the flux chamber involved the following:

1. Identifying the test area or test surface;
2. Initiating sweep gas flow rate to the flux chamber;
3. Operating the chamber for at least five residence times (30 minutes);
4. Collecting sample gas from the chamber for analysis;
5. Decontaminating the chamber; and
6. Relocating the measurement equipment to the next test area.

The specific operating protocol for flux chamber sampling is as follows:

1. Locate the flux chamber, sweep gas, sample collection equipment, and field documents at the test location.
2. Document site information, location information, equipment information, name of sampler, date, and time on the Emissions Measurement Data Sheets (Figure 5.1).
3. Place the chamber approximately ¼ inch into test surface at the test locations selected as described in the Emissions Report. Seal the chamber along the base to prevent air infiltration. Place thermocouples to monitor soil and air temperature inside and outside of the chamber.
4. Initiate the sweep gas flow rate and set the rotometer at 5.0 lpm. Maintain a constant sweep gas flow rate. Record time.
5. Collect instrument background data (thermocouple) and other parameters (see Emissions Measurement Data Sheets) and record data.
6. Connect the purge pump to the chamber. Purge the sample line from the flux chamber without exceeding the line purge rate (or sample gas collection rate of 2.5 lpm; this prevents entraining of ambient air into the chamber.
7. Operate the chamber sweep air flow rate at 5.0 lpm and record data every residence time (6 minutes) for four to five residence times or 30 minutes. Record the flow rate and time data. Maintain the chamber at steady state. Purge the sample line and Tedlar bags from the flux chamber with at least 10 line-volumes of air as part of the odor bag sampling protocol using the decompression lung device, preparing the sample line for the balance of the sample media collection.
8. Connect the sample media sequentially (odor bag, sulfur bag, and evacuated canister) to the purged sample line and collect the gas sample. Do not exceed a collection rate of 2.5 lpm at any time to prevent unwanted dilution of chamber exhaust gas by ambient air. Both the odor and sulfur bags are purged prior to sample collection; the evacuated canister is not purged.
9. Label the sample bag and record sample collection on the data sheet.
10. Store the sample(s) in the appropriate storage and/or shipping container as specified in the SP.
11. Document sample collection in field data sheets.
12. Discontinue the flux measurement, shut off the sweep air, remove chamber, and secure equipment.
13. Decontaminate the chamber where contact was made with the liquid or solid material using a clean paper towel and water (if needed) to remove any soil and condensation from the inside of the chamber.
14. Relocate equipment to the next test location or test setting, and repeat steps 1 through 13.

Canister Sampling

Grab samples using Summa® polished, evacuated stainless steel canisters will be collected from the exhaust line of the flux chamber at steady-state conditions for speciation by gas chromatography. Sampling rate will be maintained at less than 2.5 lpm from the flux chamber. Canister samples will be collected by connecting the canister to the sampling line from the flux chamber using 1/4-inch Swage-lock fittings, drawing a vacuum from the canister and filling the canister. All canisters will be batch certified by the laboratory according to USEPA Methods TO-15/TO-12/fixed gases/helium and sampled to full capacity (atmospheric pressure).

Tedlar Bag Sampling

Grab samples using Tedlar® bags will be collected from the sample line from the flux chamber at the steady-state conditions (five residence times) for analysis for olfactory odor and sulfur containing species. Bag samples will be collected by connecting the sampling line from the flux chamber using 1/4-inch Swage-lock fittings inside the decompression lung or pressure fittings, drawing a vacuum on the decompression lung, and filling the Tedlar bag. Both the odor bag and the sulfur bag will be purged and evacuated prior to the sample collection in order to minimize sample bag interaction.

Sample Handling

All sampling media will be recorded using a chain-of-custody sheet, as shown on Figure 5.2. A copy of the chain-of-custody will be kept with the field samplers, and a copy will be shipped to the lab along with the samples. The lab will review the chain-of-custody, make any necessary annotations, and return a copy of the chain-of-custody with the reporting of the lab results.

Shipping

Samples will be packaged according to media preservation and shipping instructions. All samples will be shipped using commercial shippers allowing for sample hold times to be met by the laboratories. Shipping receipts will be retained by the field crew.

Figure 5.1 Flux Chamber Data Form.

