

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

MONITORING & ANALYSIS  
REPORT OF LABORATORY ANALYSIS

<b>TO:</b> Cher Snyder Assistant DEO Engineering and Compliance	<b>LABORATORY NO:</b> <u>1601966</u>
<b>SAMPLE DESCRIPTION:</b> Triggered samples Canisters: 54603 54755 54130 54560 E3712 54622	<b>REFERENCE NO:</b> <u>GC6-3-72</u> <u>01/18/16</u> <b>DATE SAMPLED:</b> <u>and 01/19/2016</u>
<b>SAMPLE LOCATION:</b> Porter Ranch Community Elementary School	<b>DATE RECEIVED:</b> <u>01/19/16</u> <b>DATE ANALYZED:</b> <u>01/22/16</u>
	<b>ANALYZED BY:</b> <u>Yang Song</u>
	<b>REQUESTED BY:</b> <u>Sumner Wilson</u>

---

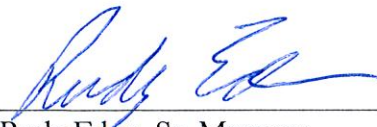
---

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

Volatile Organic Compounds (VOC) by Gas Chromatography(GC)  
and Flame Ionization Detection (FID)

Note: See attached for speciated results.

Date Approved: 1/27/16

Approved By: 

Rudy Eden, Sr. Manager  
Laboratory Services Branch  
(909) 396-2391

**LAB NO: 1601966****Location: Porter Ranch Community Elementary School (PRCES)****ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS**Quantitation of Organic Compounds by Gas Chromatography(GC) and  
Flame Ionization Detection (FID)

Sample Date	01/18/16	01/19/16	
Canister	54603	54130	
Sampling Location	PRCES	PRCES	Ambient Air
Total NMOC, ppbC	1040	1240	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	0.4	0.4	0.7-4.1
acetylene	0.4	0.4	
propane	34	40	0.4-5.0
propylene	0.1	<0.1	0.2-0.7
isobutane	3.9	4.9	0.2-0.9
n-butane	4.7	6.0	0.3-1.7
1-butene	<0.1	<0.1	0.1-0.3
trans-2-butene	<0.1	<0.1	
cis-2-butene	<0.1	<0.1	
isopentane	2.0	2.3	
1-pentene	<0.1	<0.1	
n-pentane	1.0	1.3	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	<0.1	N.D.	
cis-2-pentene	N.D.	N.D.	
2,2-dimethylbutane	<0.1	<0.1	
cyclopentane	0.1	0.1	
2,3-dimethylbutane	<0.1	<0.1	
2-methylpentane	0.3	0.4	
3-methylpentane	0.2	0.2	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.3	0.5	0.1-0.2
methylcyclopentane	0.3	0.4	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.2	0.3	0.1-0.5
cyclohexane	0.3	0.3	
2-methylhexane	<0.1	<0.1	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	<0.1	<0.1	
2,2,4-trimethylpentane	<0.1	0.1	
n-heptane	0.1	0.1	0.1-0.2
methylcyclohexane	0.3	0.4	

**LAB NO: 1601966**

**Location: Porter Ranch Community Elementary School (PRCES)**

---

---

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

Quantitation of Organic Compounds by Gas Chromatography(GC) and  
Flame Ionization Detection (FID)

Sample Date	01/18/16	01/19/16	
Canister	54603	54130	
<b>Sampling Location</b>	<b>PRCES</b>	<b>PRCES</b>	<b>Ambient Air</b>
<b>Total NMOC, ppbC</b>	1040	1240	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.3	0.3	0.1-0.6
2-methylheptane	<0.1	<0.1	
3-methylheptane	<0.1	<0.1	
n-octane	<0.1	<0.1	<0.1-0.3
ethylbenzene	<0.1	<0.1	0.1-0.2
m+p-xylenes	0.1	0.1	0.1-0.2
styrene	<0.1	<0.1	<0.1-0.2
o-xylene	<0.1	<0.1	0.1-0.2
n-nonane	<0.1	<0.1	<0.1-0.1
isopropylbenzene	<0.1	<0.1	
n-propylbenzene	<0.1	<0.1	
m-ethyltoluene	<0.1	N.D.	
p-ethyltoluene	<0.1	<0.1	
1,3,5-trimethylbenzene	<0.1	<0.1	
o-ethyltoluene	<0.1	N.D.	
1,2,4-trimethylbenzene	<0.1	<0.1	
n-decane	<0.1	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	<0.1	<0.1	
m-diethylbenzene	<0.1	<0.1	
p-diethylbenzene	<0.1	<0.1	
n-undecane	<0.1	<0.1	<0.1
n-dodecane	<0.1	<0.1	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected

