

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: 1602621

REFERENCE NO: GC6-3-72
01/22/16

SAMPLE DESCRIPTION:

Triggered Samples
Canisters: 54559 E3737
54693 54681
54060

DATE SAMPLED: and 01/23/16

DATE RECEIVED: 01/26/16

DATE ANALYZED: 01/28/16

SAMPLE LOCATION:

Castle Bay
Charter School

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: 2/2/16

Approved By: 

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

LAB NO: 1602621

Location: Castle Bay Charter School

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	01/22/16	01/22/16	
Canister	54559	54693	
Sampling Location	Castle Bay Charter School	Castle Bay Charter School	Ambient Air
Total NMOC, ppbC	1690	1340	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	1.5	1.3	0.7-4.1
acetylene	1.0	1.1	
propane	55	44	0.4-5.0
propylene	0.3	0.2	0.2-0.7
isobutane	7.0	5.7	0.2-0.9
n-butane	8.5	7.3	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	4.5	4.0	
1-pentene	<0.1	<0.1	
n-pentane	2.3	1.6	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	<0.1	<0.1	
cis-2-pentene	<0.1	N.D.	
2,2-dimethylbutane	0.1	0.1	
cyclopentane	0.2	0.2	
2,3-dimethylbutane	0.2	0.1	
2-methylpentane	0.6	0.5	
3-methylpentane	0.3	0.3	
1-hexene	<0.1	<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	0.4	0.4	0.1-0.5
cyclohexane	0.5	0.4	
2-methylhexane	0.1	0.1	
2,3-dimethylpentane	<0.1	<0.1	
3-methylhexane	0.2	0.1	
2,2,4-trimethylpentane	<0.1	0.1	
n-heptane	0.2	0.2	0.1-0.2
methylcyclohexane	0.5	0.4	

LAB NO: 1602621

Location: Castle Bay Charter School

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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	0.6	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	0.2	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	N.D.	<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: 1602621**Location: Castle Bay Charter School****ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS**

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

Sample Date	01/22/16	01/22/16	
Canister	54060	E3737	
Sampling Location	Castle Bay Charter School	Castle Bay Charter School	Ambient Air
Total NMOC, ppbC	1920	1690	100-700 ppbC
<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	1.6	2.0	0.7-4.1
acetylene	1.4	1.5	
propane	62	55	0.4-5.0
propylene	0.3	0.4	0.2-0.7
isobutane	8.0	7.4	0.2-0.9
n-butane	10	9.6	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	5.4	5.4	
1-pentene	<0.1	<0.1	
n-pentane	2.1	2.0	0.1-0.6
isoprene	<0.1	<0.1	
trans-2-pentene	<0.1	<0.1	
cis-2-pentene	<0.1	<0.1	
2,2-dimethylbutane	0.1	0.1	
cyclopentane	0.2	0.2	
2,3-dimethylbutane	0.2	0.2	
2-methylpentane	0.6	0.7	
3-methylpentane	0.4	0.4	
1-hexene	<0.1	<0.1	<0.1-0.1
n-hexane	0.6	0.6	0.1-0.2
methylcyclopentane	0.6	0.6	
2,4-dimethylpentane	<0.1	<0.1	
benzene	0.4	0.4	0.1-0.5
cyclohexane	0.5	0.5	
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	0.2	0.2	0.1-0.2
methylcyclohexane	0.5	0.5	

LAB NO: 1602621

Location: Castle Bay Charter School

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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	0.7	0.7	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	0.3	0.3	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

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

Sample Date	01/23/16	
Canister	54681	
Sampling Location	Castle Bay Charter School	Ambient Air
Total NMOC, ppbC	1200	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethylene	1.3	0.7-4.1
acetylene	1.1	
propane	39	0.4-5.0
propylene	0.2	0.2-0.7
isobutane	5.1	0.2-0.9
n-butane	6.6	0.3-1.7
1-butene	<0.1	0.1-0.3
trans-2-butene	<0.1	
cis-2-butene	<0.1	
isopentane	3.7	
1-pentene	<0.1	
n-pentane	1.4	0.1-0.6
isoprene	<0.1	
trans-2-pentene	<0.1	
cis-2-pentene	<0.1	
2,2-dimethylbutane	0.1	
cyclopentane	0.1	
2,3-dimethylbutane	0.1	
2-methylpentane	0.5	
3-methylpentane	0.3	
1-hexene	<0.1	<0.1-0.1
n-hexane	0.4	0.1-0.2
methylcyclopentane	0.4	
2,4-dimethylpentane	<0.1	
benzene	0.3	0.1-0.5
cyclohexane	0.3	
2-methylhexane	0.1	
2,3-dimethylpentane	0.1	
3-methylhexane	0.1	
2,2,4-trimethylpentane	0.2	
n-heptane	0.1	0.1-0.2
methylcyclohexane	0.3	

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Total NMOC, ppbC	1200	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
2,3,4-trimethylpentane	<0.1	
toluene	0.5	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

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N.D. = Not Detected

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

WO #: 1602621

- DIST
- INVO
- LAP /
- LABOR.



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: 1/26/15

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: Robert Wimmer Date: 1/24/16 Time: 16:00 pst

REQUESTED ANALYSIS: PAMS analysis

City/Location	Can#	Start day / time/ duration	Start vac	End vac
Castle Bay Charter School	54559	1/22/16 18:24 5 min	-30"	+1
Castle Bay Charter School	54693	1/22/16 19:12 5 min	-30"	0"
Castle Bay Charter School	54060	1/22/16 22:01 5 min	-30"	-1"
Castle Bay Charter School	E3737	1/22/16 23:05 5 min	-30"	-2"
Castle Bay Charter School	54681	1/23/16 01:27 5 min	-30"	-1"

Relinquished by	Received by	Firm/Agency	Date	Time
R. Wimmer	<i>Shirley Berberan</i>	SCAQMD Lab	1/26/16	12:20pm

Remarks: Samples collected by passive sampling via the XonTech 912 triggered by the Mocon NMHC.
Trigger is set to 20ppm
Castle Bay Charter School 19010 Castlebay Ln, Porter Ranch, CA 91326
GPS: 34.315022, -118.564872