



**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.** 1929405-01  
**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

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**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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**MONITORING AND ANALYSIS**  
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**Laboratory No.** 1929405-01  
**Sample Description** Grab, 6 L Stainless Steel Canister 53496, Aliso Canyon  
**Sample Comments** Collected on the road below the source of previous flame by SoCal gas  
**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	270	0.1	0.3	100-700
Total Calibrated, ppbC	170	0.1	0.3	
Ethane, ppbv	38 (EH)	0.05	0.2	
Ethylene, ppbv	0.6	0.05	0.2	0.7-4.1
Acetylene, ppbv	J (0.2)	0.05	0.2	
Propane, ppbv	6.8	0.03	0.1	0.4-5.0
Propylene, ppbv	0.2	0.03	0.1	0.2-0.7
Isobutane, ppbv	2.2	0.02	0.08	0.2-0.9
n-Butane, ppbv	1.1	0.02	0.08	0.3-1.7
1-Butene, ppbv	0.09 (LK)	0.02	0.08	0.1-0.3
trans-2-Butene, ppbv	J (0.04)	0.02	0.08	
cis-2-Butene, ppbv	J (0.04)	0.02	0.08	
Isopentane, ppbv	2.0 (LK)	0.02	0.06	
1-Pentene, ppbv	J (0.03)	0.02	0.06	
n-Pentane, ppbv	0.2	0.02	0.06	0.1-0.6
Isoprene, ppbv	0.7	0.02	0.06	
trans-2-Pentene, ppbv	J (0.02)	0.02	0.06	
cis-2-Pentene, ppbv	ND	0.02	0.06	
2,2-Dimethylbutane, ppbv	0.08	0.02	0.05	
Cyclopentane, ppbv	J (0.03)	0.02	0.06	
2,3-Dimethylbutane, ppbv	0.1	0.02	0.05	
2-Methylpentane, ppbv	0.09	0.02	0.05	
3-Methylpentane, ppbv	0.1	0.02	0.05	
1-Hexene, ppbv	J (0.02)	0.02	0.05	<0.1-0.1
n-Hexane, ppbv	J (0.05)	0.02	0.05	0.1-0.2
Methylcyclopentane, ppbv	0.06	0.02	0.05	
2,4-Dimethylpentane, ppbv	J (0.04)	0.01	0.04	
Benzene, ppbv	0.1	0.02	0.05	0.1-0.5
Cyclohexane, ppbv	0.08	0.02	0.05	
2-Methylhexane, ppbv	J (0.03)	0.01	0.04	
2,3-Dimethylpentane, ppbv	0.07	0.01	0.04	



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Laboratory No. **1929405-01 - continued**  
 Sample Description **Grab, 6 L Stainless Steel Canister 53496, Aliso Canyon**  
 Sample Comments **Collected on the road below the source of previous flame by SoCal gas**  
 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	0.06	0.01	0.04	
2,2,4-Trimethylpentane, ppbv	0.05 (LK)	0.01	0.04	
n-Heptane, ppbv	J (0.04)	0.01	0.04	0.1-0.2
Methylcyclohexane, ppbv	0.05	0.01	0.04	
2,3,4-Trimethylpentane, ppbv	J (0.02)	0.01	0.04	
Toluene, ppbv	0.1	0.01	0.04	0.1-0.6
2-Methylheptane, ppbv	J (0.02)	0.01	0.04	
3-Methylheptane, ppbv	J (0.01)	0.01	0.04	
n-Octane, ppbv	J (0.02)	0.01	0.04	<0.1-0.3
Ethylbenzene, ppbv	J (0.04)	0.01	0.04	0.1-0.2
m+p-Xylene, ppbv	0.08	0.01	0.04	0.1-0.2
Styrene, ppbv	J (0.03)	0.01	0.04	<0.1-0.2
o-Xylene, ppbv	0.07	0.01	0.04	0.1-0.2
n-Nonane, ppbv	J (0.03)	0.01	0.03	<0.1-0.1
Isopropylbenzene, ppbv	J (0.02)	0.01	0.03	
n-Propylbenzene, ppbv	J (0.02)	0.01	0.03	
m-Ethyltoluene, ppbv	0.08	0.01	0.03	
p-Ethyltoluene, ppbv	J (0.02)	0.01	0.03	
1,3,5-Trimethylbenzene, ppbv	0.08	0.01	0.03	
o-Ethyltoluene, ppbv	0.04	0.01	0.03	
1,2,4-Trimethylbenzene, ppbv	0.2	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	0.09	0.01	0.03	
p-Diethylbenzene, ppbv	0.2	0.01	0.03	
n-Undecane, ppbv	1.0	0.009	0.03	<0.1
n-Dodecane, ppbv	0.6	0.008	0.02	<0.1

