

Laboratory Analysis Report

CLIENT	: SCEC
PROJECT NO	: 160010
MATRIX	: AIR
UNITS	: PPB (v/v)

DATE RECEIVED DATE REPORTED

: 01/05/2016 : 01/08/2016

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AAC ID Date Sampled Date Analyzed Can Dilution Factor	P	Orter Ridge 160010-863 01/04/201 01/07/201 1.53	397 6	Sample Reporting Limit (SRL) (MRLxDF's)	St	arter Set Pre 160010-863 01/04/201 01/07/201 1.40	98 6	Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
	Result	Qualifier	Analysis DF	(minibility)	Result	Qualifier	Analysis DF	(MALLADI 3)	(WIKL)
Methane*	2330		1.0	765	2180	·	1.0	700	500
Benzene**	0.15	J	1.0	0.15	<srl< td=""><td>U</td><td>1.0</td><td>0.14</td><td>0.1</td></srl<>	U	1.0	0.14	0.1
Toluene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.70</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.70</td><td>0.5</td></srl<>	U	1.0	0.70	0.5
Ethylbenzene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.70</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.70</td><td>0.5</td></srl<>	U	1.0	0.70	0.5
m & p-Xylenes	<srl< td=""><td>U</td><td>1.0</td><td>1.53</td><td><srl< td=""><td>U</td><td>1.0</td><td>1.40</td><td>1.0</td></srl<></td></srl<>	U	1.0	1.53	<srl< td=""><td>U</td><td>1.0</td><td>1.40</td><td>1.0</td></srl<>	U	1.0	1.40	1.0
o-Xylene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>- U -</td><td>1.0</td><td>0.70</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>- U -</td><td>1.0</td><td>0.70</td><td>0.5</td></srl<>	- U -	1.0	0.70	0.5
BFB-Surrogate Std. % Recovery		101%				103%			70-130%

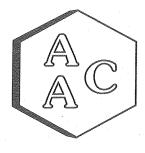
U - Compound was analyzed for, but was not detected at or above the SRL.

J - Analyte was detected. However the analyte concentration is an estimated value. ** - Benzene is being reported down to MDL reporting limits.

* - Results from EPA Method 18 modified analysis on 01/05/2016 and 01/06/2016.

Marcús Hueppe Laboratory Director

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Laboratory Analysis Report

CLIENT PROJECT NO : SCEC : 160010 MATRIX : AIR UNITS : PPB (v/v)

DATE RECEIVED DATE REPORTED : 01/05/2016 : 01/08/2016

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AAC ID Date Sampled Date Analyzed Can Dilution Factor	Castle	bay Element 160010-863 01/04/201 01/07/201 1.52	99 6 6	Sample Reporting Limit (SRL) (MRLxDF's)		Highlands 160010-864 01/04/201 01/07/201 1.39	100 6 6	Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Methane*	2290	1	1.0	761	2240		1.0	693	500
Benzene**	<srl< td=""><td>U</td><td>1.0</td><td>0.15</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.14</td><td>0.1</td></srl<></td></srl<>	U	1.0	0.15	<srl< td=""><td>U</td><td>1.0</td><td>0.14</td><td>0.1</td></srl<>	U	1.0	0.14	0.1
Toluene	<srl< td=""><td>U</td><td>1,0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.69</td><td>0.5</td></srl<></td></srl<>	U	1,0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.69</td><td>0.5</td></srl<>	U	1.0	0.69	0.5
Ethylbenzene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.69</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.69</td><td>0.5</td></srl<>	U	1.0	0.69	0.5
m & p-Xylenes	<srl< td=""><td>U</td><td>1.0</td><td>1.52</td><td><srl< td=""><td>U</td><td>1.0</td><td>1.39</td><td>1.0</td></srl<></td></srl<>	U	1.0	1.52	<srl< td=""><td>U</td><td>1.0</td><td>1.39</td><td>1.0</td></srl<>	U	1.0	1.39	1.0
o-Xylene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.69</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.69</td><td>0.5</td></srl<>	U	1.0	0.69	0.5
BFB-Surrogate Std. % Recovery		100%				100%			70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.

J - Analyte was detected. However the analyte concentration is an estimated value. ** - Benzene is being reported down to MDL reporting limits.

* - Results from EPA Method 18 modified analysis on 01/05/2016 and 01/06/2016.