SURFACE FLUX MEASUREMENT DATA FORM

DATE _____ SAMPLERS _____

LOCATION _____

SURFACE DESCRIPTION _____

CURRENT ACTIVITY _____

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐
AMBIENT CONCENTRATIONS _____

CHAMBER I.D. _____ PHOTO TAKEN: Yes ☐ No ☐ _____

CHAMBER SEAL _____ CONDENSATION: Yes ☐ No ☐ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal,____ mph

TEMP _____ RAIN: Yes ☐ No ☐ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☐ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☐ PURGED PRIOR TO SAMPLING ☐ New ☐ Used ☐

SWEEP AIR _____ CC _____ SUPPLIER _____ PSIG START _____PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F)				Real-Time (ppmv)		Sample Number	Comments
			Chamber		Ambient					
			Surf	Air	Surf	Air				
		0								
		1								
		2								
		3								
		4								
		5								

COMMENTS:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

SITE DIAGRAM

Figure 5.2 Example Chain-of-Custody Form

CE Schmidt, PhD, Environmental Consultant **Canisters Day 1**

Chain of Custody Record

Form Serial Number	For Information Regarding These Samples	# OF CONTAINERS	Client Address and Phone Number	Laboratory Name
CES F1-02106	Please Contact:			***EAS***
Client Name	**Dr. Charles E. Schmidt**		Analysis Requested	Laboratory Address
	19200 Live Oak Road, Red Bluff, CA 96080			***173 Cross Street***
Project Manager	530-529-4256			***San Luis Obispo, CA 93401***
	E-Mail: SCHMIDTCE@aol.com			Laboratory Phone
Requested Completion Date				***805-781-3585***
				Laboratory Contact
				Dr. Steve Hoyt

Station Number	Date	Time	COMP	GRAB	Sample ID Number	Can ID Number	Sample Container: Vial	Can	Tube	*TO-12 FID (TNMHC)*	*TO-14 FID (Target List/Groups)*	*TO-15 (See List on Back)*	*ASTM D-1945 (O2, CO2, He)*		*Can Pressure In (Inches Hg)*	*Can Pressure Out (Inches Hg)*	Remarks

Sampler	Date/Time	Relinquished by	Date/Time	HAZWRAP/NEESA Y N
				QC Level 1 2 3
Recieved by	Date/Time	Relinquished by	Date/Time	COC
				Ana Req
Recieved by	Date/Time	Relinquished by	Date/Time	Cust Seal
				Sample Condition
Recieved by Laboratory	Date/Time	Sample Shipped Via		
		UPS FEDEX BUS Other		
Remarks	**Do Not Pressurize with Helium**			

6. Analytical Methods

Olfactometry (ASTM E-679)

Odor samples will be analyzed using an olfactory panel and butanol calibration. Gas samples are collected in purged Tedlar® bags using a decompression device where gas is collected by filling a bag without passing the sample through a pump. Tedlar® bag samples are collected, stored in light-shielded cardboard containers, and shipped to the lab via overnight express mail for analysis within 30 hours.

The odor samples are diluted to below olfactory detection limits and then introduced to a gas delivery system. A panel of eight members trained in odor response serves as the odor "detector." Panel members are asked to smell air samples delivered to one of three nose cones (the other nose cones have clean air), one of which has the diluted sample. The concentrations of sample are increased until one-half of the odor panel members can detect the odor. The odor measurement is concluded when detection by four of the eight panel members is recorded. The odor concentration is expressed as the number of dilutions that were required for one-half of the panel members to record detection: detection threshold (D/T) level. Typical method quality control includes field blank samples and duplicate analysis. Odor concentrations can be used to evaluate odor strengths, ambient odor, or in modeling exercises to estimate a downwind odor strength. Data will be reported as D/T and recognition threshold (R/T).

SCAQMD Method 307-91 for Organic Reduced Sulfur

Sulfur species will be analyzed from a Tedlar® bag using gas chromatography/sulfur chemiluminescence detector (GC/SCD). The target analyte list is shown on Table 6.1.

Table 6.1 Target Analyte List for H2S/ORS.

