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	LABORATORY NO:	1617210
	Science and Technology Advancement	REFERENCE NO:	GC6-121-101
SAM	PLE DESCRIPTION:	DATE SAMPLED:	06/20/16
	24 hour Sample Canister # E4300	DATE RECEIVED:	06/21/16
		DATE ANALYZED:	06/22/16
SAMPLE LOCATION: Castlebay Elementary 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: 6/24/16 Approved By:

Solomon Teffera, Acting Sr. Manager

Laboratory Services Branch

(909) 396-2199

LAB NO: 1617210 Location: Castlebay Elementary School

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Canister E4300 Ambient Air Total NMOC, ppbC 45 100-700 ppbC Compound Conc. (ppbv) Conc. (ppbv) ethylene 0.3 0.7-4.1 acetylene 0.2 0.2-0.7 propane 1.1 0.4-5.0 propylene <0.1 0.2-0.7 isobutane 0.2 0.2-0.7 n-butane 0.3 0.3-1.7 1-butene <0.1 0.1-0.3 trans-2-butene <0.1 0.1-0.3 isop-entane <0.1 0.1-0.3 isopentane <0.9 0.1-0.3 1-pentene <0.1 0.1-0.6 isopentane <0.9 0.1-0.6 isoprene <0.5 0.1-0.6 isoprene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 2,2-dimethylbutane	Sample Date	06/20/16	
Total NMOC, ppbC 45 100-700 ppbC Compound ethylene Conc. (ppbv) Conc. (ppbv) ethylene 0.3 0.7-4.1 acetylene 0.2 0.2-0.7 propane 1.1 0.4-5.0 propylene <0.1 0.2-0.7 isobutane 0.2 0.2-0.9 n-butane 0.3 0.3-1.7 1-butene <0.1 0.1-0.3 trans-2-butene <0.1 0.1-0.3 trans-2-butene <0.1 0.1-0.3 tras-2-butene <0.1 0.1-0.3 isopentane 0.9 1-pentene <0.1 n-pentane 0.2 0.1-0.6 isopentane 0.5 0.1-0.6 isoprene 0.5 0.1-0.6 trans-2-pentene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cy-2-dimethylbutane <0.1 0.1-0.6 cy-1-dimethylbutane <0.1 0.1-0.1 2,3-dimethylpentane <0.1 0.1-0.2 <	Canister	E4300	
Compound Conc. (ppbv) Conc. (ppbv) ethylene 0.3 0.7-4.1 acetylene 0.2 0.7-4.1 propane 1.1 0.4-5.0 propylene <0.1 0.2-0.7 isobutane 0.2 0.2-0.9 n-butane 0.3 0.3-1.7 1-butene <0.1 0.1-0.3 trans-2-butene <0.1 0.1-0.3 cis-2-butene <0.1 0.1-0.3 isopentane <0.1 0.1-0.3 1-pentene <0.1 0.1-0.3 1-pentene <0.1 0.1-0.3 1-pentene <0.1 0.1-0.6 isopentane <0.2 0.1-0.6 isoprene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cis-2-pentene <0.1 0.1-0.6 cy-2-diimethylbutane <0.1 0.1-0.6 cy-2-diimethylpentane <0.1 0.1-0.1 3-methylpentane	Sampling Location	Castlebay Elementary School	Ambient Air
ethylene	Total NMOC, ppbC	45	100-700 ppbC
acetylene propane propane propane propane	Compound		Conc. (ppbv)
Description	ethylene	0.3	0.7-4.1
Description	acetylene	0.2	
isobutane 0.2 0.2-0.9 n-butane 0.3 0.3-1.7 1-butene <0.1			0.4-5.0
n-butane 0.3 0.3-1.7 1-butene <0.1 0.1-0.3 trans-2-butene <0.1 cis-2-butene <0.1 isopentane 0.9 1-pentene 0.5 rrans-2-pentene 0.5 trans-2-pentene 0.5 trans-2-pentene <0.1 cis-2-pentene <0.1 cis-2-pentene 0.5 trans-2-pentene <0.1 2,2-dimethylbutane <0.1 2,2-dimethylbutane <0.1 2,3-dimethylbutane <0.1 2-methylpentane 0.1 3-methylpentane <0.1 1-hexane	propylene	<0.1	0.2-0.7
1-butene	isobutane		0.2-0.9
trans-2-butene	n-butane	0.3	0.3-1.7
cis-2-butene <0.1	1-butene	<0.1	0.1-0.3
isopentane 0.9 1-pentene <0.1	trans-2-butene	<0.1	
1-pentene <0.1	cis-2-butene	<0.1	
n-pentane 0.2 0.1-0.6 isoprene 0.5 1 trans-2-pentene <0.1	isopentane	0.9	
isoprene trans-2-pentene < 0.5 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 < 0.1 3-methylpentane < 0.1 1-hexene < 0.1 n-hexane < 0.1 2,4-dimethylpentane < 0.1 2-methylpentane < 0.1 2-methylhexane < 0.1 2-methylhexane < 0.1 2-methylhexane < 0.1 2-methylpentane < 0.1 3-methylpentane < 0.1 3-methylpentane < 0.1	1-pentene	<0.1	
trans-2-pentene	n-pentane	0.2	0.1-0.6
cis-2-pentene <0.1	isoprene	0.5	
2,2-dimethylbutane <0.1	trans-2-pentene	<0.1	
cyclopentane <0.1	cis-2-pentene	<0.1	
2,3-dimethylbutane <0.1	2,2-dimethylbutane	<0.1	
2-methylpentane <0.1	cyclopentane	<0.1	
3-methylpentane <0.1	2,3-dimethylbutane	<0.1	
1-hexene <0.1	2-methylpentane	<0.1	
n-hexane	3-methylpentane	<0.1	
methylcyclopentane <0.1	1-hexene	<0.1	<0.1-0.1
2,4-dimethylpentane <0.1	n-hexane	<0.1	0.1-0.2
benzene <0.1 0.1-0.5 cyclohexane <0.1 2-methylhexane <0.1 2,3-dimethylpentane <0.1 3-methylhexane <0.1 2,2,4-trimethylpentane <0.1 n-heptane <0.1 0.1-0.2	methylcyclopentane	<0.1	
cyclohexane <0.1	2,4-dimethylpentane	<0.1	
2-methylhexane <0.1	benzene	<0.1	0.1-0.5
2,3-dimethylpentane <0.1	cyclohexane	<0.1	
3-methylhexane <0.1 2,2,4-trimethylpentane <0.1 n-heptane <0.1 0.1-0.2	2-methylhexane	<0.1	
2,2,4-trimethylpentane <0.1 n-heptane <0.1 0.1-0.2	2,3-dimethylpentane	<0.1	
n-heptane <0.1 0.1-0.2	3-methylhexane	<0.1	
	2,2,4-trimethylpentane	<0.1	
	n-heptane	<0.1	0.1-0.2
methylcyclonexane <0.1	methylcyclohexane	<0.1	

