



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr. Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 1 of 4)

To: Victor Yip
Sr. Enforcement Manager
Compliance & Enforcement

Laboratory No. 1809701-01
Requested By Kraig Morris

Sampling Location

Firestation #44 (Seal Beach)
718 Central Ave.
Seal Beach, CA 90740

Rule No. R402
ST No. NA
Report Created 04/20/2018

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Volatile Organic Compounds (VOCs) in Ambient Air by GC/FID

See attached results and sample information.

Reviewed By:

Stephen Dutz
Principal A.Q. Chemist
Laboratory Services

Date Reviewed:

04/20/18

Approved By:

Aaron Katzenstein, Ph.D.
Senior Manager
Laboratory Services
(909) 396-2219

Date Approved:

4/20/2018



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Laboratory No. 1809701-01
Sample Description SUMMA Canister 54623, Collected in front of parking lot area of seal beach fire station # 44 Rotten egg smell
Extraction Comments High concentration compounds should be viewed as estimates.
Sample Date 04/07/2018 **Received Date 04/07/2018** **Analyzed Date 04/12/2018**

Volatile Organic Compounds (VOCs) in Ambient Air by GC/FID

<u>Analyte, Unit</u>	<u>Result</u>	<u>MDL</u>	<u>MRL</u>	<u>Ambient Avg</u>
Total NMOC, ppbC	2700	0.1	0.3	100-700
Total Calibrated, ppbC	2000	0.1	0.3	
Ethane (FID), ppbv	31	0.05	0.2	
Ethylene (FID), ppbv	1.0	0.05	0.2	0.7-4.1
Acetylene (FID), ppbv	0.6	0.05	0.2	
Propane (FID), ppbv	ND	0.03	0.1	0.4-5.0
Propylene (FID), ppbv	<i>J (0.07)</i>	0.03	0.1	0.2-0.7
Isobutane (FID), ppbv	70	0.02	0.08	0.2-0.9
n-Butane (FID), ppbv	180	0.02	0.08	0.3-1.7
1-Butene (FID), ppbv	ND	0.02	0.08	0.1-0.3
trans-2-Butene (FID), ppbv	<i>J (0.02)</i>	0.02	0.08	
cis-2-Butene (FID), ppbv	ND	0.02	0.08	
Isopentane (FID), ppbv	57	0.02	0.06	
1-Pentene (FID), ppbv	<i>J (0.03)</i>	0.02	0.06	
n-Pentane (FID), ppbv	62	0.02	0.06	0.1-0.6
Isoprene (FID), ppbv	0.2	0.02	0.06	
trans-2-Pentene (FID), ppbv	<i>J (0.02)</i>	0.02	0.06	
cis-2-Pentene (FID), ppbv	ND	0.02	0.06	
2,2-Dimethylbutane (FID), ppbv	0.7	0.02	0.05	
Cyclopentane (FID), ppbv	2.7	0.02	0.06	
2,3-Dimethylbutane (FID), ppbv	1.6	0.02	0.05	
2-Methylpentane (FID), ppbv	12	0.02	0.05	
3-Methylpentane (FID), ppbv	6.5	0.02	0.05	
1-Hexene (FID), ppbv	ND	0.02	0.05	<0.1-0.1
n-Hexane (FID), ppbv	17	0.02	0.05	0.1-0.2
Methylcyclopentane (FID), ppbv	3.4	0.02	0.05	
2,4-Dimethylpentane (FID), ppbv	0.4	0.01	0.04	
Benzene (FID), ppbv	2.0	0.02	0.05	0.1-0.5
Cyclohexane (FID), ppbv	2.0	0.02	0.05	
2-Methylhexane (FID), ppbv	0.7	0.01	0.04	



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Laboratory No. 1809701-01 - continued
Sample Description SUMMA Canister 54623, Collected in front of parking lot area of seal beach fire station # 44 Rotten egg smell
Extraction Comments High concentration compounds should be viewed as estimates.
Sample Date 04/07/2018 **Received Date 04/07/2018** **Analyzed Date 04/12/2018**

