

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

MONITORING & ANALYSIS
REPORT OF LABORATORY ANALYSIS


TO: Jason Low, Ph.D. Atmospheric Measurements Manager Science and Technology Advancement	LABORATORY NO: <u>1621608</u>
	REFERENCE NO: <u>GC6-121-106</u>
SAMPLE DESCRIPTION: Grab Sample Canister # 54633 54560	DATE SAMPLED: <u>08/03/16</u>
	DATE RECEIVED: <u>08/03/16</u>
	DATE ANALYZED: <u>08/03/16</u>
SAMPLE LOCATION: Firmin Drill Site 323 Firmin Street Los Angeles 90026	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: 8/9/16

Approved By: 

Solomon Teffera, Acting Sr. Manager
Laboratory Services Branch
(909) 396-2199

LAB NO: 1621608
Location: Firmin Drill Site

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	08/03/16	08/03/16	
Canister	54633	54560	
Sampling Location	Street Level	Backyard	Ambient Air
Total NMOC, ppbC	60	71	100-700 ppbC
<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethane	4.7	4.3	
ethylene	1.2	1.4	0.7-4.1
acetylene	0.8	0.8	
propane	1.6	1.8	0.4-5.0
propylene	0.4	0.4	0.2-0.7
isobutane	0.3	0.3	0.2-0.9
n-butane	0.5	0.5	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	1.3	1.6	
1-pentene	<0.1	<0.1	
n-pentane	0.3	0.3	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	<0.1	<0.1	
2,3-dimethylbutane	<0.1	<0.1	
2-methylpentane	0.2	0.2	
3-methylpentane	0.1	0.1	
1-hexene	<0.1	<0.1	<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	0.2	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	0.2	
n-heptane	<0.1	<0.1	0.1-0.2

LAB NO: 1621608
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<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
methylcyclohexane	<0.1	<0.1	
2,3,4-trimethylpentane	<0.1	<0.1	
toluene	0.3	0.4	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

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

DISTRICT
 INVOICE S
 LAP AUDI
LABORATO.

1621608



TO: SCAQMD LAB: OTHER: _____
 SOURCE NAME: Firmin Drill site I.D. No. _____
 Source Address: 323 Firmin Street City: Loa Angeles
 Mailing Address: _____ City: _____ Zip: 90026
 Contact Person: _____ Title: _____ Tel: _____

Analysis Requested by: Sumner Wilson Date: 08/3/2016
 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: 08/3/2016 Time: 07:36, 08:01

REQUESTED ANALYSIS: VOC - PAMS

City/Location	Can#	Start day / duration	Start vac	End vac
313 Firmin St (street level) 34.063844, -118.254611	54633	08-3-16 7:36 3 min	-30"	-1
*318 Firmin St(backyard of residence) 34.063750, -118.254247	54560	08-3-16 8:01 3 min	-30"	-1

Relinquished by	Received by	Firm/Agency	Date	Time
R Wimmer	<i>[Signature]</i>	SCAQMD Lab	8/3/2016	14:13

Remarks: Requested samples representing background levels. No drilling or diesel activity during sampling.
 *Can # 54560 taken at request of resident at 317 Firmin St due to slight petrol odor in area. However, no obvious source was visible during sampling.