<u>LAB NO: 1617210</u> <u>Location: Castlebay Elementary School</u>

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date	06/20/16	
Canister	E4300	
Sampling Location	Castlebay Elementary School	Ambient Air
Total NMOC, ppbC	45	100-700 ppbC
Compound	Conc. (ppbv)	Conc. (ppbv)
2,3,4-trimethylpentane	< 0.1	
toluene	0.1	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	<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

DIST
INVO
LAP
LABOR

WO #: 1617210



	OTHER:	L			
SOURCE NAME:	Southern Cali	fornia Gas Co	i.D. No	0.	
Source Address: 12801 Ta	ampa Ave		City:	Porter Ran	ch
Mailing Address:			City:	Zip:	91326
Contact Person:		Title:		Tel:	
Analysis Requested by:	Sumner V	Sumner Wilson		6/21/16	
Approved by: Jason	n Low Of	ffice:	1	Budget #:	44716
REASON REQUESTED: Suspected Violation				Hazardous/Toxi	
Sample Collected by:			6/21/16 PAMS analysis	Time:	1:25am
City/Location	Can#		/ time/ duration	Start vac	End Press
Porter Ranch / Castlebay E	lem E4300	6/20/16 / 00:00 / 24 hours		-30"	+15
Relinquished by	Received	by	Firm/Agency	Date	Time
Zhongian	TIV		SCAQMD Lab	6/24/16	14:42
emarks: 1:3 scheduled samples fro	om trailer at Castlebay				