



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: Andrea Polidori, Ph.D.
Atmospheric Measurements Manager
Science & Technology Advancement

Laboratory No. 1929407-01
Requested By Payam Pakbin

Rule No. NA

Sampling Location
Aliso Canyon
12801 Tampa Ave
Porter Ranch, CA 91326

ST No. NA

Report Created 10/25/2019

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:

10/25/19

Approved By:

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

Date Approved:

10/25/2019



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Laboratory No. 1929407-01
Sample Description Grab, 6 L Stainless Steel Canister 53474, Aliso Canyon
Sample Comments Collected at Porter Ridge Park at intersection of Kinbrace/Muirkirk in the park.
Sample Date 10/19/2019 **Received Date 10/21/2019** **Analyzed Date 10/22/2019**

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	1300	0.1	0.3	100-700
Total Calibrated, ppbC	1100	0.1	0.3	
Ethane, ppbv	370 (EH)	0.05	0.2	
Ethylene, ppbv	0.3	0.05	0.2	0.7-4.1
Acetylene, ppbv	0.3	0.05	0.2	
Propane, ppbv	53 (EH)	0.03	0.1	0.4-5.0
Propylene, ppbv	J (0.06)	0.03	0.1	0.2-0.7
Isobutane, ppbv	4.1	0.02	0.08	0.2-0.9
n-Butane, ppbv	4.5	0.02	0.08	0.3-1.7
1-Butene, ppbv	J (0.06)	0.02	0.08	0.1-0.3
trans-2-Butene, ppbv	ND	0.02	0.08	
cis-2-Butene, ppbv	ND	0.02	0.08	
Isopentane, ppbv	5.0	0.02	0.06	
1-Pentene, ppbv	J (0.03)	0.02	0.06	
n-Pentane, ppbv	2.1	0.02	0.06	0.1-0.6
Isoprene, ppbv	0.4	0.02	0.06	
trans-2-Pentene, ppbv	ND	0.02	0.06	
cis-2-Pentene, ppbv	ND	0.02	0.06	
2,2-Dimethylbutane, ppbv	5.0	0.02	0.05	
Cyclopentane, ppbv	0.2	0.02	0.06	
2,3-Dimethylbutane, ppbv	0.2	0.02	0.05	
2-Methylpentane, ppbv	1.1	0.02	0.05	
3-Methylpentane, ppbv	0.6	0.02	0.05	
1-Hexene, ppbv	J (0.02)	0.02	0.05	<0.1-0.1
n-Hexane, ppbv	1.5	0.02	0.05	0.1-0.2
Methylcyclopentane, ppbv	0.8	0.02	0.05	
2,4-Dimethylpentane, ppbv	0.1	0.01	0.04	
Benzene, ppbv	1.2	0.02	0.05	0.1-0.5
Cyclohexane, ppbv	1.0	0.02	0.05	
2-Methylhexane, ppbv	0.4	0.01	0.04	
2,3-Dimethylpentane, ppbv	0.2	0.01	0.04	



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Laboratory No. 1929407-01 - continued
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Sample Date 10/19/2019 **Received Date 10/21/2019** **Analyzed Date 10/22/2019**

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>
3-Methylhexane, ppbv	0.5	0.01	0.04	
2,2,4-Trimethylpentane, ppbv	0.3	0.01	0.04	
n-Heptane, ppbv	1.0	0.01	0.04	0.1-0.2
Methylcyclohexane, ppbv	2.0	0.01	0.04	
2,3,4-Trimethylpentane, ppbv	<i>J (0.02)</i>	0.01	0.04	
Toluene, ppbv	3.0	0.01	0.04	0.1-0.6
2-Methylheptane, ppbv	0.3	0.01	0.04	
3-Methylheptane, ppbv	0.2	0.01	0.04	
n-Octane, ppbv	0.6	0.01	0.04	<0.1-0.3
Ethylbenzene, ppbv	0.3	0.01	0.04	0.1-0.2
m+p-Xylene, ppbv	1.7	0.01	0.04	0.1-0.2
Styrene, ppbv	0.05	0.01	0.04	<0.1-0.2
o-Xylene, ppbv	0.4	0.01	0.04	0.1-0.2
n-Nonane, ppbv	0.4	0.01	0.03	<0.1-0.1
Isopropylbenzene, ppbv	0.07	0.01	0.03	
n-Propylbenzene, ppbv	0.08	0.01	0.03	
m-Ethyltoluene, ppbv	0.2	0.01	0.03	
p-Ethyltoluene, ppbv	0.08	0.01	0.03	
1,3,5-Trimethylbenzene, ppbv	0.2	0.01	0.03	
o-Ethyltoluene, ppbv	0.07	0.01	0.03	
1,2,4-Trimethylbenzene, ppbv	0.4	0.01	0.03	
n-Decane, ppbv	0.4	0.01	0.03	<0.1-0.1
1,2,3-Trimethylbenzene, ppbv	0.2	0.01	0.03	
m-Diethylbenzene, ppbv	<i>J (0.02)</i>	0.01	0.03	
p-Diethylbenzene, ppbv	0.07	0.01	0.03	
n-Undecane, ppbv	0.3	0.009	0.03	<0.1
n-Dodecane, ppbv	0.2	0.008	0.02	<0.1

