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	LABORATORY NO:	1612413
	Atmospheric Measurements Manager Science and Technology Advancement	REFERENCE NO:	GC6-3-93
SAM	PLE DESCRIPTION:	DATE SAMPLED:	05/03/16
	24 hour Sample Canister # 54702	DATE RECEIVED:	05/04/16
		DATE ANALYZED:	05/05/16
SAM	PLE LOCATION:		
	Reseda Station	ANALYZED BY:	Yang Song
	18328 Gault St.		
	Los Angeles, CA 91335	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: Approved By:

Solomon Teffera, Acting Sr. Manager

Laboratory Services Branch

(909) 396-2199

LAB NO: 1612413 Location: Reseda Station

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

Sample Date

05/03/16

Compound ethylene Cone. (ppbv) Cone. (ppbv) ethylene 2.0 0.7-4. acetylene 1.6 0.7-4. propane 3.0 0.4-5. propylene 0.6 0.2-0. isobutane 0.6 0.2-0. n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene <0.1 0.1-0. cis-2-butene <0.1	Sample Date	05/03/16		
Compound ethylene Cone. (ppbv) Cone. (ppbv) ethylene 2.0 0.7-4. acetylene 1.6 0.7-4. propane 3.0 0.4-5. propylene 0.6 0.2-0. isobutane 0.6 0.2-0. n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene <0.1 0.1-0. cis-2-butene <0.1	Canister	54702		
Compound Conc. (ppbv) Conc. (ppbv) ethylene 2.0 0.7-4. acetylene 1.6 0.7-4. propane 3.0 0.4-5. propylene 0.6 0.2-0. isobutane 0.6 0.2-0. n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene <0.1 0.1-0. cis-2-butene <0.1 0.1-0. cis-2-butene <0.1 0.1-0. cis-2-butene <0.1 0.1-0. cis-2-butene <0.1 0.1-0. isopentane <0.1 0.1-0. rans-2-butene <0.1 0.1-0. isoprene <0.1 0.1-0. trans-2-pentene <0.1 0.1-0. cis-2-pentene <0.1 0.1-0. cis-2-pentene <0.1 0.1-0. cy-2-deimethylbutane <0.1 0.1 cy-3-dimethylpentane <0.1 <0.1-0. cy-dimethylpentane <td< th=""><th>Sampling Location</th><th>Reseda Station</th><th colspan="2">Ambient Air</th></td<>	Sampling Location	Reseda Station	Ambient Air	
ethylene	Total NMOC, ppbC	125	100-700 ppbC	
acetylene propane 3.0 0.4-5. propane 3.0 0.4-5. propylene 0.6 0.2-0. isobutane 0.6 0.2-0. n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene 0.1 isopentane 4.1 1-pentene 0.5 isopentane 0.5 isoprene 0.2 trans-2-pentene 0.2 trans-2-pentene 0.1 2,2-dimethylbutane 0.1 2,2-dimethylbutane 0.1 2-methylpentane 0.2 1-hexene 0.2 1-hexene 0.2 1-hexene 0.2 2,4-dimethylpentane 0.1 explicit of the state of the stat	Compound	Conc. (ppbv)	Conc. (ppbv)	
propane 3.0 0.4-5. propylene 0.6 0.2-0. isobutane 0.6 0.2-0. n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene <0.1	ethylene	2.0	0.7-4.1	
Description	acetylene	1.6		
isobutane 0.6 0.2-0. n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene <0.1		3.0	0.4-5.0	
n-butane 0.9 0.3-1. 1-butene 0.1 0.1-0. trans-2-butene <0.1	propylene	0.6	0.2-0.7	
1-butene trans-2-butene	isobutane	0.6	0.2-0.9	
trans-2-butene <0.1	n-butane	0.9	0.3-1.7	
cis-2-butene <0.1	1-butene	0.1	0.1-0.3	
1-pentene 4.1 1-pentene -0.1 -pentene -0.5 0.1-0.	trans-2-butene	< 0.1		
1-pentene <0.1	cis-2-butene	<0.1		
n-pentane 0.5 0.1-0. isoprene 0.2 0.2 trans-2-pentene <0.1	isopentane	4.1		
isoprene trans-2-pentene < 0.2 trans-2-pentene < 0.1 cis-2-pentene < 0.1	1-pentene	< 0.1		
trans-2-pentene	n-pentane	0.5	0.1-0.6	
cis-2-pentene <0.1	isoprene	0.2		
2,2-dimethylbutane <0.1	trans-2-pentene	<0.1		
cyclopentane <0.1	cis-2-pentene	< 0.1		
2,3-dimethylbutane 0.1 2-methylpentane 0.3 3-methylpentane 0.2 1-hexene <0.1	2,2-dimethylbutane	< 0.1		
2-methylpentane 0.3 3-methylpentane 0.2 1-hexene <0.1	cyclopentane	< 0.1		
3-methylpentane 0.2 1-hexene <0.1	2,3-dimethylbutane	0.1		
3-methylpentane 0.2 1-hexene <0.1		0.3		
n-hexane 0.2 0.1-0. methylcyclopentane 0.2 2,4-dimethylpentane 0.1 benzene 0.3 0.1-0. cyclohexane <0.1		0.2		
methylcyclopentane 0.2 2,4-dimethylpentane 0.1 benzene 0.3 0.1-0. cyclohexane <0.1	1-hexene	<0.1	< 0.1-0.1	
2,4-dimethylpentane 0.1 benzene 0.3 0.1-0. cyclohexane <0.1	n-hexane	0.2	0.1-0.2	
2,4-dimethylpentane 0.1 benzene 0.3 0.1-0. cyclohexane <0.1	methylcyclopentane	0.2		
cyclohexane <0.1		0.1		
2-methylhexane 0.1 2,3-dimethylpentane 0.1 3-methylhexane 0.1 2,2,4-trimethylpentane 0.3 n-heptane <0.1	benzene	0.3	0.1-0.5	
2,3-dimethylpentane 0.1 3-methylhexane 0.1 2,2,4-trimethylpentane 0.3 n-heptane <0.1	cyclohexane	< 0.1		
3-methylhexane 0.1 2,2,4-trimethylpentane 0.3 n-heptane <0.1 0.1-0.	2-methylhexane	0.1		
2,2,4-trimethylpentane 0.3 n-heptane <0.1 0.1-0.	7	0.1		
n-heptane <0.1 0.1-0.	3-methylhexane	0.1		
n-heptane <0.1 0.1-0.	•	0.3		
		< 0.1	0.1-0.2	
	methylcyclohexane	< 0.1		