Hydrogen sulfide
Carbonyl sulfide
Methyl mercaptan
Ethyl mercaptan
Dimethyl sulfide (DMS)
Carbon disulfide
isopropyl mercaptan
t-butyl mercaptan
n-propyl mercaptan
s-Butyl mercaptan
i-Butyl mercaptan
Dimethyl disulfide
Tetrahydrothiophene
Unidentified sulfurs
Total reduced sulfur (TRS)

ASTM D-1945/USEPA Method 3C for Fixed Gases

Fixed gases will be analyzed from a Summa® canister using a GC/TCD. The target analyte list is shown on Table 6.2.

Table 6.2 Target Analyte List for Fixed Gases.
Methane
Carbon dioxide
Oxygen
Nitrogen
Hydrogen
Carbon monoxide
Helium (as a tracer for flow determination)

USEPA TO-12 for VOCs or NMOCs

The C_2 to C_{12} hydrocarbons and TNMHC taken as VOC emissions is determined using fused silica capillary column on an HP 5890 GC with a FID detector. A 200 ml sample is loaded using a flow controller onto a glass bead freeze out trap immersed in liquid oxygen. The components are desorbed onto a cryo-focusing loop and separated using a 100-meter, 0.25-micron fused silica PetroCol capillary column. The column is programmed from -20 °C to 225 °C at 4 °C /min. On the FID, hydrocarbons have a uniform response based on the number of carbon atoms, and the total area is used to calculate the TNMHC. The instrument is calibrated using a National Institute of Standards and Technology (NIST) Traceable, 10 ppmv hexane standard. The data will be reported as TNMHC as methane. In addition, data will be provided as to distributions of functional groups and molecular weights/carbon counts.

USEPA TO-15 for VOC Species

USEPA Method TO-15 GC/MS method uses a cryo-trapping system with a high-resolution capillary column to analyze for TAC using gas chromatography/Mass Spectrometry (GC/MS). This method can be used for many saturated and unsaturated organic compounds, and includes alcohol compounds. The method can measure most compounds down to 0.2 parts per billion by volume (ppbv). The target compound list is provided in Table 6.3

Samples are analyzed on an HP 5890 Series II gas chromatograph. A gas phase internal standard mixture is injected with each sample prior to sample loading. The freeze-out loop is constructed of 1/8" x 8” nickel tubing packed with glass beads and is immersed in liquid oxygen while the sample is drawn through the loop using a vacuum pump connected to a mass flow controller adjusted to a flow of 50 milliliters per minute (ml/min). After the sample is trapped, it is thermally desorbed at 150 °C using an electric heater and is cryo-focused onto the beginning of a 0.32 millimeter (mm) internal diameter deactivated fused silica capillary column. The cryo-focused loop is then warmed, and the compounds are injected onto a 60-meter, DB-5, 0.25 mm ID fused silica capillary column in the GC. The GC is temperature programmed from -10 °C to 220 °C at a ramp rate of 13 °C /min. As the column is heated, the compounds elute off the column and enter the detector.

Table 6.3 Target List for TO-15 HAP/TAC Speciated Hydrocarbon Analysis.

Freon 12	n-Hexane	Dibromochloromethane
Chloromethane	Chloroform	1,2-Dibromoethane
Freon 114	Ethyl acetate	Tetrachloroethene
Vinyl chloride	Tetrahydrofuran	Chlorobenzene
1,3-Butadiene	1,2-Dichloroethane	Ethylbenzene
Bromomethane	1,1,1-Trichloroethane	m,p-Xylene
Chloroethane	Benzene	Bromoform
Acetone	Carbon tetrachloride	Styrene
Freon 11	Cyclohexane	1,1,2,2-Tetrachloroethane
Isopropyl Alcohol	1,20-Dichloropropane	o-Xylene
1,1-Dichloroethene	Bromodichloromethane	Benzyl chloride
Methylene chloride	Trichloroethene	4-Ethyl toluene
Carbon disulfide	1,4-Dioxane	1,3,5-Trimethyl benzene
Freon 113	n-Heptane	1,2,4-Trimethyl benzene
trans-1,2-Dichloroethene	cis-1,3-Dichloropropene	1,3-Dichlorobenzene
1,1-Dichloroethane	4-Methyl-2-pentanone	1,4-Dichlorobenzene
MTBE	trans-1,3-Dichloropropene	1,2-Dichlorobenzene
Vinyl acetate	1,1-2-Trichloroethane	1,2,4-Trichlorobenzene
2-Butanone	Toluene	Hexachlorobutadiene
cis-1,2-Dichloroethene	2-Hexanone	

7. Data Analysis and Reporting

Data Validation

All field and sample data will be reviewed and challenged against the method QC specifications. Data not meeting method specifications will be flagged appropriately.