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

EH = Estimated; Exceeds Upper Range

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

DISTRICT INFORMATION
 INVOICE SOURCE
 LAP AUDIT
 LABORATORY NO 1929407-01

TO: SCAQMD LAB: _{3B} OTHER:
 SOURCE NAME: Aliso Canyon I.D. No. _____
 Source Address: 12801 Tampa Ave, Porter Ranch, CA 91326 City: Porter Ranch
 Mailing Address: _____ City: _____ Zip: _____
 Contact Person: _____ Title: _____ Tel: _____

Analysis Requested by: Payam Pakbin Date: 10-19-19
 Approved by: Andrea Polidori Office: _____ Budget #: 44716
 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill
 Suspected Violation Rule(s) _____ Other

Sample Collected by: S Boddeker Date: 10/19/19 Time: 11:52 ^{9B} _{9B}

REQUESTED ANALYSIS:

Location	Can#	Date / time	Start vac	End vac
Porter Ridge Park Kinbrace/Muirkirk	53474	10-19-2019 1442pst	30"	0"

Relinquished by	Received by	Firm/Agency	Date	Time
<i>S Boddeker</i>	<i>Table Adjacent Freezer 15</i>	<i>SCAQMD Lab</i>	<i>10/19/19</i>	<i>20:55pst</i>
<i>Table Adjacent Freezer 15</i>	<i>Ningqiang Ran</i>	<i>SCAQMD</i>	<i>10-21-19</i>	<i>13:25</i>

Remarks:

Collected at Porter Ridge Park at intersection of Kinbrace/Muirkirk in the park.

Note: This is following the Saddleridge Fire that spread to Porter Ranch. Extinguished on 10/18/19. A small clean flame ignited on the hill side.



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21865 Copley Dr., Diamond Bar, CA 91765-4182

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(Page 1 of 5)

To: Andrea Polidori, Ph.D.
Atmospheric Measurements Manager
Science & Technology Advancement

Laboratory No. 1929407-01
Requested By Payam Pakbin

Rule No. NA

Sampling Location

Aliso Canyon
12801 Tampa Ave
Porter Ranch, CA 91326

ST No. NA

Report Created 10/25/2019

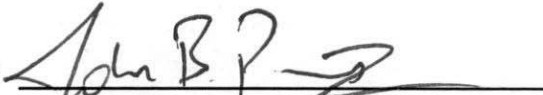
ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Percent hydrogen (H₂), nitrogen (N₂), oxygen (O₂), and methane (CH₄) by SCAQMD Method 10.1 (GC-TCD)

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

See attached results and sample information.

Reviewed By:


Brad Parrack
Principal A.Q. Chemist
Laboratory Services

Date Reviewed:

10/25/19

Approved By:


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

Date Approved:

10/25/2019



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Sample Comments Collected at Porter Ridge Park at intersection of Kinbrace/Muirkirk in the park.

Sample Date 10/19/2019 **Received Date 10/21/2019** **Analyzed Date 10/21/2019**

Percent hydrogen (H₂), nitrogen (N₂), oxygen (O₂), and methane (CH₄) by SCAQMD Method 10.1 (GC-TCD)

Analyte, Unit	Result	Dilution	MDL	MRL
H ₂ , %	ND	1	-	2
O ₂ , %	20.8	1	-	2
N ₂ , %	77.9	1	-	2
CH ₄ , %	ND	1	-	2

Laboratory No. 1929407-01
Sample Description Grab, 6 L Stainless Steel Canister - 53474, Aliso Canyon
Sample Comments Collected at Porter Ridge Park at intersection of Kinbrace/Muirkirk in the park. CO₂ Estimated at ambient concentration.

