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

SAMPLE DESCRIPTION:
Triggered Samples
Canisters: E3754 54686
54542 54538
54706

SAMPLE LOCATION:
Highlands Community
Pool Parking Lot

LABORATORY NO: 1603318

REFERENCE NO: GC6-3-73

DATE SAMPLED: 02/01/16 and 02/02/16

DATE RECEIVED: 02/02/16

DATE ANALYZED: 02/04/16

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

H:\Ambient VOCs\00toxPAMS\2016 PAMS\Special Projects\LN1603318_Gas_YS_RD

LAB NO: 1603318
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	02/01/16	02/02/16	
Canister	E3754	54542	
Sampling Location	**Highlands Community Pool Parking Lot**	**Highlands Community Pool Parking Lot**	**Ambient Air**
Total NMOC, ppbC	1980	2860	100-700 ppbC
Compound	**Conc. (ppbv)**	**Conc. (ppbv)**	**Conc. (ppbv)**
ethylene	0.1	0.3	0.7-4.1
acetylene	0.3	0.4	
propane	65	94	0.4-5.0
propylene	<0.1	0.1	0.2-0.7
isobutane	7.8	11	0.2-0.9
n-butane	9.1	13	0.3-1.7
1-butene	<0.1	<0.1	0.1-0.3
trans-2-butene	N.D.	<0.1	
cis-2-butene	<0.1	<0.1	
isopentane	3.0	5.1	
1-pentene	<0.1	<0.1	
n-pentane	11	13	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	0.2	0.3	
2,3-dimethylbutane	0.1	0.2	
2-methylpentane	0.5	0.7	
3-methylpentane	0.3	0.4	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.5	0.8	0.1-0.2
methylcyclopentane	0.5	0.7	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.3	0.4	0.1-0.5
cyclohexane	0.4	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	0.1	0.2	
n-heptane	0.2	0.3	0.1-0.2
methylcyclohexane	0.5	0.7	

LAB NO: 1603318
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	02/01/16	02/02/16	
Canister	E3754	54542	
Sampling Location	**Highlands Community Pool Parking Lot**	**Highlands Community Pool Parking Lot**	**Ambient Air**
Total NMOC, ppbC	1980	2860	100-700 ppbC
Compound	**Conc. (ppbv)**	**Conc. (ppbv)**	**Conc. (ppbv)**
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	1.0	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: 1603318
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	02/02/16	02/02/16	
Canister	54706	54686	
Sampling Location	**Highlands Community Pool Parking Lot**	**Highlands Community Pool Parking Lot**	**Ambient Air**
Total NMOC, ppbC	3090	3380	100-700 ppbC

Compound	**Conc. (ppbv)**	**Conc. (ppbv)**	**Conc. (ppbv)**
ethylene	0.2	0.2	0.7-4.1
acetylene	0.4	0.5	
propane	104	115	0.4-5.0
propylene	<0.1	<0.1	0.2-0.7
isobutane	12	14	0.2-0.9
n-butane	15	16	0.3-1.7
1-butene	0.1	0.2	0.1-0.3
trans-2-butene	N.D.	<0.1	
cis-2-butene	N.D.	<0.1	
isopentane	4.6	5.1	
1-pentene	<0.1	<0.1	
n-pentane	8.8	6.2	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	0.3	0.3	
2,3-dimethylbutane	0.2	0.2	
2-methylpentane	0.8	0.8	
3-methylpentane	0.5	0.5	
1-hexene	N.D.	N.D.	<0.1-0.1
n-hexane	0.8	0.9	0.1-0.2
methylcyclopentane	0.8	0.8	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.5	0.5	0.1-0.5
cyclohexane	0.7	0.8	
2-methylhexane	0.2	0.2	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	0.2	0.2	
2,2,4-trimethylpentane	0.2	0.2	
n-heptane	0.3	0.3	0.1-0.2
methylcyclohexane	0.7	0.8	

LAB NO: 1603318
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	02/02/16	02/02/16	
Canister	54706	54686	
Sampling Location	**Highlands Community Pool Parking Lot**	**Highlands Community Pool Parking Lot**	**Ambient Air**
Total NMOC, ppbC	3090	3380	100-700 ppbC
Compound	**Conc. (ppbv)**	**Conc. (ppbv)**	**Conc. (ppbv)**
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	1.0	0.9	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	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: 1603318
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	02/02/16	
Canister	54538	
Sampling Location	**Highlands Community Pool Parking Lot**	**Ambient Air**
Total NMOC, ppbC	1740	100-700 ppbC

Compound	**Conc. (ppbv)**	**Conc. (ppbv)**
ethylene	<0.1	0.7-4.1
acetylene	0.4	
propane	58	0.4-5.0
propylene	<0.1	0.2-0.7
isobutane	6.9	0.2-0.9
n-butane	8.1	0.3-1.7
1-butene	<0.1	0.1-0.3
trans-2-butene	<0.1	
cis-2-butene	N.D.	
isopentane	3.0	
1-pentene	<0.1	
n-pentane	8.5	0.1-0.6
isoprene	<0.1	
trans-2-pentene	N.D.	
cis-2-pentene	N.D.	
2,2-dimethylbutane	<0.1	
cyclopentane	0.2	
2,3-dimethylbutane	<0.1	
2-methylpentane	0.4	
3-methylpentane	0.3	
1-hexene	<0.1	<0.1-0.1
n-hexane	0.5	0.1-0.2
methylcyclopentane	0.4	
2,4-dimethylpentane	<0.1	
benzene	0.3	0.1-0.5
cyclohexane	0.4	
2-methylhexane	0.1	
2,3-dimethylpentane	<0.1	
3-methylhexane	0.1	
2,2,4-trimethylpentane	0.1	
n-heptane	0.2	0.1-0.2
methylcyclohexane	0.4	

LAB NO: 1603318
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	02/02/16	
Canister	54538	
Sampling Location	**Highlands Community Pool Parking Lot**	**Ambient Air**
Total NMOC, ppbC	1740	100-700 ppbC

Compound	**Conc. (ppbv)**	**Conc. (ppbv)**
2,3,4-trimethylpentane	<0.1	
toluene	0.9	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	0.1	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	N.D.	
m-ethyltoluene	<0.1	
p-ethyltoluene	<0.1	
1,3,5-trimethylbenzene	<0.1	
o-ethyltoluene	N.D.	
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

☒ DI
☐ IN
☐ L.
LAB

WO #: 1603318

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: 2/2/16

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: 2/2/16 Time: 12:00

REQUESTED ANALYSIS: PAMS analysis

City/Location	Can#	Start day / time/ duration	Start vac	End vac
Highlands Community	E3754	2-1-16 / 23:47 / 5 min	-30	-2"
Highlands Community	54542	2-2-16 / 00:44 / 5 min	-30	0
Highlands Community	54706	2-2-16 / 01:38 / 5 min	-30	-1.5
Highlands Community	54686	2-2-16 / 02:25 / 5 min	-30	0
Highlands Community	54538	2-2-16 / 03:49 / 5 min	-30	0

Relinquished by	Received by	Firm/Agency	Date	Time
		SCAQMD Lab	2-2-16	1700

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)