Marcus Hueppe

Laboratory Director





Laboratory Analysis Report

: SCEC CLIENT PROJECT NO MATRIX : 160010 : AIR UNITS : PPB (v/v) DATE RECEIVED DATE REPORTED : 01/05/2016 : 01/08/2016

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AAC ID Date Sampled Date Analyzed Can Dilution Factor	Porter R Result	anch Comm 160010-864 01/04/2010 01/07/2010 1.51 Qualifier	6	Sample Reporting Limit (SRL) (MRLxDF's)	Ho Result	lleigh Bernso 160010-864 01/04/201 01/07/201 1.48 Qualifier	02 6	Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
Methane*	2380		1.0	755	2270		1.0	739	500
Benzene**	<srl< td=""><td>U</td><td>1.0</td><td>0.15</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.15</td><td>0.1</td></srl<></td></srl<>	U	1.0	0.15	<srl< td=""><td>U</td><td>1.0</td><td>0.15</td><td>0.1</td></srl<>	U	1.0	0.15	0.1
Toluene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.74</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.74</td><td>0.5</td></srl<>	U	1.0	0.74	0.5
Ethylbenzene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.74</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.74</td><td>0.5</td></srl<>	U	1.0	0.74	0.5
m & p-Xylenes	<srl< td=""><td>U</td><td>1.0</td><td>1.51</td><td><srl< td=""><td>U</td><td>1.0</td><td>1.48</td><td>1.0</td></srl<></td></srl<>	U	1.0	1.51	<srl< td=""><td>U</td><td>1.0</td><td>1.48</td><td>1.0</td></srl<>	U	1.0	1.48	1.0
o-Xylene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.74</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.74</td><td>0.5</td></srl<>	U	1.0	0.74	0.5
BFB-Surrogate Std. % Recovery		102%				101%			70-130%

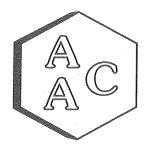
U - Compound was analyzed for, but was not detected at or above the SRL.

3 - Analyte was detected. However the analyte concentration is an estimated value.
** - Benzene is being reported down to MDL reporting limits.
* - Results from EPA Method 18 modified analysis on 01/05/2016 and 01/06/2016.

Bart Marcus Hueppe

Laboratory Director

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Laboratory Analysis Report

CLIENT PROJECT NO : SCEC MATRIX UNITS

: 160010 : AIR : PPB (v/v) DATE RECEIVED DATE REPORTED : 01/05/2016 : 01/08/2016

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AAC ID Date Sampled Date Analyzed Can Dilution Factor	Po	orter Ranch I 160010-864 01/04/201 01/07/201 1.52	03 6	Sample Reporting Limit (SRL) (MRLxDF's)		Highlands 160010-864 01/04/201 01/07/201 1.52	104 6 6	Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
	Result	Qualifier	Analysis DF		Result	Qualifier	Analysis DF		
Methane*	2330		1.0	762	2540		1.0	758	500
Benzene**	<srl< td=""><td>U</td><td>1.0</td><td>0.15</td><td>0.17</td><td>J</td><td>1.0</td><td>0.15</td><td>0.1</td></srl<>	U	1.0	0.15	0.17	J	1.0	0.15	0.1
Toluene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td>0.5</td></srl<>	U	1.0	0.76	0.5
Ethylbenzene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td>0.5</td></srl<>	U	1.0	0.76	0.5
m & p-Xylenes	<srl< td=""><td>U</td><td>1.0</td><td>1.52</td><td><srl< td=""><td>U</td><td>1.0</td><td>1.52</td><td>1.0</td></srl<></td></srl<>	U	1.0	1.52	<srl< td=""><td>U</td><td>1.0</td><td>1.52</td><td>1.0</td></srl<>	U	1.0	1.52	1.0
o-Xylene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td>0.5</td></srl<>	U	1.0	0.76	0.5
BFB-Surrogate Std. % Recovery		103%				105%			70-130%

U - Compound was analyzed for, but was not detected at or above the SRL.

J - Analyte was detected. However the analyte concentration is an estimated value. ** - Benzene is being reported down to MDL reporting limits.

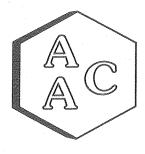
* - Results from EPA Method 18 modified analysis on 01/05/2016 and 01/06/2016.

