

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: <u>1600613</u>
	REFERENCE NO: <u>GC6-3-69</u>
SAMPLE DESCRIPTION: Canisters 54676 54629 54683 54588	DATE SAMPLED: <u>1/1/2016</u>
	DATE RECEIVED: <u>01/06/16</u>
SAMPLE LOCATION: Highlands Community Pool Parking Lot	DATE ANALYZED: <u>01/07/16</u>
	ANALYZED BY: <u>Yang Song</u>
	REQUESTED BY: <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: 1/3/16

Approved By: 

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

LAB NO: 1600613

Location: Highlands Pool

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	01/01/16	01/01/16	
Canister	54676	54629	Ambient Air
Sampling Location	Highlands Pool	Highlands Pool	

Total NMOC, ppbC	301	579	100-700 ppbC
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<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	N.D.	<0.1	0.7-4.1
acetylene	0.1	0.2	
propane	8.2	16	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	0.9	1.6	0.2-0.9
n-butane	1.0	1.9	0.3-1.7
1-butene	N.D.	<0.1	0.1-0.3
trans-2-butene	N.D.	<0.1	
cis-2-butene	<0.1	<0.1	
isopentane	0.5	0.8	
1-pentene	<0.1	N.D.	
n-pentane	0.4	1.1	0.1-0.6
isoprene	N.D.	N.D.	
trans-2-pentene	<0.1	N.D.	
cis-2-pentene	N.D.	<0.1	
2,2-dimethylbutane	<0.1	<0.1	
cyclopentane	<0.1	<0.1	
2,3-dimethylbutane	<0.1	<0.1	
2-methylpentane	<0.1	0.1	
3-methylpentane	<0.1	<0.1	
1-hexene	<0.1	N.D.	<0.1-0.1
n-hexane	<0.1	0.1	0.1-0.2
methylcyclopentane	<0.1	0.1	
2,4-dimethylpentane	<0.1	<0.1	
benzene	<0.1	<0.1	0.1-0.5
cyclohexane	<0.1	0.1	
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	<0.1	0.1	

LAB NO: 1600613

Location: Highlands Pool

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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Sampling Location	Highlands Pool	Highlands Pool	

Total NMOC, ppbC	301	579	100-700 ppbC
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<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.1	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	N.D.	<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.	N.D.	
m-ethyltoluene	N.D.	<0.1	
p-ethyltoluene	N.D.	<0.1	
1,3,5-trimethylbenzene	N.D.	<0.1	
o-ethyltoluene	<0.1	N.D.	
1,2,4-trimethylbenzene	N.D.	<0.1	
n-decane	N.D.	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	N.D.	N.D.	
m-diethylbenzene	<0.1	N.D.	
p-diethylbenzene	<0.1	N.D.	
n-undecane	<0.1	<0.1	<0.1
n-dodecane	N.D.	N.D.	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected

LAB NO: 1600613

Location: Highlands Pool

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	01/01/16	01/01/16	
Canister	54683	54588	Ambient Air
Sampling Location	Highlands Pool	Highlands Pool	

Total NMOC, ppbC	2240*	126	100-700 ppbC
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<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	187	3.5	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	6.6	0.4	0.2-0.9
n-butane	7.4	0.6	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	2.5	0.8	
1-pentene	<0.1	<0.1	
n-pentane	2.1	0.7	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	0.1	<0.1	
2,3-dimethylbutane	<0.1	<0.1	
2-methylpentane	0.4	<0.1	
3-methylpentane	0.2	<0.1	
1-hexene	<0.1	N.D.	<0.1-0.1
n-hexane	0.5	<0.1	0.1-0.2
methylcyclopentane	0.4	<0.1	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	<0.1	0.1-0.5
cyclohexane	0.4	<0.1	
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	<0.1	

LAB NO: 1600613

Location: Highlands Pool

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.5	0.2	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	<0.1	0.1-0.2
styrene	<0.1	N.D.	<0.1-0.2
o-xylene	<0.1	N.D.	0.1-0.2
n-nonane	<0.1	<0.1	<0.1-0.1
isopropylbenzene	<0.1	<0.1	
n-propylbenzene	<0.1	N.D.	
m-ethyltoluene	<0.1	<0.1	
p-ethyltoluene	<0.1	<0.1	
1,3,5-trimethylbenzene	<0.1	N.D.	
o-ethyltoluene	N.D.	N.D.	
1,2,4-trimethylbenzene	<0.1	N.D.	
n-decane	<0.1	N.D.	<0.1-0.1
1,2,3-trimethylbenzene	<0.1	N.D.	
m-diethylbenzene	<0.1	N.D.	
p-diethylbenzene	<0.1	N.D.	
n-undecane	<0.1	<0.1	<0.1
n-dodecane	<0.1	N.D.	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected

* NMOC consists mostly of ethane.

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

DISTI
 INVO
 LAP,
LABOR

WO #: 1600613



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: Mike Koch Date: 1/5/16 Time: 12:30

REQUESTED ANALYSIS: PAMS analysis

City/Location	Can#	Start day / time/ duration	Start vac	End vac
Highlands Community	54676	1-1-16/7:23/5 min	-30	-2
Highlands Community	54629	1-1-16/7:59/5 min	-30	-2
Highlands Community	54683	1-1-16/8:36/5 min	-30	-2
Highlands Community	54588	1-1-16/12:04/5 min	-30	0

Relinquished by	Received by	Firm/Agency	Date	Time
Mike Koch	<i>[Signature]</i>	SCAQMD Lab	1/6/16	10:55

Remarks: Samples collected by passive sampling via the XonTech 912 triggered by the Thermo 55i NMHC.
Trigger is set to 20ppm
Highlands community pool parking lot. Address: 12378 High Glen Way, Northridge CA 91326 (across from 12377)