

MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

(Page 1 of 10)

To: Rafael Reynosa

Sr. Enforcement Manager

Compliance & Enforcement

Southern California Gas Company

1928901-01 to -03

Requested By

Laboratory No.

Thomas Lee

Rule No.

NA

Sampling Location

12801 Tampa Avenue Porter Ranch, CA 91326 ST No.

NA

Date Reviewed:

Date Approved:

16/22/10/9

Report Created

10/22/2019

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS) Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS) - Tentatively **Identified**

See attached results and sample information.

Reviewed By:

Stephen Dutz

Principal A.Q. Chemist **Laboratory Services**

Approved By:

Aaron Katzenstein, Ph.D.

Senior Manager **Laboratory Services** (909) 396-2219

Form 2.0



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01

Sample Description

SILCO Canister E5755, Gas sample from soil after fire was extinguished & cooled,

collected by Geosyntec

Extraction Comments

Sample diluted from can E5755 to E3758 (419x)

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Analyte, Unit	<u>Result</u>	<u>MDL</u>	MRL	Ambient Avg
1,1,1-Trichloroethane, ppbv	ND	42	42	« 0.1
1,1,2,2-Tetrachloroethane, ppbv	ND	42	42	<0.1
1,1,2-Trichloroethane, ppbv	, ND	42	42 .	<0.1
1,1-Dichloroethane, ppbv	ND	42	42	<0.1
1,1-Dichloroethylene, ppbv	, ND	42	42	
1,2,4-Trichlorobenzene, ppbv	AS	42	42	<0.1
1,2,4-Trimethylbenzene, ppbv	ND ·	, 42	42	0.1
1,2-Dibromoethane, ppbv	ND	42	42	
1,2-Dichlorobenzene, ppbv	ND	42	42	
1,2-Dichloroethane, ppbv	ND	42	42	
1,2-Dichloropropane, ppbv	ND	42	42	<0.1
1,3,5-Trimethylbenzene, ppbv	ND	42	42	0.1
1,3-Butadiene, ppbv	ND	42	42 ***	<0.1
1,3-Dichlorobenzene, ppbv	ND	42	42	
1,4-Dichlorobenzene, ppbv	PU ND	42	42	*
1,4-Dioxane, ppbv	ND	42	42	<0.1
2-Butanone (MEK), ppbv	ND	42	42	0.3
2-Hexanone (MBK), ppbv	ND	42	42	
2-Propegal, ppbv	ND	42	42	
Acetone, ppbv	BH	42	42	7.7
Benzene, ppbv	88	. 42	42	0.6
Benzyl chloride, ppbv	ND	42	42	<0.1
Bromodichloromethane, ppbv	ND	, 42	42	<0.1
Bromoform, ppbv	ND	42	42	<0.1
Bromomethane, ppbv	S E ND	42	42	<0.1
Carbon disulfide, ppbv	ND	42	42	<0.1
Carbon Tetrachloride, ppbv	ND	42	42	0.1
Chlorobenzene, ppbv .	ND	42	42	<0.1
Chloroethane, ppbv	, ND .	42	42	<0.1
Chloroform, ppbv	ND	42	42	<0.1



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01 - continued

Sample Description

SILCO Canister E5755, Gas sample from soil after fire was extinguished & cooled,

collected by Geosyntec

Extraction Comments

Sample diluted from can E5755 to E3758 (419x)