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Laboratory Director

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Laboratory Analysis Report

: SCEC : 160010 CLIENT **PROJECT NO** MATRIX : AIR : PPB (v/v) UNITS

DATE RECEIVED DATE REPORTED : 01/05/2016 : 01/08/2016

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AACID Date Sampled Date Analyzed Can Dilution Factor	Por	ter Ranch E 160010-864 01/04/201 01/07/201 1.51	05 6	Sample Reporting Limit (SRL) (MRLxDF's)		Highlands 160010-864 01/04/201 01/07/201 1.62	06 6	Sample Reporting Limit (SRL) (MRLxDF's)	Method Reporting Limit (MRL)
Can Datation Pacion	Result	Qualifier	Analysis DF	(WIRLADE S)	Result	Qualifier	Analysis DF	, , , , , , , , , , , , , , , , , , ,	
Methane*	2560		1.0	756	2390		1.0	809	500
Benzene**	0.18	J	1.0	0.15	<srl< td=""><td>U</td><td>1.0</td><td>0.16</td><td>0.1</td></srl<>	U	1.0	0.16	0.1
Toluene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.81</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.81</td><td>0.5</td></srl<>	U	1.0	0.81	0.5
Ethylbenzene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td>U</td><td>1.0</td><td>0.81</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td>U</td><td>1.0</td><td>0.81</td><td>0.5</td></srl<>	U	1.0	0.81	0.5
m & p-Xylenes	<srl< td=""><td>U</td><td>1.0</td><td>1.51</td><td><srl< td=""><td>U</td><td>1.0</td><td>1.62</td><td>1.0</td></srl<></td></srl<>	U	1.0	1.51	<srl< td=""><td>U</td><td>1.0</td><td>1.62</td><td>1.0</td></srl<>	U	1.0	1.62	1.0
o-Xylene	<srl< td=""><td>U</td><td>1.0</td><td>0.76</td><td><srl< td=""><td><u> </u></td><td>1.0</td><td>0.81</td><td>0.5</td></srl<></td></srl<>	U	1.0	0.76	<srl< td=""><td><u> </u></td><td>1.0</td><td>0.81</td><td>0.5</td></srl<>	<u> </u>	1.0	0.81	0.5
BFB-Surrogate Std. % Recovery		103%				103%			70-130%

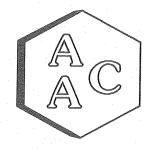
U - Compound was analyzed for, but was not detected at or above the SRL.

a - Analyte was detected. However the analyte concentration is an estimated value.
** - Benzene is being reported down to MDL reporting limits.
* - Results from EPA Method 18 modified analysis on 01/05/2016 and 01/06/2016.

Marcus Hueppe Laboratory Director

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LABORATORY ANALYSIS REPORT

CLIENT: SCECPROJECT NO. :160010MATRIX: AIRUNITS: ppbV

SAMPLING DATE : 01/04/2016 RECEIVING DATE : 01/05/2016 ANALYSIS DATE : 01/05/2016 REPORT DATE : 01/06/2016

Total Reduced Sulfur Compounds Analysis by SCAQMD 307.91

Client ID	Porter Ridge Park	Starter Set Preschool	Castlebay Elementary School	Highlands 2	Porter Ranch Community School	Holleigh Bernson Park
AACID	160010-86397	160010-86398	160010-86399	160010-86400	160010-86401	160010-86402
Canister Dil. Fac.	1.53	1.40	1.52	1.39	1.51	1.48
Analyte	Result	Result	Result	Result	Result	Result
Hydrogen Sulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Carbonyl Sulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Sulfur Dioxide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Methyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Ethyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Dimethyl Sulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Carbon Disulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Isopropyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
tert-Butyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
n-Propyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Methylethylsulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
sec-Butyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Thiophene	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
iso-Butyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Diethyl Sulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
n-Butyl Mercaptan	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Dimethyl Disulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
2-Methylthiophene	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
3-Methylthiophene	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Tetrahydrothiophene	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Bromothiophene	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Thiophenol	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Diethyl disulfide	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Total Unidentified Sulfur	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33
Total Reduced Sulfurs as HS	< 2.41	< 2.21	< 2.40	< 2.19	< 2.38	< 2.33

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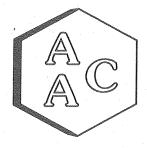
All compound's concentrations expressed in terms of [18 (TRS does not include COS and SQ)

Sample Detection Limit (SDL) is equal to Detection Limit (1.58 ppbV) x Canister Dil. Fac. x Analysis Dil. Fac.

Eter ll Marcus Hueppe

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Laboratory Director



LABORATORY ANALYSIS REPORT

CLIENT: SCECPROJECT NO. :160010MATRIX: AIRUNITS: ppbV

SAMPLING DATE : 01/04/2016 RECEIVING DATE : 01/05/2016 ANALYSIS DATE : 01/05/2016 REPORT DATE : 01/06/2016

Total Reduced Sulfur Compounds Analysis by SCAQMD 307.91

Client ID	Porter Ranch Estates	Highlands 1	Porter Ranch Estates 2	Highlands 3
AAC ID	160010-86403	160010-86404	160010-86405	160010-86406
Canister Dil. Fac.	1.52	1.52	1.51	1.62
Analyte	Result	Result	Result	Result
Hydrogen Sulfide	< 2.41	< 2.39	< 2.39	< 2.55
Carbonyl Sulfide	< 2.41	< 2.39	< 2.39	< 2.55
Sulfur Dioxide	< 2.41	< 2.39	< 2.39	< 2.55
Methyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
Ethyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
Dimethyl Sulfide	< 2.41	< 2.39	< 2.39	< 2.55
Carbon Disulfide	< 2.41	< 2.39	< 2.39	< 2.55
Isopropyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
tert-Butyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
n-Propyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
Methylethylsulfide	< 2.41	< 2.39	< 2.39	< 2.55
sec-Butyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
Thiophene	< 2.41	< 2.39	< 2.39	< 2.55
iso-Butyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
Diethyl Sulfide	< 2.41	< 2.39	< 2.39	< 2.55
n-Butyl Mercaptan	< 2.41	< 2.39	< 2.39	< 2.55
Dimethyl Disulfide	< 2.41	< 2.39	< 2.39	< 2.55
2-Methylthiophene	< 2.41	< 2.39	< 2.39	< 2.55
3-Methylthiophene	< 2.41	< 2.39	< 2.39	< 2.55
Tetrahydrothiophene	< 2.41	< 2.39	< 2.39	< 2.55
Bromothiophene	< 2.41	< 2.39	< 2.39	< 2.55
Thiophenol	< 2.41	< 2.39	< 2.39	< 2.55
Diethyl disulfide	< 2.41	< 2.39	< 2.39	< 2.55
Total Unidentified Sulfur	< 2.41	< 2.39	< 2.39	< 2.55
Total Reduced Sulfurs as HS	< 2.41	< 2.39	< 2.39	< 2.55

All compound's concentrations expressed in terms of 1\$ (TRS does not include COS and SQ)

Sample Detection Limit (SDL) is equal to Detection Limit (1.58 ppbV) x Canister Dil. Fac. x Analysis Dil. Fac.

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Laboratory Director

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Chain of Custody _____cord Analytical Services Request

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SCEC 1631 E. Saint Andrew Place Santa Ana, CA 92705 (714) 282-8240 phone, (714) 282-8247 fax

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Relinguishe	Relinquishe	Kelinquisne						10		0			6		10			#		Sample	Contact: F	Project Lo	Client/Proj
Relinguished by (Signature):	Relinquished by (Sisperture): ()	reminduished by (Sighama):						10 Highlands 3	9 Porter Ranch Estates 2	8 Highlands 1	7 Porter Ranch Estates	6 Holleigh Bernson Park	5 Porter Ranch Community School	4 Highlands 2	3 Castlebay Elementary School	2 Starter Set Preschool	Porter Ridge Park		Description		Contact: Rudy Nunez	Project Location: Aliso Canyon	Client/Project Name: So Cal Gas Company
Company	Company:				-			6									1-4-2016	Date		000000000	Sampler (Signature)		X
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Company:	Company.	Company:					-								Email data to: rnunez@montrose-env.com	SA	QAVQC DATA PACKAGE ON ALL	Re		Turnaround Time 24 Hour	Lab Phone No.: 805-650-1642	Lab Contact: Marcus Hueppe	Laboratory Name: Atmospheric Analysis and Consulting, Inc.
Date:	Date:	Date-/	j.												ez@montrose	SAMPLES	PACKAGE ON	Remarks:		Hour	-650-1642	s Hueppe	mospheric / nc.
Time:	Fime:	Time													}-env.com		J ALL						Analysis

Page 1



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

LABORATORY REPORT

January 6, 2016

Glenn La Fevers Southern California Gas Company 12801 Tampa Ave Northridge, CA 91326-1045

RE: So Cal Gas Company / 2045.1063

Dear Glenn:

Enclosed are the results of the samples submitted to our laboratory on January 4, 2016. For your reference, these analyses have been assigned our service request number P1600021.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at <u>www.alsglobal.com</u>. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 1:16 pm, Jan 06, 2016

Sue Anderson Project Manager



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

Client:Southern California Gas CompanyProject:So Cal Gas Company / 2045.1063

Service Request No: P1600021

CASE NARRATIVE

The samples were received intact under chain of custody on January 4, 2016 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

C1 through C6 Hydrocarbon and TGNMO Analysis

The samples were analyzed per modified EPA Method TO-3 for C1 through >C6 hydrocarbons and total gaseous non-methane organics as methane using a gas chromatograph equipped with a flame ionization detector (FID). This procedure is described in laboratory SOP VOA-TO3C1C6. This method is included on the laboratory's DoD-ELAP scope of accreditation, however it is not part of the NELAP or AIHA-LAP accreditation.

Sulfur Analysis

The samples were also analyzed for seven sulfur compounds and total reduced sulfur as hydrogen sulfide (TRS as H₂S) per ASTM D 5504-12 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan. The results for TRS as H₂S were determined by obtaining the total response for all chromatographic peaks and quantitating the value against the initial calibration curve for hydrogen sulfide thus generating a result specified as "Total Reduced Sulfur as Hydrogen Sulfide". This method is included on the laboratory's NELAP scope of accreditation, however it is not part of the DoD-ELAP or AIHA-LAP accreditation.

