

**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: 1602929

REFERENCE NO: GC6-3-73

SAMPLE DESCRIPTION:

Triggered Samples
Canisters: 54575 54570
E3838 E3376
53382

DATE SAMPLED: 01/28/16

DATE SAMPLED: and 01/29/16

DATE RECEIVED: 01/29/16

DATE ANALYZED: 02/04/16

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: 2/11/16

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

LAB NO: 1602929

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	01/28/16	01/28/16	
Canister	54575	E3838	
Sampling Location	Highlands Community Pool Pool Parking Lot	Highlands Community Pool Pool Parking Lot	Ambient Air
Total NMOC, ppbC	935	2250	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	0.4	0.4	
propane	29	74	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	3.4	8.7	0.2-0.9
n-butane	4.2	10	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	2.1	4.1	
1-pentene	<0.1	<0.1	
n-pentane	7.4	7.9	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	N.D.	N.D.	
cis-2-pentene	N.D.	<0.1	
2,2-dimethylbutane	<0.1	<0.1	
cyclopentane	<0.1	0.2	
2,3-dimethylbutane	<0.1	0.1	
2-methylpentane	0.2	0.6	
3-methylpentane	0.1	0.3	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.3	0.6	0.1-0.2
methylcyclopentane	0.2	0.6	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.2	0.4	0.1-0.5
cyclohexane	0.2	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	<0.1	0.2	0.1-0.2
methylcyclohexane	0.2	0.5	

LAB NO: 1602929**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	01/28/16	01/28/16	
Canister	54575	E3838	
Sampling Location	Highlands Community Pool Pool Parking Lot	Highlands Community Pool Pool Parking Lot	Ambient Air
Total NMOC, ppbC	935	2250	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	0.8	1.1	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	<0.1	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	N.D.	<0.1	
m-ethyltoluene	N.D.	<0.1	
p-ethyltoluene	<0.1	<0.1	
1,3,5-trimethylbenzene	N.D.	<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: 1602929

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	01/28/16	01/29/16	
Canister	53382	54570	
Sampling Location	Highlands Community Pool Pool Parking Lot	Highlands Community Pool Pool Parking Lot	Ambient Air
Total NMOC, ppbC	2420	3060	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	0.4	
propane	80	103	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	9.6	12	0.2-0.9
n-butane	11	14	0.3-1.7
1-butene	0.1	<0.1	0.1-0.3
trans-2-butene	<0.1	N.D.	
cis-2-butene	N.D.	<0.1	
isopentane	3.9	5.2	
1-pentene	<0.1	<0.1	
n-pentane	5.6	10	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	N.D.	N.D.	
cis-2-pentene	N.D.	N.D.	
2,2-dimethylbutane	<0.1	0.1	
cyclopentane	0.2	0.3	
2,3-dimethylbutane	0.1	0.2	
2-methylpentane	0.6	0.8	
3-methylpentane	0.4	0.5	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.7	0.8	0.1-0.2
methylcyclopentane	0.6	0.8	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	0.4	0.1-0.5
cyclohexane	0.6	0.7	
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	0.6	0.8	

LAB NO: 1602929

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	01/28/16	01/29/16	
Canister	53382	54570	
Sampling Location	Highlands Community Pool Pool Parking Lot	Highlands Community Pool Pool Parking Lot	Ambient Air
Total NMOC, ppbC	2420	3060	100-700 ppbC

Compound	Conc. (ppbv)	Conc. (ppbv)	Conc. (ppbv)
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.8	1.2	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.	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: 1602929

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 01/29/16
Canister E3376
Sampling Location Highlands Community Ambient Air
Pool Pool Parking Lot
Total NMOC, ppbC 3060 100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	<0.1	0.7-4.1
acetylene	0.4	
propane	100	0.4-5.0
propylene	<0.1	0.2-0.7
isobutane	12	0.2-0.9
n-butane	14	0.3-1.7
1-butene	<0.1	0.1-0.3
trans-2-butene	<0.1	
cis-2-butene	<0.1	
isopentane	5.2	
1-pentene	<0.1	
n-pentane	9.8	0.1-0.6
isoprene	<0.1	
trans-2-pentene	N.D.	
cis-2-pentene	N.D.	
2,2-dimethylbutane	0.1	
cyclopentane	0.3	
2,3-dimethylbutane	0.2	
2-methylpentane	0.1	
3-methylpentane	0.5	
1-hexene	<0.1	<0.1-0.1
n-hexane	0.8	0.1-0.2
methylcyclopentane	0.6	
2,4-dimethylpentane	<0.1	
benzene	0.4	0.1-0.5
cyclohexane	0.7	
2-methylhexane	0.2	
2,3-dimethylpentane	<0.1	
3-methylhexane	0.2	
2,2,4-trimethylpentane	0.2	
n-heptane	0.3	0.1-0.2
methylcyclohexane	0.6	

LAB NO: 1602929

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 01/29/16
Canister E3376
Sampling Location Highlands Community Ambient Air
Pool Pool Parking Lot
Total NMOC, ppbC 3060 100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
2,3,4-trimethylpentane	<0.1	
toluene	1.2	0.1-0.6
2-methylheptane	<0.1	
3-methylheptane	<0.1	
n-octane	0.1	<0.1-0.3
ethylbenzene	<0.1	0.1-0.2
m+p-xylenes	0.2	0.1-0.2
styrene	<0.1	<0.1-0.2
o-xylene	<0.1	0.1-0.2
n-nonane	<0.1	<0.1-0.1
isopropylbenzene	<0.1	
n-propylbenzene	<0.1	
m-ethyltoluene	<0.1	
p-ethyltoluene	<0.1	
1,3,5-trimethylbenzene	<0.1	
o-ethyltoluene	<0.1	
1,2,4-trimethylbenzene	<0.1	
n-decane	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	<0.1	
m-diethylbenzene	<0.1	
p-diethylbenzene	<0.1	
n-undecane	<0.1	<0.1
n-dodecane	<0.1	<0.1

NMOC = Non-Methane Organic Compounds
N.D. = Not Detected

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

DIS
 INV
 LA
 LABO

WO #: 1602929



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: 1/29/16

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: 1/29/16 Time: 12:30

REQUESTED ANALYSIS: PAMS analysis

City/Location	Can#	Start day / time/ duration	Start vac	End vac
Highlands Community	54575 ✓	1-28-16 / 20:45 / 5 min	-30	-1"
Highlands Community	E3838 ✓	1-28-16 / 21:35 / 5 min	-30	0 ✓
Highlands Community	53382 ✓	1-28-16 / 23:15 / 5 min	-30	-10 <i>Base issue?</i>
Highlands Community	54570 ✓	1-29-16 / 00:58 / 5 min	-30	-2"
Highlands Community	E3376 ✓	1-29-16 / 01:43 / 5 min	-30	0 ✓

Relinquished by	Received by	Firm/Agency	Date	Time
<i>RW</i>	<i>ML</i>	SCAQMD Lab	1/29/16	4:20

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)