LAB NO: 1612413 Location: Reseda Station

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

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

05/03/16

Sample Date	03/03/16			
Canister	54702			
Sampling Location	Reseda Station	Ambient Air		
Total NMOC, ppbC	125	100-700 ppbC		
C	Come (make)	Come (make)		
Compound	Conc. (ppbv)	Conc. (ppbv)		
2,3,4-trimethylpentane	<0.1			
toluene	0.7	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	0.3	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

Sample Date

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT SAMPLE ANALYSIS REQUEST

X	DIST
	INVO
	LAP
TΛ	ROD



TO: SCAQMD LAB:	\boxtimes	OTHER:				
SOURCE NAME:	Sou	thern California	Gas Co.	I.D. 1	No.	
Source Address: 128					Porter Ran	
					Zip:	91326
		Title:				
Analysis Requested by:		Sumner Wilson		Date:	5/4/16	
Approved by:	Jason Low	Office:			Budget #:	44716
REASON REQUESTED Suspected Violation	Court/Hea	ring Board	Permit Pendi	ng 🗌		
Sample Collected by:	Qian	Zhou I	Date:	5/4/16	_ Time:	10:15pm
	REQU	JESTED ANAL	YSIS: PAN	MS analysis		<u>C. Hull</u>
City/Location	n	Can# Sta	rt day / tim	e/ duration	Start vac	End Press
Reseda Station	n	54702 5/3	3/16 / 00:00	/ 24 hours	<-30"	+14
Relinquished by		Received by	Fi	rm/Agency	Date	Time
Zhongian	#	2	₹ SC	AQMD Lab	514/16	12:04