LAB NO: 1601966

Location: Porter Ranch Community Elementary School (PRCES)

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

Quantitation of Organic Compounds by Gas Chromatography(GC) and  
Flame Ionization Detection (FID)

Sample Date	01/19/16	01/19/16	
Canister	E3712	54755	
Sampling Location	PRCES	PRCES	Ambient Air
Total NMOC, ppbC	1440	1700	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	0.8	0.6	0.7-4.1
acetylene	0.7	0.6	
propane	46	56	0.4-5.0
propylene	0.2	0.1	0.2-0.7
isobutane	5.8	6.8	0.2-0.9
n-butane	7.1	8.1	0.3-1.7
1-butene	<0.1	<0.1	0.1-0.3
trans-2-butene	N.D.	<0.1	
cis-2-butene	N.D.	<0.1	
isopentane	3.0	3.1	
1-pentene	<0.1	<0.1	
n-pentane	1.5	1.8	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	<0.1	N.D.	
cis-2-pentene	N.D.	N.D.	
2,2-dimethylbutane	<0.1	<0.1	
cyclopentane	0.2	0.2	
2,3-dimethylbutane	0.1	0.1	
2-methylpentane	0.4	0.5	
3-methylpentane	0.3	0.3	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.5	0.5	0.1-0.2
methylcyclopentane	0.5	0.5	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	0.3	0.1-0.5
cyclohexane	0.4	0.5	
2-methylhexane	0.1	0.1	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	0.1	0.1	
2,2,4-trimethylpentane	<0.1	0.1	
n-heptane	0.2	0.2	0.1-0.2
methylcyclohexane	0.4	0.5	



LAB NO: 1601966

Location: Porter Ranch Community Elementary School (PRCES)

---

---

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

Quantitation of Organic Compounds by Gas Chromatography(GC) and  
Flame Ionization Detection (FID)

Sample Date	01/19/16	01/19/16	
Canister	E3712	54755	
<b>Sampling Location</b>	<b>PRCES</b>	<b>PRCES</b>	<b>Ambient Air</b>
<b>Total NMOC, ppbC</b>	1440	1700	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.4	0.4	0.1-0.6
2-methylheptane	<0.1	<0.1	
3-methylheptane	<0.1	<0.1	
n-octane	<0.1	<0.1	<0.1-0.3
ethylbenzene	<0.1	<0.1	0.1-0.2
m+p-xylenes	0.2	0.2	0.1-0.2
styrene	<0.1	<0.1	<0.1-0.2
o-xylene	<0.1	<0.1	0.1-0.2
n-nonane	<0.1	<0.1	<0.1-0.1
isopropylbenzene	<0.1	<0.1	
n-propylbenzene	<0.1	<0.1	
m-ethyltoluene	<0.1	<0.1	
p-ethyltoluene	<0.1	<0.1	
1,3,5-trimethylbenzene	<0.1	<0.1	
o-ethyltoluene	N.D.	<0.1	
1,2,4-trimethylbenzene	<0.1	<0.1	
n-decane	<0.1	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	<0.1	<0.1	
m-diethylbenzene	<0.1	<0.1	
p-diethylbenzene	<0.1	<0.1	
n-undecane	<0.1	<0.1	<0.1
n-dodecane	<0.1	<0.1	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected

LAB NO: 1601966

Location: Porter Ranch Community Elementary School (PRCES)

---

---

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

Quantitation of Organic Compounds by Gas Chromatography(GC) and  
Flame Ionization Detection (FID)

Sample Date	01/19/16	01/19/16	
Canister	54560	54622	
<b>Sampling Location</b>	<b>PRCES</b>	<b>PRCES</b>	<b>Ambient Air</b>
<b>Total NMOC, ppbC</b>	1430	1180	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	0.5	1.7	0.7-4.1
acetylene	0.6	0.9	
propane	48	38	0.4-5.0
propylene	0.1	0.3	0.2-0.7
isobutane	5.9	4.6	0.2-0.9
n-butane	7.4	5.7	0.3-1.7
1-butene	<0.1	0.1	0.1-0.3
trans-2-butene	<0.1	<0.1	
cis-2-butene	N.D.	<0.1	
isopentane	3.2	2.6	
1-pentene	<0.1	<0.1	
n-pentane	1.5	1.3	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	N.D.	<0.1	
cis-2-pentene	N.D.	<0.1	
2,2-dimethylbutane	<0.1	<0.1	
cyclopentane	0.2	0.1	
2,3-dimethylbutane	0.1	<0.1	
2-methylpentane	0.4	0.4	
3-methylpentane	0.3	0.2	
1-hexene	N.D.	<0.1	<0.1-0.1
n-hexane	0.5	0.4	0.1-0.2
methylcyclopentane	0.5	0.4	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	0.4	0.1-0.5
cyclohexane	0.4	0.3	
2-methylhexane	0.1	<0.1	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	0.1	0.1	
2,2,4-trimethylpentane	<0.1	<0.1	
n-heptane	0.2	0.1	0.1-0.2
methylcyclohexane	0.4	0.3	