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Analyte, Unit	Result	MDL	MRL	Ambient Avg
Chloromethane, ppbv	ND	42	42	0.6
cis-1,2-Dichloroethylene, ppbv	ND	42	42	
cis-1,3-Dichloropropene, ppbv	ND	42	42	
Cyclohexane, ppbv	250	42	42	0.1
Dibromochloromethane, ppbv	ND	42	42	<0.1
Dichlorodifluoromethane (Freon 12), ppbv	ND	42	42	0.5
Dichlorotetrafluoroethane (Freon 114), ppbv	ND	42	42	<0.1
Ethanol, ppbv	AS	42	42	7.3
Ethyl Acetate, ppbv	AS	42	42	<0.1
Ethylbenzene, ppbv	ND	42	42	0.2
Hexachloro-1,3-butadiene, ppbv	AS	42	42.	
Isopropanol, ppbv	AS	42	42	
m+p-Xylene, ppbv	ND	42	42	0.6
Methyl Isobutyl Ketone (MIBK), ppbv	ND	42	42	
Methyl Methacrylate, ppbv	ND	42	42	<u> </u>
Methyl tert-Butyl Ether (MTBE), ppbv	ND	42	42	
Methylene Chloride, ppbv	ND	42	42	0.2
Naphthalene, ppbv	AS	42	42	
n-Heptane, ppbv	ND	42	42	0.2
n-Hexane, ppbv	84	42	42	0.1
o-Xylene, ppbv	ND	42	42	0.2
p-Ethyltoluene, ppbv	ND	42	42	
Propylene, ppbv	50	42	42	0.5
Styrene, ppbv	ND	42	42	0.1
Tetrachloroethylene, ppbv	ND	42	42	r
Tetrahydrofuran, ppbv	ND	42	42	<0.1
Toluene, ppbv	ND	42	42	1.6
trans-1,2-Dichloroethylene, ppbv	ND .	42	42	
trans-1,3-Dichloropropene, ppbv	ND	42	42	
Trichloroethylene, ppbv	ND	42	42	<0.2



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Laboratory No.

1928901-01 - continued

Sample Description

SILCO Canister E5755, Gas sample from soil after fire was extinguished & cooled,

collected by Geosyntec

Extraction Comments

Sample diluted from can E5755 to E3758 (419x)

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Analyte, Unit	Result	<u>MDL</u>	<u>MRL</u>	Ambient Avg	
Trichlorofluoromethane (Freon 11), ppbv	ND	42	42	0.2	
Trichlotrifluoroethane (Freon 113), ppbv	ND	42	42	0.1.	
Vinyl acetate, ppbv	AS	42	42	<0.1	
Vinyl chloride, ppbv	ND	. 42	42	<0.1	

^{*} J = Value is between method detection and reporting limits.



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01 - continued

Sample Description

SILCO Canister E5755, Gas sample from soil after fire was extinguished & cooled,

collected by Geosyntec

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS) - Tentatively Identified

-TENTATIVELY IDENTIFIED COMPOUNDS-CONCENTRATIONS ARE APPROXIMATED

Analyte, Unit	Result
Propane, ppbv	8300
C6 Hydrocarbon, ppbv	500
Pentane, ppbv	450
Pentane, 2-methyl-, ppby	250
Butane, 2,3-dimethyl-, p	v 560
Butane 2,2-dimethyl, ppl	340
Isopentane, ppbv	4100
Propane, 2,2-dimethyl, p	ov . 230
Isobutane, ppbv	9800
Butane, ppbv	3600

^{*}J = Value is between method detection and reporting limits.



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-03

Sample Description

Tedlar Bag VeriAir s/n 150788, Ambient air collected at foot of the hill/mountain

Extraction Comments

Sample diluted on Entech 3x

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Analyte, Unit	Result	<u>MDL</u>	<u>MRL</u>	Ambient Avg
1,1,1-Trichloroethane, ppbv	ND	0.3	0.3	0.1
1,1,2,2-Tetrachloroethane, ppbv	ND	0.3	0.3	<0.1
1,1,2-Trichloroethane, ppbv	ND	0.3	0.3	<0.1
1,1-Dichloroethane, ppbv	ND	0.3	0.3	<0.1
1,1-Dichloroethylene, ppbv	ND	0.3	0.3	
1,2,4-Trichlorobenzene, ppbv	AS	0.3	0.3	<0.1
1,2,4-Trimethylbenzene, ppbv	ND	0.3	0.3	0.1
1,2-Dibromoethane, ppbv	. ND	0.3	0.3	
1,2-Dichlorobenzene, ppbv	ND	0.3	0.3	
1,2-Dichloroethane, ppbv	ND	0.3	0.3	
1,2-Dichloropropane, ppbv	ND	0.3	0.3	<0.1
1,3,5-Trimethylbenzene, ppbv	ND	0.3	0.3	0.1
1,3-Butadiene, ppbv	ND	0.3	0.3	<0.1
1,3-Dichlorobenzene, ppbv	ND	0.3	0.3	
1,4-Dichlorobenzene, ppbv	ND	0.3	0.3	
1,4-Dioxane, ppbv	ND	. 0.3	0.3	<0.1
2-Butanone (MEK), ppbv	0.9	0.3	0.3	0.3
2-Hexanone (MBK), ppbv	ND	0.3	0.3	
2-Propenal, ppbv	1.9	0.3	0.3	
Acetone, ppbv	15 (EH)	0.3	0.3	7.7
Benzene, ppbv	0.4	0.3	0.3	0.6
Benzyl chloride, ppbv	ND	0.3	0.3	<0.1
Bromodichloromethane, ppbv	ND	0.3	0.3	<0.1
Bromoform, ppbv	ND	0.3	0.3	<0.1
Bromomethane, ppbv	ND	0.3	0.3	<0.1
Carbon disulfide, ppbv	ND	0.3	0.3	<0.1
Carbon Tetrachloride, ppbv	ND	0.3	0.3	0.1
Chlorobenzene, ppbv	ND	0.3	0.3	<0.1
Chloroethane, ppbv	ND	0.3	0.3	<0.1
Chloroform, ppbv	ND	0.3	0.3	<0.1
Chloromethane, ppbv	0.7	0.3	0.3	0.6



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-03 - continued

Sample Description

Tedlar Bag VeriAir s/n 150788, Ambient air collected at foot of the hill/mountain

Extraction Comments

Sample diluted on Entech 3x

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Analyte, Unit	Result	$\underline{\mathbf{MDL}}$	MRL	Ambient Avg
cis-1,2-Dichloroethylene, ppbv	ND	0.3	0.3	
cis-1,3-Dichloropropene, ppbv	ND	0.3	0.3	-,
Cyclohexane, ppbv	ND	0.3	0.3	0.1
Dibromochloromethane, ppbv	ND	0.3	0.3	<0.1
Dichlorodifluoromethane (Freon 12), ppbv	0.4	0.3	0.3	0.5
Dichlorotetrafluoroethane (Freon 114), ppbv	ND	0.3	0.3	<0.1
Ethanol, ppbv	370 (LJ)	0.3	0.3	7.3
Ethyl Acetate, ppbv	AS	0.3	0.3	<0.1
Ethylbenzene, ppbv	ND	0,3	0.3	0.2
Hexachloro-1,3-butadiene, ppbv	AS	0.3	0.3	
Isopropanol, ppbv	AS	0.3	0.3	······································
m+p-Xylene, ppbv	0.3	0.3	0.3	0.6
Methyl Isobutyl Ketone (MIBK), ppbv	0.3	0.3	0.3	
Methyl Methacrylate, ppbv	ND	0.3	0.3	
Methyl tert-Butyl Ether (MTBE), ppbv	ND	0.3	0.3	
Methylene Chloride, ppbv	0.3	0.3	0.3	0.2
Naphthalene, ppbv	AS	0.3	0.3	
n-Heptane, ppbv	ND	0.3	0.3	0.2
n-Hexane, ppbv	0.4	0.3	0.3	0.1
o-Xylene, ppbv	ND	0.3	0.3	0.2
p-Ethyltoluene, ppbv	ND	0.3	0.3	
Propylene, ppbv	0.4	0.3	0.3	0.5
Styrene, ppbv	ND	0.3	0.3	0.1
Tetrachloroethylene, ppbv	ND -	0.3	0.3	
Tetrahydrofuran, ppbv	ND	0.3	0.3	<0.1
Toluene, ppbv	0.6	0.3	0.3	1.6
trans-1,2-Dichloroethylene, ppbv	ND	0.3	0.3	
trans-1,3-Dichloropropene, ppbv	ND	0.3	0.3	
Trichloroethylene, ppbv	ND	0.3	0.3	<0.2
Trichlorofluoromethane (Freon 11), ppbv	ND	0.3	0.3	0.2
Trichlotrifluoroethane (Freon 113), ppbv	ND	0.3	0.3	0.1



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-03 - continued

Sample Description

Tedlar Bag VeriAir s/n 150788, Ambient air collected at foot of the hill/mountain

Extraction Comments

Sample diluted on Entech 3x

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Analyte, Unit	Result	<u>MDL</u>	MRL	Ambient Avg
Vinyl acetate, ppbv	AS	0.3	0.3	<0.1
Vinyl chloride, ppbv	ND	0.3	0.3	<0.1



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-03 - continued

Sample Description

Tedlar Bag VeriAir s/n 150788, Ambient air collected at foot of the hill/mountain

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/17/2019

Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS) - Tentatively Identified

-TENTATIVELY IDENTIFIED COMPOUNDS-CONCENTRATIONS ARE APPROXIMATED

Analyte, Unit	<u>Result</u>	
C9 hydrocarbon, ppbv	9.2	
N,N-Dimethylacetamide, ppbv	22	
Phenol, ppbv	5.8	
C12 Hydrocarbon, ppbv	12	

^{*}J = Value is between method detection and reporting limits.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT SAMPLE ANALYSIS REQUEST

\boxtimes	DISTRICT INFORMATION
	INVOICE SOURCE
LA	BORATORY NO.192890

TO: SCAQMD LAB:	X OTHER:		,-		
SOURCE NAME:	So Cal Gas (Aliso Canyo	on Soil Flame)	I.D. No.	_	
Source Address:	12801 Tampa Ave	· Ci	ty: No	rthridge	
Mailing Address: ~	12801 Tampa Ave			Zip: 91326	
Contact Person:	Uliana Micovic Tit	le: Prin. Env. Special	st Tel:	818-701-3499	
Analysis Requested by:	Thomas Lee	Date:	10/16/2019)	
Approved by:	Rafael Office: Reynosa AQMD Emergen Response	•	Budget #		
REASON REQUESTED:	Court/Hearing Board	Permit Pending	Hazardous/T	oxic Spill	
Suspected Violation	Rule(s)	Other [
Sample Collected by: Thomas Lee & Ryan Gray Date: 10/15/2019 Time: 1238 – 1611 (Geosyntec) hours					
[1928901-01] – E5755: Gas sample from soil after fire was extinguished & cooled, collected by Ryan Gray with Geosyntec @ 1608 hours [1928901-02] – VeriAir s/n 150588: Gas sample from soil after fire was extinguished & cooled, collected by Ryan Gray with Geosyntec @ 1611 hours [1928901-03] – VeriAir s/n 150788: Ambient Air collected at the foot of the hill/mountain side by Thomas Lee, South Coast AQMD @ 1238 hours					
Analysis Requested: TO-	15 - TICs				
Relinquished by	Received by	Firm/Agency	Date	Time	
Larry Israel	Heidee DeLa Cruz	South Coast AQMD	10/15/2019		
Heidee DeLa Cruz	Thomas Lee	South Coast AQMD	10/15/2019	1000 hrs	
Thomas Lee	Ryan Gray	Geosyntec	10/15/2019	1545 hrs	
Ryan Gray	Thomas Lee	South Coast AQMD	10/15/2019	1701 hrs	
Thomas Lee	Stephen Dutz	South Coast AQMD	10/16/2019	0850 hrs	
Remarks: Samples from the soil flame event after Saddle Ridge Fire.					

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MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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To: Rafael Reynosa

Sr. Enforcement Manager

Compliance & Enforcement

Laboratory No. 1928901-01 to -03

Requested By

Thomas Lee

Rule No.

NA

Sampling Location ST No.

Southern California Gas Company

12801 Tampa Avenue Porter Ranch, CA 91326 NA

Report Created 10/17/2019

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Percent hydrogen (H2), nitrogen (N2), oxygen (O2), and methane (CH4) by SCAQMD Method 10.1 (GC-TCD)

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

See attached results and sample information.

Comments: Samples from the soil flame event after Saddle Ridge Fire.

Comments: Blank subtraction performed for SCAOMD M25.1

Reviewed By:

Brad Parrack

Principal A.Q. Chemist Láboratory Services

Approved By:

Aaron Katzenstein, Ph.D.

Senior Manager **Laboratory Services** (909) 396-2219

Form 2.0

Date Reviewed:

Date Approved:



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01

Sample Description

SILCO Canister - E5755, Gas sample from soil after fire was extinguished & cooled,

collected by Geosyntec

Analysis Comments

Sample 1928901-01 analyzed on GC-TCD for helium, but no helium was detected.

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/16/2019

Percent hydrogen (H2), nitrogen (N2), oxygen (O2), and methane (CH4) by SCAQMD Method 10.1 (GC-TCD)

Analyte, Unit	Result	Dilution	MDL	MRL
H2, %	ND	1	0.2	2
O2, %	20.6	1	0.2	2
N2, %	77.2	1	0.2	2
CH4, %	0.8	1	0.2	2

Laboratory No.

1928901-01

Sample Description

SILCO Canister - E5755, Gas sample from soil after fire was extinguished &

cooled, collected by Geosyntec

Analysis Comments

Sample not analyzed in replicate.

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/16/2019

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

Analyte, Unit	Result	Dilution	MDL	MRL
CH4, ppmvC	8620	1	0.2	0.9
CO2, ppmvC	737	1	0.1	2
Ethane, ppmvC	371	1	0.2	1
NMNEOC, ppmvC	236	1	0.2	1



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-02

Sample Description

Tedlar Bag - VeriAir s/n 150588, Gas sample from soil after fire was extinguished &

cooled, collected by Geosyntec

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/16/2019

Percent hydrogen (H2), nitrogen (N2), oxygen (O2), and methane (CH4) by SCAQMD Method 10.1 (GC-TCD)

Analyte, Unit	Result	Dilution	MDL	MRL'
H2, %	ND	1	0.2	2
O2, %	20.8	1	0.2	2
N2, %	77.8	1	0.2	2
CH4, %	0.1	1	0.2	2

Laboratory No.

1928901-02

Sample Description

Tedlar Bag - VeriAir s/n 150588, Gas sample from soil after fire was extinguished &

cooled, collected by Geosyntec

Analysis Description

Sample not analyzed in replicate.

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/16/2019

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

Analyte, Unit		Result	Dilution	MDL	MRL
CH4, ppmvC		1230	1	0.2	0.9
CO2, ppmvC		555	1	0.1	2
Ethane, ppmvC	•	52	1	0.2	ľ
NMNEOC, ppmvC		32	1	0.2	1



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-03

Sample Description

Tedlar Bag - VeriAir s/n 150788, Ambient air collected at foot of the hill/mountain

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/16/2019

Percent hydrogen (H2), nitrogen (N2), oxygen (O2), and methane (CH4) by SCAQMD Method 10.1 (GC-TCD)

Analyte, Unit	Result	Dilution	MDL	MRL
H2, %	ND	1	0.2.	2
O2, %	20.8	1	0.2	2
N2, %	77.8	1	0.2	2
CH4, %	ND	1	0.2	2

Laboratory No.

1928901-03

Sample Description

Tedlar Bag - VeriAir s/n 150788, Ambient air collected at foot of the hill/mountain

Analysis Description

Sample not analyzed in replicate.

Sample Date 10/15/2019

Received Date 10/16/2019

Analyzed Date 10/16/2019

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

Analyte, Unit	Result	Dilution	MDL	MRL
CH4, ppmvC	$2^{^{\tau}}$	1	0.2	0.9
CO2, ppmvC	511	1	0.1	2
Ethane, ppmvC	ND	1	0.2	1
NMNEOC, ppmvC	2	1	0.2	1



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01 to -03

Percent hydrogen (H2), nitrogen (N2), oxygen (O2), and methane (CH4) by SCAQMD Method 10.1 (GC-TCD)

QUALITY CONTROL SUMMARY

CCV1 (CC122586)
Analyte, Unit
H2, %
O2, %
N2, %
CH4, %

Theoretical	Absolute Difference	40.5%
0.944	0.06	PASS
1.03	0.09	PASS
0.959	0.38	PASS
1.01	0.02	PASS
	0.944 1.03 0.959	Theoretical Difference 0.944 0.06 1.03 0.09 0.959 0.38

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA	NA NA	NA
24.96	24.63	0.33	PASS
5.13	4.93	0.20	PASS
NA	NA	NA	NA

CCV3 (FF130)
Analyte, Unit
H2, %
O2, %
N2, %
CH4, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA	NA	NA
1.10	0.997	0.10	PASS
94.38	93.9	0.48	PASS
NA_	NA	NA	NA

CCV4 (CC122586) Analyte, Unit
H2, %
O2, %
N2, %
CH4, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
1.01	0.944	0.07	PASS
1.06	1.03	0.03	PASS
1.09	0.959	0.13	PASS
0.98	1.01	0.03	PASS

CCV5 (CC/3109)
Analyte, Unit
H2, %
O2, %
N2, %
CH4, %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA	NA	NA
24.92	24.63	0.29	PASS
5.05	4.93	0.12	PASS
NA	NA	NA	NA



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01 to -03

Percent hydrogen (H2), nitrogen (N2), oxygen (O2), and methane (CH4) by SCAQMD Method 10.1 (GC-TCD)

QUALITY CONTROL SUMMARY

CCV6 (FF130)
Analyte, Unit
H2, %
O2, %
N2, %
CH4. %

Measured	Theoretical	Absolute Difference	QC Limit ±0.5%
NA	NA NA	NA	NA
1.20	0.997	0.20	PASS
94.32	93.9	0.42	PASS
NA	NA	NA	NA

REFERENCE NO.

B19J073



MONITORING AND ANALYSIS REPORT OF LABORATORY ANALYSIS

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Laboratory No.

1928901-01 to -03

Total Gaseous Non-Methane Non-Ethane Organic Carbon by SCAQMD Method 25.1 (GC-TCA)

QUALITY CONTROL SUMMARY

CCV1 (CC106783)			Percent	Absolute	QC Limit
Analyte, Unit	Measured	Theoretical	Error	Difference	±5% or ±1
CO, ppmvC	1.48	1.92	23.08	0.44	PASS
CH4, ppmvC	1.89	2.02	6.62	0.13	PASS
CO2, ppmvC	1.69	1.57	7.71	0.12	PASS
Ethane, ppmvC	1.96	2.03	3.45	0.07	PASS
NMNEOC, ppmvC	1.79	2.03	11.74	0.24	PASS
CCV2 (CC135067)	-		Percent	Absolute	QC Limit
Analyte, Unit	_Measured	Theoretical _	Error	<u>Difference</u>	<u>±5% or ±1</u>
CO, ppmvC	9958	10100	1.41	142.06	PASS
CH4, ppmvC	9811	9950	1.39	138.69	PASS
CO2, ppmvC	<u>9954</u>	10100	1.44	145.88	PASS_
Ethane, ppmvC	9793	9940	1.47	146.58	PASS
NMNEOC, ppmvC	9920	10000	0.80	80.18	PASS
CCV3 (CC106783)			Percent	Absolute	QC Limit
Analyte, Unit	Measured	Theoretical	Percent Error	Absolute Difference	QC Limit ±5% or ±1
Analyte, Unit CO, ppmvC	Measured 1.57	Theoretical			
Analyte, Unit			Error 18.40 6.62	Difference	±5% or ±1
Analyte, Unit CO, ppmvC	1.57	1.92	Error 18.40	Difference 0.35 -	±5% or ±1 PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC	1.57 1.89	1.92 2.02	Error 18.40 6.62	0.35 - 0.13	±5% or ±1 PASS PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC	1.57 1.89 1.51	1.92 2.02 1.57	Error 18.40 6.62 3.76	0.35 - 0.13 0.06	±5% or ±1 PASS PASS PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC NMNEOC, ppmvC CCV4 (CC135067)	1.57 1.89 1.51 2.01 1.81	1.92 2.02 1.57 2.03 2.03	Error 18.40 6.62 3.76 0.99 10.75 Percent	0.35 - 0.13 - 0.06 - 0.02 - 0.22 - Absolute	PASS PASS PASS PASS PASS PASS PASS PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC NMNEOC, ppmvC CCV4 (CC135067) Analyte, Unit	1.57 1.89 1.51 2.01 1.81	1.92 2.02 1.57 2.03 2.03 Theoretical	Error 18.40 6.62 3.76 0.99 10.75 Percent Error	0.35 - 0.13 0.06 0.02 0.22 Absolute Difference	+5% or +1 PASS PASS PASS PASS PASS PASS PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC NMNEOC, ppmvC CCV4 (CC135067)	1.57 1.89 1.51 2.01 1.81	1.92 2.02 1.57 2.03 2.03	Error 18.40 6.62 3.76 0.99 10.75 Percent	0.35 - 0.13 - 0.06 - 0.02 - 0.22 - Absolute	PASS PASS PASS PASS PASS PASS PASS PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC NMNEOC, ppmvC CCV4 (CC135067) Analyte, Unit	1.57 1.89 1.51 2.01 1.81	1.92 2.02 1.57 2.03 2.03 Theoretical	Error 18.40 6.62 3.76 0.99 10.75 Percent Error	0.35 - 0.13 0.06 0.02 0.22 Absolute Difference	±5% or ±1 PASS PASS PASS PASS PASS PASS QC Limit ±5% or ±1
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC NMNEOC, ppmvC CCV4 (CC135067) Analyte, Unit CO, ppmvC	1.57 1.89 1.51 2.01 1.81 Measured 9944	1.92 2.02 1.57 2.03 2.03 Theoretical 10100	Error 18.40 6.62 3.76 0.99 10.75 Percent Error 1.54	0.35 - 0.13 0.06 0.02 0.22 Absolute Difference 155.60	+5% or ±1 PASS PASS PASS PASS PASS PASS QC Limit ±5% or ±1 PASS
Analyte, Unit CO, ppmvC CH4, ppmvC CO2, ppmvC Ethane, ppmvC NMNEOC, ppmvC CCV4 (CC135067) Analyte, Unit CO, ppmvC CH4, ppmvC	1.57 1.89 1.51 2.01 1.81 Measured 9944 9807	1.92 2.02 1.57 2.03 2.03 Theoretical 10100 9950	Error 18.40 6.62 3.76 0.99 10.75 Percent Error 1.54 1.44	0.35 - 0.13 0.06 0.02 0.22 Absolute Difference 155.60 143.02	#5% or ±1 PASS PASS PASS PASS PASS PASS QC Limit ±5% or ±1 PASS PASS