Volatile Organic Compound Analysis

The samples were also analyzed for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph/mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. According to the method, the use of Tedlar bags is considered a method modification. This



2655 Park Center Dr., Suite A Simi Valley, CA 93065 **T:** +1 805 526 7161 **F:** +1 805 526 7270 <u>www.alsglobal.com</u>

Client:Southern California Gas CompanyProject:So Cal Gas Company / 2045.1063

Service Request No: P1600021

CASE NARRATIVE

method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AIHA-LAP accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



2655 Park Center Dr., Suite A Simi Valley, CA 93065 **T:** +1 805 526 7161 **F:** +1 805 526 7270 <u>www.alsglobal.com</u>

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L15-398
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm_	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp- services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	977273
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaborat oryAccreditation/Pages/index.aspx	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413- 15-6
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA01627201 5-5
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at <u>www.alsglobal.com</u>, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

DETAIL SUMMARY REPORT

Client: Project ID:	Southern Califo So Cal Gas Con		· ·		Service Request: P1600021
Date Received: Time Received:	1/4/2016 22:00	iipairy / 20			Modified - C1C6+ Bag ID 5504-12 - Sulfur Bag 5 Modified - VOC Bags
			Date	Time	TO-3 Mc TO-15 M
Client Sample ID	Lab Code	Matrix	Collected	Collected	TO-1: TO-1:
SS-09	P1600021-001	Air	1/4/2016	16:52	X X X
SS-3H	P1600021-002	Air	1/4/2016	16:58	X X X
R-1	P1600021-003	Air	1/4/2016	17:14	X X X
SF-2/5	P1600021-004	Air	1/4/2016	17:24	X X X
SF-1	P1600021-005	Air	1/4/2016	17:30	X X X
P-40	P1600021-006	Air	1/4/2016	17:37	X X X
MA1-A	P1600021-007	Air	1/4/2016	17:50	X X X
T-3 Low Road	P1600021-008	Air	1/4/2016	17:58	X X X
T-3 High Road	P1600021-009	Air	1/4/2016	18:06	X X X

Chain of Custody Record Analytical Services Request

p1600021

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SCEC 1631 E. Saint Andrew Place Santa Ana, CA 92705 (714) 282-8240 phone, (714) 282-8247 fax

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i.,

Client Project Vanue, 20 Cal Gas Company Client Project Name, 2045, 1063 AMALYSES REQUESTED Jaboratory Name, ALB Project Location: Allso Carryon Samplagr (Signature) Contact: Routy Nunez Samplagr (Signature) Laboratory Name, ALB Contact: Rudy Nunez Samplagr (Signature) Samplagr (Signature) EPC (Contact Name, ALB Laboratory Name, ALB Contact: Rudy Nunez Samplagr (Signature) Samplagr (Signature) EPC (Contact Name, ALB Laboratory Name, ALB Contact: Rudy Nunez Samplagr (Signature) Samplagr (Signature) EPC (Contact Name, ALB Laboratory Name, ALB Contact: Rudy Nunez Samplagr (Signature) Samplagr (Signature) EPC (Contact Name, ALB Laboratory Name, ALB Contact: Rudy Nunez Samplagr (Signature) Samplagr (Signature) EPC (Contact Name, ALB EPC (Contact Name, ALB Samplagr (Signature) Decorption EPC (Contact Name, ALB EPC (Contact Name, ALB EPC (Contact Name, ALB Samplagr (Signature) EPC (Contact Name, ALB EPC (Contact Name, ALB EPC (Contact Name, ALB Samplagr (Signature) EPC (Contact Name, ALB EPC (Contact Name, ALB EPC (Contact Name, ALB												
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So Cal Gas Company Aliso Canyon 2045 1063 ALS REV 1 01042016 xls

Page 1

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ALS Environmental Sample Acceptance Check Form

Client:	Southern Calif	ornia Gas Company	Samb			Work order:	P1600021			
Project:	So Cal Gas Co	mpany / 2045.1063								
Sample((s) received on:	1/4/16]	Date opened:	1/4/16	by:	KKEL	PE	
<u>Note:</u> This	form is used for <u>all</u>	samples received by ALS.	The use of this for	orm for custody se	eals is strictly me	eant to indicate presen	ce/absence and n	iot as an ir	dication	of
compliance	or nonconformity.	Thermal preservation and	pH will only be e	valuated either at	the request of the	e client and/or as requ	ired by the metho	od/SOP.		
								Yes	<u>No</u>	<u>N/A</u>
1	Were sample	containers properly n	narked with cli	ient sample ID	?			X		
2	Did sample co	ontainers arrive in goo	od condition?					\times		
3	Were chain-of	f-custody papers used	and filled out	?				X		
4	Did sample co	ntainer labels and/or	tags agree wi	th custody pap	ers?			X		
5	Was sample v	olume received adequ	ate for analysi	is?				\times		
6	Are samples w	vithin specified holding	g times?					X		
7	Was proper te	mperature (thermal p	reservation) o	f cooler at rece	eipt adhered t	o?				X
8	Were custody	seals on outside of co	oler/Box/Con	tainer?					X	
		Location of seal(s)?					Sealing Lid?			X
	Were signature	e and date included?								X
	Were seals inta	act?								X
9	Do containe	rs have appropriate pr	eservation, a	ccording to me	thod/SOP or	Client specified i	nformation?			X
		nt indication that the s		•		Ĩ				X
		ials checked for prese	-							X
	Does the clien	t/method/SOP require	that the analy	st check the sa	mple pH and	if necessary alter	it?			X
10	Tubes:	Are the tubes capp	•		1 1	<u>/</u> _				X
11	Badges:	Are the badges pr								X
	0	Are dual bed badg			v capped and	intact?				X
Lab	Sample ID	Container	Required	Received	Adjusted	VOA Headspace		pt / Pres		1 I
		Description	pH *	pH	pH	(Presence/Absence)		Commer	nts	
P160002		5L tedlar bag								
P1600021-002.01 5L tedlar bag										
P1600021-003.01 5L tedlar bag										

Explain any discrepancies: (include lab sample ID numbers):

5L tedlar bag

P1600021-004.01

P1600021-005.01

P1600021-006.01

P1600021-007.01

P1600021-008.01

P1600021-009.01

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	Southern California Gas Company SS-09 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-001
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.8	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C ₆ + as n-Hexane	3.3	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	20	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	Southern California Gas Company SS-3H So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-002
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.3	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C ₆ + as n-Hexane	3.5	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	21	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID Client Project ID	Southern California Gas Company : R-1 : So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-003
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.1	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C ₄ as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C_6 + as n-Hexane	3.7	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	22	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	Southern California Gas Company SF-2/5 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-004
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.2	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C ₅ as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C ₆ + as n-Hexane	3.2	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	19	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	Southern California Gas Company SF-1 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-005
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	1.9	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C ₄ as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C_6 + as n-Hexane	2.2	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	13	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company P-40 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-006
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.2	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C ₄ as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C_6 + as n-Hexane	4.1	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	25	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company MA1-A So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-007	
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16	
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16	
Analyst:	Wade Henton	Date Analyzed: 1/5/16	
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)	

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.3	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C ₅ as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C ₆ + as n-Hexane	1.5	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	9.1	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company T-3 Low Road So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-008
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.0	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C ₅ as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C ₆ + as n-Hexane	2.2	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	13	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company T-3 High Road So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-009
Test Code:	EPA TO-3 Modified	Date Collected: 1/4/16
Instrument ID:	HP5890 II/GC8/FID	Date Received: 1/4/16
Analyst:	Wade Henton	Date Analyzed: 1/5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	2.2	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C_6 as n-Hexane	ND	0.50	
C_6 + as n-Hexane	2.8	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	17	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company Method Blank So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P160105-MB
Test Code:	EPA TO-3 Modified	Date Collected: NA
Instrument ID:	HP5890 II/GC8/FID	Date Received: NA
Analyst:	Wade Henton	Date Analyzed: 1/05/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed: 1.0 ml(s)

Compound	Result	MRL	Data
	ppmV	ppmV	Qualifier
Methane	ND	0.50	
C_2 as Ethane	ND	0.50	
C_3 as Propane	ND	0.50	
C_4 as n-Butane	ND	0.50	
C_5 as n-Pentane	ND	0.50	
C ₆ as n-Hexane	ND	0.50	
C ₆ + as n-Hexane	ND	0.50	
Total Gaseous Nonmethane Organics (TGNMO) as Methane	ND	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

LABORATORY CONTROL SAMPLE SUMMARY

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Client:	Southern California Gas Company
Client Sample ID:	Lab Control Sample
Client Project ID:	So Cal Gas Company / 2045.1063

ALS Project ID: P1600021	
ALS Sample ID: P160105-LCS	,

Test Code:	EPA TO-3 Modified	Date Collected: NA	
Instrument ID:	HP5890 II/GC8/FID	Date Received: NA	
Analyst:	Wade Henton	Date Analyzed: 1/05	5/16
Sampling Media:	5.0 L Tedlar Bag	Volume(s) Analyzed:	NA ml(s)
Test Notes:			

Compound	Spike Amount	Result	% Recovery	ALS Acceptance	Data
	ppmV	ppmV		Limits	Qualifier
Methane	1,020	931	91	83-107	
Ethane	1,010	1,010	100	77-111	
Propane	1,010	1,020	101	78-110	
n-Butane	1,010	1,020	101	73-109	
n-Pentane	1,010	1,100	109	75-115	
n-Hexane	1,020	1,150	113	73-121	

