

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 21, 2016

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

RE: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

Dear Glenn:

Enclosed are the results of the samples submitted to our laboratory on January 20, 2016. For your reference, these analyses have been assigned our service request number P1600262.

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 www.alsglobal.com. 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 12:13 pm. Jan 21, 2016

Sue Anderson Project Manager



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Client: Southern California Gas Company Service Request No: P1600262

Project: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

CASE NARRATIVE

The samples were received intact under chain of custody on January 20, 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.

Methane Analysis

The samples were analyzed per modified EPA Method TO-3 for 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 ten sulfur compounds 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. 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. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AlHA-LAP accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The canisters were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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.



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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/EnvironmentalLaboratoryAccreditation/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 www.alsglobal.com, 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

fied - C1C6+ Can 04-12 - Sulfur Can

Client: Southern California Gas Company Service Request: P1600262

Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

Date Received: 1/20/2016 Time Received: 09:19

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modii ASTM D 55 TO-15 - V(
AA-01-B-011916	P1600262-001	Air	1/19/2016	18:00	AS00935	-1.81	1.22	X X X
AA-02-B-011916	P1600262-002	Air	1/19/2016	18:49	AS00794	-2.34	1.13	X - X - X
AA-03-B-011916	P1600262-003	Air	1/19/2016	18:06	AS00903	-1.12	1.02	X - X - X
AA-04-B-011916	P1600262-004	Air	1/19/2016	19:20	AS00942	-1.52	1.20	X - X - X
AA-05-B-011916	P1600262-005	Air	1/19/2016	18:53	AS00901	-2.18	1.00	X - X - X
AA-06-B-011916	P1600262-006	Air	1/19/2016	19:02	AS00974	-1.57	1.22	X - X - X
SS-3H-B-011916	P1600262-007	Air	1/19/2016	17:53	AS00989	-4.25	1.36	X - X - X
SF-1-B-011916	P1600262-008	Air	1/19/2016	18:13	AS00939	-2.74	1.16	X - X - X
SF-2/5-B-011916	P1600262-009	Air	1/19/2016	18:24	AS00971	-3.44	1.18	X - X - X

Page 1 of 1

Air - Chain of Custody Record & Analytical Service Request

27: 2655 Park Center Drive, Suite A Simi Valley, California 93065 Phone (805) 526-7161 Fax (805) 526-7270

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*	- /Cak-C			1		Comment	e.g. Actual	Preservative	or specific	instructions												
	No.	7		hod					(Χ∃Τ	8) SI-O.	ι×	×	×	×	×	×	×	×	×		
	ALS Project No.		Sue Anderson	Analysis Method	זונטר	s pət	oələ H se	S) 2	¦1-4 ₹Τ΄,	220 ,	O MTS/	×	×	×	×	×	×	×	×	×	:	Circle) ABSENT
	e -Standard	ALS Contact:		An		ane	цэ	or îv	йb	əyib	om &-O]	×	×	×	×	×	×	×	×	×		Istody Seal: (Circle BROKEN ABS
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	ıys (Surcharge y (35%) 5 Day			NYON STATIO				0	1	ja di	Canister Start Pressure "Hg	30+	28.5	30	28	87	28.5	27.	87	BI		i.
	negulation of unaround 11me in Business Days (Surcharges) please circle (1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard		,	SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION				,		I for	Flow Controller ID (Bar code # - FC #)	SFC OUGHY	SFC00/25	SFC Ooodd	SFC 00 104	SF000077	SFC00079	SFC 000 C(SFC 80/53	SFC (261 14)	ės .	Yes) No Units:
i	Day (75%)		6	N CALIFORNIA	_	. # / Billing Information			& Sign)	is Lopez	Canister ID (Bar code # - AC, SC, etc.)	T	AS00744	AS00093	ASOOGHI	AS.00901	HE BOOSY	AS 004 89	ASCOC(39	AS00971		EDD required (Yes
	1 Day (100%)		Project Name	SOUTHER	Project Numbe 14424	P.O. # / Billing			Sampler (Print & Sign)	Sesus	Collection Vessel	Silonite Canister		ummaries) 0% Surcharge								
2000										i.	Collection	0000	184.5°	9081	1920	0649 1853	1902	0608	0290	1824		& Calibration S ion Package) 1
Dhono (805) 626 7164	Fax (805) 526-7270		irormation)				Fax	(714) 956-2350		Please see Kelly Horiuchi for distribution list	Collection Date	Start: 01/19/16 End: 01/19/16		Report Tier Levels - please select ccified) Tier III (Results + QC & Calibration Summaries)								
		() - () - ()	ess (Reporting III			:			porting	Kelly Horiuc	Laboratory ID Number		2	4	4	>	و	_	8	6	_	Report Tier L specified)
(ALS)	,	omply of amply monage	Company value & Address (Reporting Information)	AIRKINETICS, INC.	Anaheim, CA 92805	Project Manager SON BUI	Phone	(714) 254-1945	Email Address for Result Reporting	Please see	Client Sample ID	AA-01-B-011916	AA-02-B-011916	AA-03-B-011916	AA-04-B-011916	AA-05-B-011916	AA-06-B-011916	SS-3H-B-011916	SF-1-B-011916	SF-2/5-B-0,11916		Repor Tier I - Results (Default if not specified) Tier II (Results + QC Summaries)