Sample Date 10/19/2019 **Received Date 10/21/2019** **Analyzed Date 10/21/**

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

Analyte, Unit	Result	Dilution	MDL	MRL
CH ₄ , ppmvC	5	1	0.2	0.9
Ethane, ppmvC	ND	1	0.2	1
NMNEOC, ppmvC	ND	1	0.2	1



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MONITORING AND ANALYSIS
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Laboratory No. 1929407-01

Percent hydrogen (H₂), nitrogen (N₂), oxygen (O₂), and methane (CH₄) by SCAQMD Method 10.1
 (GC-TCD)

QUALITY CONTROL SUMMARY

CCV1 (CC122586)

Analyte, Unit

H₂, %
 O₂, %
 N₂, %
 CH₄, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
1.01	0.944	0.07	PASS
1.05	1.03	0.02	PASS
1.05	0.959	0.09	PASS
0.99	1.01	0.02	PASS

CCV2 (CC73109)

Analyte, Unit

H₂, %
 O₂, %
 N₂, %
 CH₄, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA	NA	NA
24.93	24.63	0.30	PASS
5.15	4.93	0.22	PASS
NA	NA	NA	NA

CCV3 (FF130)

Analyte, Unit

H₂, %
 O₂, %
 N₂, %
 CH₄, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA	NA	NA
1.10	0.997	0.10	PASS
94.36	93.9	0.46	PASS
NA	NA	NA	NA

CCV4 (CC122586)

Analyte, Unit

H₂, %
 O₂, %
 N₂, %
 CH₄, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
1.01	0.944	0.07	PASS
1.01	1.03	0.02	PASS
1.02	0.959	0.06	PASS
0.99	1.01	0.02	PASS

CCV5 (CC73109)

Analyte, Unit

H₂, %
 O₂, %
 N₂, %
 CH₄, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA	NA	NA
24.89	24.63	0.26	PASS
5.10	4.93	0.17	PASS
NA	NA	NA	NA



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Laboratory No. 1929407-01

Percent hydrogen (H₂), nitrogen (N₂), oxygen (O₂), and methane (CH₄) by SCAQMD Method 10.1 (GC-TCD)

QUALITY CONTROL SUMMARY

CCV6 (CA03593)
Analyte, Unit

H₂, %
O₂, %
N₂, %
CH₄, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
25.51	25.34	0.17	PASS
NA	NA	NA	NA
0.20	NA	0.20	PASS
49.13	49.00	0.13	PASS



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Laboratory No. 1929407-01

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

QUALITY CONTROL SUMMARY

CCV1 (CC106783)

Analyte, Unit

CO, ppmvC

CH₄, ppmvC

Ethane, ppmvC

NMNEOC, ppmvC

Measured	Theoretical	Percent Error	Absolute Difference	QC Limit ±5% or ±1
1.78	1.92	7.48	0.14	PASS
2.08	2.02	2.77	0.06	PASS
2.19	2.03	7.88	0.16	PASS
1.94	2.03	4.34	0.09	PASS

CCV2 (CC135067)

Analyte, Unit

CO, ppmvC

CH₄, ppmvC

Ethane, ppmvC

NMNEOC, ppmvC

Measured	Theoretical	Percent Error	Absolute Difference	QC Limit ±5% or ±1
10239	10100	1.38	138.92	PASS
10093	9950	1.44	143.07	PASS
10092	9940	1.53	151.65	PASS
10187	10000	1.87	186.76	PASS

CCV3 (CC106783)

Analyte, Unit

CO, ppmvC

CH₄, ppmvC

Ethane, ppmvC

NMNEOC, ppmvC

Measured	Theoretical	Percent Error	Absolute Difference	QC Limit ±5% or ±1
1.90	1.92	1.25	0.02	PASS
2.07	2.02	2.27	0.05	PASS
2.20	2.03	8.37	0.17	PASS
2.06	2.03	1.58	0.03	PASS

CCV4 (CC135067)

Analyte, Unit

CO, ppmvC

CH₄, ppmvC

Ethane, ppmvC

NMNEOC, ppmvC

Measured	Theoretical	Percent Error	Absolute Difference	QC Limit ±5% or ±1
9985	10100	1.14	114.66	PASS
9839	9950	1.11	110.91	PASS
9836	9940	1.04	103.69	PASS
9932	10000	0.68	68.08	PASS

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

DISTRICT INFORMATION
 INVOICE SOURCE
 LAP AUDIT
 LABORATORY NO 1929407-01

TO: SCAQMD LAB: SB OTHER: _____
 SOURCE NAME: Alison Canyon I.D. No. _____
 Source Address: 12801 Tampa Ave, Porter Ranch, CA 91326 City: Porter Ranch
 Mailing Address: _____ City: _____ Zip: _____
 Contact Person: _____ Title: _____ Tel: _____

Analysis Requested by: Payam Pakbin Date: 10-19-19
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14:52 (SB)

REQUESTED ANALYSIS:

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Porter Ridge Park Kinbrace/Muirkirk	53474	10-19-209 1442pst	-30"	0"

Relinquished by	Received by	Firm/Agency	Date	Time
<i>S Boddeker</i>	Table Adjacent Freezer 15	SCAQMD Lab	10/19/19	20:55pst
Table Adjacent Freezer 15	Ningqing Ran	SCAQMD	10-21-19	13:25

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