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT SAMPLE ANALYSIS REQUEST

DISTRICT INFORMATION
INVOICE SOURCE
LABORATORY NO.192890

			ABUKATUKI	110.1720701
TO: SCAQMD LAB:	X OTHER:	<u> </u>	<u> </u>	<u></u>
SOURCE NAME:	So Cal Gas (Aliso Canyo	on Soil Flame)	I.D. No.	
Source Address:	12801 Tampa Ave	c	ity: N	lorthridge_
Mailing Address:	12801 Tampa Ave	City: No	rthridge	Zip: 91326
Contact Person:	Uliana Micovic Tit	le: Prin. Env. Specia	list Tel:	818-701-3499
Analysis Requested by:	Thomas Lee	 Date:	10/16/20	.10
i				119
Approved by:	Rafael Office: Reynosa AQMD Emergen Response	-	Budget #	
REASON REQUESTED:	Court/Hearing Board	Permit Pending	Hazardous	Toxic Spill
Suspected Violation	Rule(s)	Other		
				·
Sample Collected by:	Thomas Lee & Ryan G (Geosyntec)	ray Date: 10/15/20	19 Time:	1238 – 1611 hours
Specify the description a	nd location where the sam	ple was collected:		
[1928901-01] - E5755: Gas sample from soil after fire was extinguished & cooled, collected by Ryan Gray with Geosyntec @ 1608 hours [1928901-02] - VeriAir s/n 150588: Gas sample from soil after fire was extinguished & cooled, collected by				
Ryan Gray with Geosynt	ec @ 1611 hours		3	
[1928901-03] - VeriAir s/n 150788: Ambient Air collected at the foot of the hill/mountain side by Thomas Lee, South Coast AQMD @ 1238 hours				
Analysis Requested: TO-15 - TICs				
Relinquished by	Received by	Firm/Agency	Date	Time
Larry Israel	Heidee DeLa Cruz	South Coast AQMD	10/15/2019	
Heidee DeLa Cruz	Thomas Lee	South Coast AQMD	10/15/2019	1000 hrs
Thomas Lee	Ryan Gray	Geosyntec	10/15/2019	1545 hrs
Ryan Gray	Thomas Lee	South Coast AQMD	10/15/2019	1701 hrs
Thomas Lee	Stephen Dutz	South Coast AQMD	10/16/2019	0850 hrs
Remarks: Samples from the soil flame event after Saddle Ridge Fire.				