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company SS-09 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-001
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 16:52
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 10:21
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company SS-3H So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-002
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 16:58
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 10:58
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Client Sample ID: Client Project ID:	Southern California Gas Company R-1 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-003	
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16	
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 17:14	
Analyst:	Wade Henton	Date Received: 1/4/16	
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16	
Test Notes:		Time Analyzed: 12:40	
		Volume(s) Analyzed: 2.0 ml(s)	

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company SF-2/5 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-004
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 17:24
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 12:24
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company SF-1 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-005
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 17:30
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 12:08
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company P-40 So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-006
Test Code: Instrument ID: Analyst: Sample Type: Test Notes:	ASTM D 5504-12 Agilent 7890A/GC22/SCD Wade Henton 5.0 L Tedlar Bag	Date Collected: 1/4/16 Time Collected: 17:37 Date Received: 1/4/16 Date Analyzed: 1/5/16 Time Analyzed: 11:53 Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company MA1-A So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-007
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 17:50
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 11:37
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company T-3 Low Road So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-008
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 17:58
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 11:22
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company T-3 High Road So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P1600021-009
Test Code:	ASTM D 5504-12	Date Collected: 1/4/16
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: 18:06
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/5/16
Test Notes:		Time Analyzed: 10:37
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:Southern California Gas CompanyClient Project ID:So Cal Gas Company / 2045.1063

ALS Project ID: P1600021

Total Reduced Sulfur as Hydrogen Sulfide

Test Code:	ASTM D 5504-12	
Instrument ID:	Agilent 7890A/GC22/SCD	Date(s) Collected: 1/4/16
Analyst:	Wade Henton	Date Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag(s)	Date Analyzed: 1/5/16
Test Notes:		

		Injection				
Client Sample ID	ALS Sample ID	Volume	Time	Result	MRL	Data
		ml(s)	Analyzed	ppbV	ppbV	Qualifier
SS-09	P1600021-001	2.0	10:21	ND	5.0	
SS-3H	P1600021-002	2.0	10:58	ND	5.0	
R-1	P1600021-003	2.0	12:40	ND	5.0	
SF-2/5	P1600021-004	2.0	12:24	ND	5.0	
SF-1	P1600021-005	2.0	12:08	ND	5.0	
P-40	P1600021-006	2.0	11:53	ND	5.0	
MA1-A	P1600021-007	2.0	11:37	ND	5.0	
T-3 Low Road	P1600021-008	2.0	11:22	ND	5.0	
T-3 High Road	P1600021-009	2.0	10:37	ND	5.0	
Method Blank	P160105-MB	2.0	10:06	ND	5.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company Method Blank So Cal Gas Company / 2045.1063	ALS Project ID: P1600021 ALS Sample ID: P160105-MB
Test Code:	ASTM D 5504-12	Date Collected: NA
Instrument ID:	Agilent 7890A/GC22/SCD	Time Collected: NA
Analyst:	Wade Henton	Date Received: NA
Sample Type:	5.0 L Tedlar Bag	Date Analyzed: 1/05/16
Test Notes:		Time Analyzed: 10:06
		Volume(s) Analyzed: 2.0 ml(s)

CAS #	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	5.0	
74-93-1	Methyl Mercaptan	ND	2.5	
75-08-1	Ethyl Mercaptan	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
110-01-0	Tetrahydrothiophene	ND	2.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

LABORATORY CONTROL SAMPLE SUMMARY

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Client:	Southern California Gas Company
Client Sample ID:	Lab Control Sample
Client Project ID:	So Cal Gas Company / 2045.1063

ALS Project ID: P1600021 ALS Sample ID: P160105-LCS

Test Code:	ASTM D 5504-12	Date Collected: NA	
Instrument ID:	Agilent 7890A/GC22/SCD	Date Received: NA	
Analyst:	Wade Henton	Date Analyzed: 1/05/16	
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: NA ml(s)	
Test Notes:			

					ALS	
CAS #	Compound	Spike Amount	Result	% Recovery	Acceptance	Data
		ppbV	ppbV		Limits	Qualifier
7783-06-4	Hydrogen Sulfide	1,000	1,080	108	65-138	
463-58-1	Carbonyl Sulfide	1,000	1,070	107	60-135	
74-93-1	Methyl Mercaptan	1,000	1,010	101	57-140	

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	SS-09	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-001
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	0.53	0.31	
108-88-3	Toluene	1.4	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	SS-3H	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-002
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	R-1	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-003
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	SF-2/5	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-004
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	SF-1	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-005
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	P-40	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-006
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Southern California Gas Company		
MA1-A	ALS Project ID: P1600021	
So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-007	
EPA TO-15 Modified	Date Collected: 1/4/16	
Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16	
Simon Cao	Date Analyzed: 1/5/16	
5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)	
	MA1-A So Cal Gas Company / 2045.1063 EPA TO-15 Modified Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Simon Cao	