Volatile Organic Compounds (VOCs) in Ambient Air by GC/FID

<u>Analyte, Unit</u>	<u>Result</u>	<u>MDL</u>	<u>MRL</u>	<u>Ambient Avg</u>
2,3-Dimethylpentane (FID), ppbv	2.0	0.01	0.04	
3-Methylhexane (FID), ppbv	1.9	0.01	0.04	
2,2,4-Trimethylpentane (FID), ppbv	0.5	0.01	0.04	
n-Heptane (FID), ppbv	4.4	0.01	0.04	0.1-0.2
Methylcyclohexane (FID), ppbv	1.6	0.01	0.04	
2,3,4-Trimethylpentane (FID), ppbv	<i>J (0.04)</i>	0.01	0.04	
Toluene (FID), ppbv	1.5	0.01	0.04	0.1-0.6
2-Methylheptane (FID), ppbv	0.7	0.01	0.04	
3-Methylheptane (FID), ppbv	0.4	0.01	0.04	
n-Octane (FID), ppbv	1.1	0.01	0.04	<0.1-0.3
Ethylbenzene (FID), ppbv	0.1	0.01	0.04	0.1-0.2
m+p-Xylene (FID), ppbv	0.4	0.01	0.04	0.1-0.2
Styrene (FID), ppbv	ND	0.01	0.04	<0.1-0.2
o-Xylene (FID), ppbv	0.1	0.01	0.04	0.1-0.2
n-Nonane (FID), ppbv	0.3	0.01	0.03	<0.1-0.1
Isopropylbenzene (FID), ppbv	<i>J (0.02)</i>	0.01	0.03	
n-Propylbenzene (FID), ppbv	<i>J (0.01)</i>	0.01	0.03	
m-Ethyltoluene (FID), ppbv	0.04	0.01	0.03	
p-Ethyltoluene (FID), ppbv	ND	0.01	0.03	
1,3,5-Trimethylbenzene (FID), ppbv	<i>J (0.02)</i>	0.01	0.03	
o-Ethyltoluene (FID), ppbv	<i>J (0.01)</i>	0.01	0.03	
1,2,4-Trimethylbenzene (FID), ppbv	<i>J (0.03)</i>	0.01	0.03	
n-Decane (FID), ppbv	0.09	0.01	0.03	<0.1-0.1
1,2,3-Trimethylbenzene (FID), ppbv	<i>J (0.01)</i>	0.01	0.03	
m-Diethylbenzene (FID), ppbv	ND	0.01	0.03	
p-Diethylbenzene (FID), ppbv	ND	0.01	0.03	
n-Undecane (FID), ppbv	<i>J (0.02)</i>	0.009	0.03	<0.1
n-Dodecane (FID), ppbv	<i>J (0.01)</i>	0.008	0.02	<0.1

* J = Value is between method detection and reporting limits.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
SAMPLE ANALYSIS REQUEST**

DISTRICT
 INVOICE S
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LABORATO

WO #: 1809701



TO: SCAQMD LAB: OTHER:
 SOURCE NAME: Fire Station #44 (Seal Beach) I.D. No. _____
 Source Address: 718 Central Ave City: Seal Beach
 Mailing Address: Same City: Same Zip: 90740
 Contact Person: JASON Rolston Title: Engineer Tel: (562) 431-0648

Analysis Requested by: Kraig Morris Date: 4/7/18
 Approved by: _____ Office: C/E Budget #: _____
 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill
 Suspected Violation Rule(s) 402 Other

Sample Collected by: Firefighter Haney Date: 4/7/18 Time: 1250

SAMPLE DESCRIPTION:

Sample collected in front parking lot area of Seal Beach Fire station #44. Wind was blowing from northwest and on shore. Event lasted approx 10 min. Odor detected was rotten egg smell with an intensity of 4 out of 5.

REQUESTED ANALYSIS:

VOC Analysis
 54623 X
 CAN ID# 56423

Relinquished by	Received by	Firm/Agency	Date	Time
<u>Firefighter Haney</u>	<u>Kraig Morris</u>	<u>SCAQMD</u>	<u>4/7/18</u>	<u>1500</u>
<u>Kraig Morris</u>	<u>[Signature]</u>	<u>Laboratory</u>	<u>4/7/18</u>	<u>16:25</u>

Remarks: