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

MONITORING & ANALYSIS REPORT OF LABORATORY ANALYSIS

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TO:	Jason Low, Ph.D.	LABORATORY NO:	1620110	
	Atmospheric Measurements Manager			
	Science and Technology Advancement	REFERENCE NO:	MSF-9-95	
SAM	PLE DESCRIPTION:	DATE SAMPLED:	07/15/16	
	Grab samples			
	Canister # 54534	DATE RECEIVED:	07/19/16	
	53392			
		DATE ANALYZED:	07/20/16	
SAM	PLE LOCATION:			
	Orphan Well Project	ANALYZED BY:	Yadira De Haro-Hammock	
	323 Firmin St.		1 N N N N N N N N N N N N N N N N N N N	
	Los Angeles, CA	REQUESTED BY:	Sumner Wilson	

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Qualitative Analysis and Quantitation of Toxic Organics by Gas Chromatography(GC) - Mass Spectrometry(MS) and Flame Ionization Detection(FID)

Note: See attached results.

Date Approved: 7/28/16

Approved By:

Solomon Teffera, Acting Sr. Manager

Laboratory Services Branch

(909) 396-2199

LAB NO: 1620110 Location: Orphan Well Project 323 Firmin St. Los Angeles, CA 90026

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ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Qualitative Analysis and Quantitation of Toxic Organics by Gas Chromatography(GC) - Mass Spectrometry(MS) and Flame Ionization Detection(FID)

Sample Date	7/15/2016	7/15/2016	
Canister	54534	53392	
Sampling time	8:01 AM	4:30 PM	
7 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Ambient Air
Total NMOC, ppbC	366	1111	100-700 ppbC
Compound	Conc. (ppbv)	Conc. (ppbv)	Conc. (ppbv)
ethanol	14	7.5	
vinyl chloride	0.3	0.5	
1,3-butadiene	0.4	0.6	
2-propenal (Acrolein)	1.1	2.9	
acetone	5.9	10	
methylene chloride	0.6	1.0	
methyl tert butyl ether	0.2	0.6	
2-butanone (MEK)	1.1	3.5	
chloroform	0.3	0.6	
1,2-dichloroethane	0.4	0.8	
benzene	0.8	0.9	0.1-0.5
carbon tetrachloride	0.4	0.7	
1,2-dichloropropane	0.4	0.7	
trichloroethylene	0.3	0.6	
toluene	1.2	1.7	0.1-0.6
1,2-dibromoethane	0.4	1.1	
tetrachloroethylene	5.8	2.6	
ethylbenzene	0.5	1.4	0.1-0.2
m+p-xylenes	1.5	3.0	0.1-0.2
styrene	0.5	1.7	< 0.1-0.2
o-xylene	0.4	1.4	0.1-0.2
1,4-dichlorobenzene	0.3	1.8	
1,2-dichlorobenzene	0.2	2.0	

LAB NO: 1620110

Location: Orphan Well Project 323 Firmin St. Los Angeles, CA 90026

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ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Qualitative Analysis and Quantitation of Toxic Organics by Gas Chromatography(GC) - Mass Spectrometry(MS) and Flame Ionization Detection(FID)

Sample Date	7/15/2016	7/15/2016	
Canister	54534	53392	
Sampling time	8:01 AM	4:30 PM	
			Ambient Air
Total NMOC, ppbC	366	1111	100-700 ppbC
Compound	Conc. (ppbv)	Conc. (ppbv)	Conc. (ppbv)
isoprene	< 0.1	0.4	
acetylene+ethylene	6.7	4.8	
ethane	7.2	3.7	
propylene	1.0	1.0	0.2-0.7
propane	3.4	1.3	0.4-5.0
isobutane	0.9	0.4	0.2-0.9
1-butene	0.2	< 0.1	0.1-0.3
n-butane	1.2	0.6	0.3-1.7
n-pentane	0.6	0.3	0.1-0.6
1-hexene	N.D.	< 0.1	< 0.1-0.1
n-hexane	0.6	0.8	0.1-0.2
n-heptane	0.3	0.7	0.1-0.2
n-octane	< 0.1	N.D.	<0.1-0.3
n-nonane	N.D.	N.D.	<0.1-0.1
n-decane	< 0.1	N.D.	<0.1-0.1
n-undecane	< 0.1	N.D.	<0.1

N.D.

