

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

**MONITORING & ANALYSIS
REPORT OF LABORATORY ANALYSIS**

TO: Cher Snyder
Assistant DEO
Engineering and Compliance

LABORATORY NO: 1604114

REFERENCE NO: GC6-3-74

SAMPLE DESCRIPTION:

Triggered Samples
Canisters: 54628 54602
54623 54716
E4232 53433

DATE SAMPLED: 02/09/16

DATE RECEIVED: 02/10/16

DATE ANALYZED: 02/11/16

SAMPLE LOCATION:

Highlands Community
Pool Parking Lot

ANALYZED BY: Yang Song

REQUESTED BY: Sumner Wilson

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: 2/25/16 Approved By: 

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

LAB NO: 1604114

Location: Highlands Community

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	02/09/16	02/09/16	
Canister	54628	54623	
Sampling Location	Highlands Community	Highlands Community	Ambient Air
	Pool Parking Lot	Pool Parking Lot	
Total NMOC, ppbC	2720	2730	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	<0.1	0.1	0.7-4.1
acetylene	0.2	0.3	
propane	94	92	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	11	11	0.2-0.9
n-butane	13	13	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	4.4	5.3	
1-pentene	<0.1	<0.1	
n-pentane	4.8	15	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	N.D.	<0.1	
cis-2-pentene	N.D.	N.D.	
2,2-dimethylbutane	<0.1	<0.1	
cyclopentane	0.3	0.3	
2,3-dimethylbutane	0.1	0.2	
2-methylpentane	0.7	0.7	
3-methylpentane	0.4	0.4	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.7	0.8	0.1-0.2
methylcyclopentane	0.7	0.7	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.4	0.4	0.1-0.5
cyclohexane	0.6	0.6	
2-methylhexane	0.1	0.2	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	0.1	0.2	
2,2,4-trimethylpentane	0.2	0.2	
n-heptane	0.2	0.3	0.1-0.2
methylcyclohexane	0.6	0.6	

LAB NO: 1604114

Location: Highlands Community

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	02/09/16	02/09/16	
Canister	54628	54623	
Sampling Location	Highlands Community	Highlands Community	Ambient Air
	Pool Parking Lot	Pool Parking Lot	
Total NMOC, ppbC	2720	2730	100-700 ppbC

Compound	Conc. (ppbv)	Conc. (ppbv)	Conc. (ppbv)
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.8	2.1	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	<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

LAB NO: 1604114

Location: Highlands Community

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	02/09/16	02/09/16	
Canister	E4232	54602	
Sampling Location	Highlands Community	Highlands Community	Ambient Air
	Pool Parking Lot	Pool Parking Lot	
Total NMOC, ppbC	1980	3630	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	0.1	0.1	0.7-4.1
acetylene	0.2	0.3	
propane	67	127	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	8.0	15	0.2-0.9
n-butane	9.5	18	0.3-1.7
1-butene	<0.1	0.2	0.1-0.3
trans-2-butene	N.D.	<0.1	
cis-2-butene	<0.1	<0.1	
isopentane	3.7	6.1	
1-pentene	<0.1	<0.1	
n-pentane	10	5.0	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	0.3	
2,3-dimethylbutane	0.1	0.2	
2-methylpentane	0.5	0.9	
3-methylpentane	0.3	0.6	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.6	1.0	0.1-0.2
methylcyclopentane	0.5	0.9	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	0.5	0.1-0.5
cyclohexane	0.5	0.9	
2-methylhexane	0.1	0.2	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	0.1	0.2	
2,2,4-trimethylpentane	0.1	0.2	
n-heptane	0.2	0.3	0.1-0.2
methylcyclohexane	0.5	0.9	

LAB NO: 1604114

Location: Highlands Community

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	02/09/16	02/09/16	
Canister	E4232	54602	
Sampling Location	Highlands Community	Highlands Community	Ambient Air
	Pool Parking Lot	Pool Parking Lot	
Total NMOC, ppbC	1980	3630	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	1.5	0.8	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	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: 1604114

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ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	02/09/16	02/09/16	
Canister	54716	53433	
Sampling Location	Highlands Community	Highlands Community	Ambient Air
	Pool Parking Lot	Pool Parking Lot	
Total NMOC, ppbC	2020	754	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	0.1	0.2	0.7-4.1
acetylene	0.3	0.3	
propane	70	25	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	8.5	3.0	0.2-0.9
n-butane	10	3.6	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	3.9	1.9	
1-pentene	<0.1	<0.1	
n-pentane	3.7	2.4	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	0.5	0.2	
3-methylpentane	0.3	0.1	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.6	0.2	0.1-0.2
methylcyclopentane	0.5	0.2	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	0.1	0.1-0.5
cyclohexane	0.5	0.2	
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	0.5	0.2	

LAB NO: 1604114
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Quantitation of Organic Compounds by Gas Chromatography(GC) and
 Flame Ionization Detection (FID)

Sample Date	02/09/16	02/09/16	
Canister	54716	53433	
Sampling Location	Highlands Community	Highlands Community	Ambient Air
	Pool Parking Lot	Pool Parking Lot	
Total NMOC, ppbC	2020	754	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	0.6	0.5	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	<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
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 LAP AL
LABORA'

WO #: 1604114



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: 2/10/16

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: Robert Wimmer Date: 2/9/16 Time: 11:30

REQUESTED ANALYSIS: PAMS analysis

City/Location	Can#	Start day / time/ duration	Start vac	End vac
Highlands Community	54628	2-9-16 / 05:27 / 5 min	-30	-1"
Highlands Community	54623	2-9-16 / 06:06 / 5 min	-30	-1"
Highlands Community	E4232	2-9-16 / 06:42 / 5 min	-30	-3"
Highlands Community	54602	2-9-16 / 07:20 / 5 min	-30	-2"
Highlands Community	54716	2-9-16 / 07:56 / 5 min	-30	-3"
Highlands Community	53433	2-9-16 / 08:35 / 5 min	-30	-2"

Relinquished by	Received by	Firm/Agency	Date	Time
<i>[Signature]</i>	<i>[Signature]</i>	SCAQMD Lab	2/10/16	11:46

Remarks: Samples collected by passive sampling via the XonTech 912 triggered by the Thermo 55i NMHC.

Trigger is set to 35ppm

Highlands community pool parking lot. Address: 12378 High Glen Way, Northridge CA 91326 (across from 12377)