Data Analysis

All cells will be quantitatively screened by FID for the integrated concentration. The cells will be placed into three groups based on emission levels for this screening. Cells will be assessed (high level, medium level, and low level) in detail by further screening and flux chamber measurement. The emissions from the representative cells will be used to estimate the emissions for the portion of the landfill that they represent, either non-reaction area surfaces or reaction area surfaces.

Report

The data will be presented in a report that provides a description of the sampling effort and tabular emission rates for each process. All field notes, chain-of-custody forms, and laboratory reports will be included in the report.

8. Project Implementation

Schedule

The project will be executed on the schedule given below. The project team will arrive the morning of testing at 0700. All equipment and field supplies will be inventoried that day. The first order of business will be to review health and safety issues. All field progress will be recorded on field data sheets, and all

chain-of-custody will be completed on the day of sample collection. All shipping records will be retained as part of the field data set, and the person shipping samples is responsible for contacting the laboratory prior to sample receipt.

Table 8.1 Project Schedule

Draft Protocol	12/31/2023
Field Sampling	Within 4 to 5 weeks of approval of protocol
Report	Within 3 to 4 weeks of receipt of laboratory data

Laboratory Shipping Addresses

Olfactometry Laboratory

Odor Science & Engineering, Inc.
105 Filley Street
Bloomfield, CT 06002
Contact: Martha O'Brien or Gary Grumley, (860) 243-9380 x102

FedEx: FedEx Ship Center
21300 Vanowen St
Canoga Park, CA 91303
Last East Coast Drop Off: 5:00 PM

Canister Analysis

EAS
173 Cross Street
San Luis Obispo, CA 93401
Contact: Steve Hoyt, (805) 781-3585

Sulfur Analysis (either lab)

AtmAA
23917 Craftsman Road
Calabasas, CA 91302
(818) 223-3277

AAC
2225 Sperry Avenue
Ventura, CA 93003
(805) 650-1642

Project Equipment

All sampling media (prepared per method specifications) will be provided by the contract laboratory, including clean, evacuated canisters. Dr. C.E. Schmidt will supply all other sampling equipment and expendable supplies. Following are the necessary field equipment and expendable supplies for the proposed field testing:

- USEPA flux chambers per USEPA design, including stainless steel Swage-lock fittings
- Support cooler with a mounted rotometer (0-to-5 liter per minute) through the cooler walls
- Brass, 2-stage regulator for bottled air (CGA 590) fitting for air and 1/4" Swage-lock (male) adapter fitting
- Ten-foot, ¼-inch Teflon® line with female fittings
- Ten-foot, ¼-inch Teflon® air inlet/outlet support line
- Large size plastic support cooler
- Set of miscellaneous hand-tools, including an adjustable crescent wrench for the CGA 580 regulator fitting, small adjustable crescent wrench for the 1/4-inch swage fittings, assorted medium- and small-size screw drivers
- Two 12-inch Type K thermocouple wires and temperature readout
- Rigid-wall shipping/storage crate for the flux chamber mounted on roller wheels
- Decontamination supplies, including Alconox soap, paper towels, and wash water
- Ultra high-purity air bottles with trace gas helium (4, size 150)
- Purge pump for sample line purging
- Canister media
- Sample shipping containers
- Hand tools
- Camera
- Hard hat
- Safety glasses
- Decompression lung samplers (2) for bag sample collection
- TVA-100B with support and calibration gases
- Jerome 631X analyzer

9. Health and Safety

All field work will be in conformance with the SCS Site Health and Safety Plan (attached). Specific requirements include:

- Hard hat,
- Safety shoes,
- Eye protection,
- Visibility clothing, and
- Personal gas monitoring.

10. Works Cited

U.S. Environmental Protection Agency (USEPA). 1986. *Measurement of Gaseous Emission Rates from Land Surfaces Using an Emission Isolation Flux Chamber- User's Guide*, EPA 600/8-86-008 (NTIS PB86-223161).

SCAQMD Rule 1133.3, Attachment A.

Attachment 1

SCS Site Specific Health and Safety Plan

Available upon request