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

EH = Estimated; Exceeds Upper Range, LK = Analyte Identified; Reported Value May Be Biased High

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

DISTRICT INFORMATION  
 INVOICE SOURCE  
 LAP AUDIT  
 LABORATORY NO 1929405-01

TO: SCAQMD LAB:  <sup>SR</sup> 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

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 <sup>SR</sup> Time: 11:52 pst

**REQUESTED ANALYSIS:**

Location	Can#	Date / time	Start vac	End vac
Base of hill with ground flame	53496	10-19-209 1152pst	-30"	0"

Relinquished by	Received by	Firm/Agency	Date	Time
<i>Steve Boddeker</i>	Lab Table next to <sup>Freezer</sup> 15	SCAQMD Lab	10/19/19	20:55 pst
Lab Table next to Freezer 15	Wingqing Ran	SCAQMD	10-21-19	13:32:29 (M)

**Remarks:**

Collected at the base on the road below the source of previous flame by SoCal gas.

LI-COR measured methane values consistently from 3 to 7 as the wind shifted which placed the previous spot of the flame downwind. Collected this sample as the LI-COR displayed a 3.5 ppm value.

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**

**MONITORING AND ANALYSIS  
REPORT OF LABORATORY ANALYSIS**

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

**Laboratory No.** 1929405-01  
**Requested By** Payam Pakbin

**Rule No.** NA

**Sampling Location**

Aliso Canyon  
12801 Tampa Ave  
Porter Ranch, CA 91326

**ST No.** NA

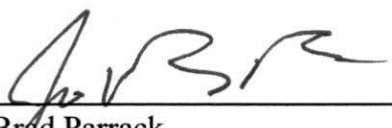
**Report Created** 10/25/2019

**ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS**

**Percent hydrogen (H<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), and methane (CH<sub>4</sub>) 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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**Laboratory No.** 1929405-01  
**Sample Description** Grab, 6 L Stainless Steel Canister - 53496, Aliso Canyon  
**Sample Comments** Collected at the base on the road below the source of previous flame by SoCal gas

**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
H2, %	ND	1	-	2
O2, %	20.9	1	-	2
N2, %	78.3	1	-	2
CH4, %	ND	1	-	2

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**Laboratory No.** 1929405-01  
**Sample Description** Grab, 6 L Stainless Steel Canister - 53496, Aliso Canyon  
**Sample Comments** Collected at the base on the road below the source of previous flame by SoCal gas. CO2 estimated at ambient concentrations.

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

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

Analyte, Unit	Result	Dilution	MDL	MRL
CH4, ppmvC	4	1	0.2	0.9
Ethane, ppmvC	ND	1	0.2	1
NMNEOC, ppmvC	ND	1	0.2	1

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Laboratory No. **1929405-01**

Percent hydrogen (H<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), and methane (CH<sub>4</sub>) by SCAQMD Method 10.1 (GC-TCD)

**QUALITY CONTROL SUMMARY**

**CCV1 (CC122586)**

Analyte, Unit

H<sub>2</sub>, %  
 O<sub>2</sub>, %  
 N<sub>2</sub>, %  
 CH<sub>4</sub>, %

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

H<sub>2</sub>, %  
 O<sub>2</sub>, %  
 N<sub>2</sub>, %  
 CH<sub>4</sub>, %

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

H<sub>2</sub>, %  
 O<sub>2</sub>, %  
 N<sub>2</sub>, %  
 CH<sub>4</sub>, %

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

H<sub>2</sub>, %  
 O<sub>2</sub>, %  
 N<sub>2</sub>, %  
 CH<sub>4</sub>, %

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

H<sub>2</sub>, %  
 O<sub>2</sub>, %  
 N<sub>2</sub>, %  
 CH<sub>4</sub>, %

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



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
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Laboratory No. 1929405-01

Percent hydrogen (H<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), and methane (CH<sub>4</sub>) by SCAQMD Method 10.1 (GC-TCD)

**QUALITY CONTROL SUMMARY**

**CCV6 (CA03593)**

Analyte, Unit

H<sub>2</sub>, %

O<sub>2</sub>, %

N<sub>2</sub>, %

CH<sub>4</sub>, %

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.      1929405-01

**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 1929405-01

TO: SCAQMD LAB:  <sup>SB</sup> OTHER:  \_\_\_\_\_  
 SOURCE NAME: Alisop 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 <sup>SB</sup> Time: 11:52 pst

**REQUESTED ANALYSIS:**

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Relinquished by	Received by	Firm/Agency	Date	Time
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Lab Table next to Freezer 15	Ningqing Ran	SCAQMD	10-21-19	13:32:29 (M)

**Remarks:**  
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 LI-COR measured methane values consistently from 3 to 7 as the wind shifted which placed the previous spot of the flame downwind. Collected this sample as the LI-COR displayed a 3.5 ppm value.  
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