**LAB NO: 1601966****Location: Porter Ranch Community Elementary School (PRCES)****ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS**Quantitation of Organic Compounds by Gas Chromatography(GC) and  
Flame Ionization Detection (FID)

Sample Date	01/19/16	01/19/16	
Canister	54560	54622	
<b>Sampling Location</b>	<b>PRCES</b>	<b>PRCES</b>	<b>Ambient Air</b>
<b>Total NMOC, ppbC</b>	1430	1180	100-700 ppbC
<b><u>Compound</u></b>	<b><u>Conc. (ppbv)</u></b>	<b><u>Conc. (ppbv)</u></b>	<b><u>Conc. (ppbv)</u></b>
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.3	0.4	0.1-0.6
2-methylheptane	<0.1	<0.1	
3-methylheptane	<0.1	<0.1	
n-octane	<0.1	<0.1	<0.1-0.3
ethylbenzene	<0.1	<0.1	0.1-0.2
m+p-xylenes	0.1	0.2	0.1-0.2
styrene	<0.1	<0.1	<0.1-0.2
o-xylene	<0.1	<0.1	0.1-0.2
n-nonane	<0.1	<0.1	<0.1-0.1
isopropylbenzene	<0.1	<0.1	
n-propylbenzene	<0.1	<0.1	
m-ethyltoluene	<0.1	<0.1	
p-ethyltoluene	<0.1	<0.1	
1,3,5-trimethylbenzene	<0.1	<0.1	
o-ethyltoluene	<0.1	<0.1	
1,2,4-trimethylbenzene	<0.1	<0.1	
n-decane	<0.1	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	<0.1	<0.1	
m-diethylbenzene	<0.1	<0.1	
p-diethylbenzene	<0.1	<0.1	
n-undecane	<0.1	<0.1	<0.1
n-dodecane	<0.1	<0.1	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected



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

DISTRI  
 INVOIC  
 LAP AI  
 LABORA

WO #: 1601966



TO: SCAQMD LAB:  OTHER:

SOURCE NAME: Southern California Gas Co. I.D. No. \_\_\_\_\_

Source Address: 12801 Tampa Ave City: Porter Ranch

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: 91326

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_ Tel: \_\_\_\_\_

Analysis Requested by: Sumner Wilson Date: 12/31/15

Approved by: Jason Low Office: \_\_\_\_\_ Budget #: 44716

REASON REQUESTED: Court/Hearing Board  Permit Pending  Hazardous/Toxic Spill

Suspected Violation Rule(s) \_\_\_\_\_ Other

Sample Collected by: S Boddeker / S Wilson Date: 1/19/16 Time: 11:30

REQUESTED ANALYSIS: PAMS analysis

City/Location	Can#	Start day / time/ duration	Start vac	End vac
Porter Ranch Community Elementary School	54603	1-18-16 / 23:55 / 5 min	<-30"	-1"
Porter Ranch Community Elementary School	54130	1-19-16 / 00:25 / 5 min	-30"	-1"
Porter Ranch Community Elementary School	E3712	1-19-16 / 00:55 / 5 min	<-30"	-5"
Porter Ranch Community Elementary School	54755	1-19-16 / 03:36 / 5 min	<-30"	-4"
Porter Ranch Community Elementary School	54560	1-19-16 / 04:23 / 5 min	<-30"	-3"
Porter Ranch Community Elementary School	54622	1-19-16 / 05:50 / 5 min	<-30"	0

Relinquished by	Received by	Firm/Agency	Date	Time
Steve Boddeker <i>SB</i>	<i>SP</i>	SCAQMD Lab	1-19-16	16:52

Remarks: Samples collected by passive sampling via the XonTech 912 triggered by the Mocon NMHC. Trigger is set to 20ppm  
Porter Ranch Community School Elementary – 5 Sesnon Blvd, Porter Ranch, CA 91326  
GPS (34.293369, -118.580505)