N.D.

< 0.1

NMOC = Non-Methane Organic Compounds N.D. = Not Detected

n-dodecane

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT SAMPLE ANALYSIS REQUEST

DISTRIC	1620110
INVOIC	
LAP AU	11250 1121 2114 1121 1121 1121 1121 1121

OURCE NAME: Firmin Drill site				LABORAT	OK I NO	1010012
Analysis Requested by: Sumner Wilson Date: 07/19/2016 Approved by: Jason Low Office: Budget #: 44716 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill Suspected Violation Rule(s) REQUESTED ANALYSIS: VOC - PAMS City/Location Can# Start day / duration Start vac End Caty/Location Start vac End Caty/Location Start vac End Caty/Location Start vac End Caty/Location Can# Start day / duration Start vac End Caty/Location Can# Start day / duration Start vac End Caty/Location Can# Start day / duration Start vac End Caty/Location Caty/Location Can# Start day / duration Start vac End Caty/Location Caty/Location Start vac End Caty/Location Start vac End Caty/Location Start vac End Caty/Location Start vac End Caty/Location Caty/Location Start vac End Caty/Location Start vac En	O: SCAQMD LAB:	OTHER:				
Mailing Address: City: Zip: 900: Contact Person: Title: Tel: Analysis Requested by: Sumner Wilson Date: 07/19/2016 Approved by: Jason Low Office: Budget #: 44716 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill Suspected Violation Rule(s) REQUESTED ANALYSIS: VOC - PAMS City/Location Can# Start day / duration Start vac End Los Angeles/Firmin St Drill Site (near bore hole) Los Angeles/Firmin St Drill Site (near extracted earth) Site (near extracted earth) Received by Received by Firm/Agency Date Time Relinquished by Received by Firm/Agency Date Time Relinquished by Received by Firm/Agency Date Time	OURCE NAME: Firmin Dril		I.D. No.			
Contact Person:			ct City:			
Contact Person:	Mailing Address:		City:		Zip:	90026
Approved by: Jason Low Office: Budget #: 44716 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill Suspected Violation Rule(s) Sample Collected by: Robert Wimmer Date: 07/15/2016 Time: 08:01, 16:3 REQUESTED ANALYSIS: VOC - PAMS City/Location Can# Start day / duration Start vac End Los Angeles/Firmin St Drill Site (near bore hole) 54534 07-15-16 8:01 3 min -30" 0" Los Angeles/Firmin St Drill Site (near extracted earth) 53392 07-15-16 16:30 3 min -30" -9" Relinquished by Received by Firm/Agency Date Times						
REASON REQUESTED: Court/Hearing Board Rule(s) Other Hazardous/Toxic Spill Suspected Violation Rule(s) Other Market Permit Pending Hazardous/Toxic Spill Suspected Violation Rule(s) Other Market Permit Pending Hazardous/Toxic Spill Suspected Violation Parket Permit Pending Hazardous/Toxic Spill Suspected Violation Parket Permit Pending Hazardous/Toxic Spill Suspected Violation Parket Permit Pending Hazardous/Toxic Spill Site (Parket Parket P	Analysis Requested by:	Sumner Wilso	on D	ate:	07/19/201	16
Suspected Violation Rule(s) Other Requested Date: 07/15/2016 Time: 08:01, 16:30 REQUESTED ANALYSIS: VOC - PAMS City/Location Can# Start day / duration Start vac End Office (near bore hole) S4534 07-15-16 8:01 3 min -30" 0" Can# Start can office (near extracted earth) S3392 07-15-16 16:30 3 min -30" -30" -30" -30" -30" -30" -30" -30"	approved by: Jason Low	Office	:	Bud	lget #:	44716
REQUESTED ANALYSIS: VOC - PAMS City/Location Can# Start day / duration Start vac End						
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		53392	07-15-16 16:30 3 min		-30"	-9"
			- 194 - 194			
R Wimmer SCAQMD Lab 7-19-16 103(Relinquished by	Received by	Firm	n/Agency	Date	Time
	R Wimmer b	nha	SCA	QMD Lab 7	-19-16	1030
Remarks:	Jamaska.					