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client:	Southern California Gas Company	
Client Sample ID:	T-3 Low Road	ALS Project ID: P1600021
Client Project ID:	roject ID: So Cal Gas Company / 2045.1063 ALS Sample ID: P1600021-00	
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16
Analyst:	Simon Cao	Date Analyzed: 1/5/16
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)
Test Notes:		

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Southern California Gas Company		
T-3 High Road	ALS Project ID: P1600021	
So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-009	
EPA TO-15 Modified	Date Collected: 1/4/16	
Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16	
Simon Cao	Date Analyzed: 1/5/16	
5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)	
	T-3 High Road So Cal Gas Company / 2045.1063 EPA TO-15 Modified Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Simon Cao	

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.31	
108-88-3	Toluene	ND	1.3	
100-41-4	Ethylbenzene	ND	1.2	
179601-23-1	m,p-Xylenes	ND	1.2	
95-47-6	o-Xylene	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

RESULTS OF ANALYSIS

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Client: Client Sample ID: Client Project ID:	Southern California Gas Company Method Blank So Cal Gas Company / 2045.1063	ALS Project ID: P10 ALS Sample ID: P10	
Test Code:	EPA TO-15 Modified	Date Collected: NA	L .
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: NA	
Analyst:	Simon Cao	Date Analyzed: 1/5	/16
Sample Type: Test Notes:	5.0 L Tedlar Bag	Volume(s) Analyzed:	1.00 Liter(s)

CAS #	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	ND	0.031	
108-88-3	Toluene	ND	0.13	
100-41-4	Ethylbenzene	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.12	
95-47-6	o-Xylene	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

SURROGATE SPIKE RECOVERY RESULTS

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Client:Southern California Gas CompanyClient Project ID:So Cal Gas Company / 2045.1063

ALS Project ID: P1600021

Test Code:	EPA TO-15 Modified	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date(s) Collected: 1/4/16
Analyst:	Simon Cao	Date(s) Received: 1/4/16
Sample Type:	5.0 L Tedlar Bag(s)	Date(s) Analyzed: 1/5/16
Test Notes:		

		1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene		
Client Sample ID	ALS Sample ID	Percent	Percent	Percent	Acceptance	Data
		Recovered	Recovered	Recovered	Limits	Qualifier
Method Blank	P160105-MB	91	103	105	70-130	
Lab Control Sample	P160105-LCS	86	102	108	70-130	
SS-09	P1600021-001	87	107	114	70-130	
SS-3H	P1600021-002	83	107	115	70-130	
R-1	P1600021-003	86	105	116	70-130	
SF-2/5	P1600021-004	83	106	116	70-130	
SF-1	P1600021-005	83	106	116	70-130	
SF-1	P1600021-005DUP	86	106	116	70-130	
P-40	P1600021-006	83	107	117	70-130	
MA1-A	P1600021-007	83	107	116	70-130	
T-3 Low Road	P1600021-008	83	106	116	70-130	
T-3 High Road	P1600021-009	84	106	117	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY CONTROL SAMPLE SUMMARY

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Client:	Southern California Gas Company	
Client Sample ID:	Lab Control Sample	ALS Project ID: P1600021
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P160105-LCS
Test Code:	EPA TO-15 Modified	Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA		Date Received: NA
Analyst:	Analyst:Simon CaoDate Analyzed: 1/5/16	
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:		

				ALS			
CAS #	Compound	Spike Amount	Result	% Recovery	Acceptance	Data	
		ppbV	ppbV		Limits	Qualifier	
71-43-2	Benzene	70.8	59.2	84	61-110		
108-88-3	Toluene	57.9	50.0	86	67-117		
100-41-4	Ethylbenzene	50.2	44.7	89	69-123		
179601-23-1	m,p-Xylenes	98.6	87.4	89	67-125		
95-47-6	o-Xylene	48.4	42.2	87	67-124		

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result. Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

LABORATORY DUPLICATE SUMMARY RESULTS

Page 1 of 1

Client:	Southern California Gas Company		
Client Sample ID:	SF-1	ALS Project ID: P1600021	
Client Project ID:	So Cal Gas Company / 2045.1063	ALS Sample ID: P1600021-005DUP	
Test Code:	EPA TO-15 Modified	Date Collected: 1/4/16	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: 1/4/16	
Analyst:	Simon Cao	Date Analyzed: 1/5/16	
Sample Type:	5.0 L Tedlar Bag	Volume(s) Analyzed: 0.10 Liter(s)	
Test Notes:			

Compound	Sample Result ppbV	Duplicate Sample Result ppbV	Average	% RPD	RPD Limit	Data Qualifier
Benzene	ND	ND	-	-	25	
Toluene	ND	ND	-	-	25	
Ethylbenzene	ND	ND	-	-	25	
m,p-Xylenes	ND	ND	-	-	25	
o-Xylene	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.