Time:

Date: Date

Received by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Received by: (Signature)

Time:

Date:

ALS Environmental Sample Acceptance Check Form

Project:	SOUTHERN	Ifornia Gas Company I CALIFORNIA GAS	- ALISO CAN				P1600262			
Sample	(s) received or	n: <u>1/20/16</u>		-	Date opened:	1/20/16	by:	KKEL	PE	
		all samples received by ALS y. Thermal preservation and						od/SOP.		
1	_	e containers properly		ient sample ID	?			<u>Yes</u>	<u>No</u> □	<u>N/A</u> □
2	Did sample	containers arrive in go	ood condition?					X		
3	Were chain-	of-custody papers used	d and filled out	:?				X		
4	Did sample	container labels and/o	r tags agree wi	th custody par	ers?			X		
5	Was sample	volume received adeq	uate for analys	is?				X		
6	Are samples	within specified holding	ng times?					X		
7	Was proper t	temperature (thermal	preservation) o	of cooler at rec	eipt adhered	to?				X
8	Were custod	y seals on outside of c		tainer?			Sealing Lid?		×	
	Wara signatu	are and date included?					Scaling Liu!			X
	Were seals in									X
0		nact: iers have appropriate p	wagawyatian a	accerdina to m	othed/COD on	Client enecified in	farmation?			X
9		ent indication that the		Ü		Chefit specified if	normation?			X
		vials checked for prese	_		eserveu?					X
	·				1 77 1	· C 1.				X
10		ent/method/SOP require	-		ımpie pri and	ii necessary after	11.7			
10	Tubes:	Are the tubes cap	-							X
11	Badges:	Are the badges p Are dual bed bad			v canned and	intact?				\boxtimes
Lab	Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	_	pt / Pres	ervation	
P160026	2-001.01	6.0 L Silonite Can								
	2-002.01	6.0 L Silonite Can								
	2-003.01	6.0 L Silonite Can								
	2-004.01	6.0 L Silonite Can								
	2-005.01 2-006.01	6.0 L Silonite Can								
	2-000.01	6.0 L Silonite Can 6.0 L Silonite Can								
	2-008.01	6.0 L Silonite Can								
	2-009.01	6.0 L Silonite Can								
Explai	n any discrepan	cies: (include lab sample	ID numbers):							

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company ALS Project ID: P1600262

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

Methane

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID Date(s) Collected: 1/19/16
Analyst: Mike Conejo Date Received: 1/20/16
Sampling Media: 6.0 L Silonite Canister(s) Date Analyzed: 1/20/16

Test Notes:

Client Sample ID	ALS Sample ID	Canister Dilution Factor	Injection Volume ml(s)	Result ppmV	MRL ppmV	Data Qualifier
AA-01-B-011916	P1600262-001	1.24	1.0	3.7	0.62	
AA-02-B-011916	P1600262-002	1.28	1.0	3.5	0.64	
AA-03-B-011916	P1600262-003	1.16	1.0	3.4	0.58	
AA-04-B-011916	P1600262-004	1.21	1.0	3.5	0.61	
AA-05-B-011916	P1600262-005	1.25	1.0	4.7	0.63	
AA-06-B-011916	P1600262-006	1.21	1.0	3.2	0.61	
SS-3H-B-011916	P1600262-007	1.54	1.0	12	0.77	
SF-1-B-011916	P1600262-008	1.33	1.0	4.5	0.67	
SF-2/5-B-011916	P1600262-009	1.41	1.0	3.5	0.71	
Method Blank	P160120-MB	1.00	1.0	ND	0.50	

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

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: Lab Control Sample

ALS Project ID: P1600262

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

ALS Sample ID: P160120-LCS

Test Code: EPA TO-3 Modified Date Collected: NA
Instrument ID: HP5890 II/GC8/FID Date Received: NA
Analyst: Mike Conejo Date Analyzed: 1/20/16

Sampling Media: 6.0 L Silonite Canister Volume(s) Analyzed: NA ml(s)

Test Notes:

				ALS	
Compound	Spike Amount	Result	% Recovery	Acceptance	Data
	ppmV	ppmV		Limits	Qualifier
Methane	1.020	1.030	101	83-107	

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-01-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-001

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 18:00
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 10:20

Container ID: AS00935 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -1.81 Final Pressure (psig): 1.22

Canister Dilution Factor: 1.24

CAS#	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	6.2	
463-58-1	Carbonyl Sulfide	ND	6.2	
74-93-1	Methyl Mercaptan	ND	3.1	
75-08-1	Ethyl Mercaptan	ND	3.1	
75-18-3	Dimethyl Sulfide	ND	3.1	
75-15-0	Carbon Disulfide	ND	3.1	
75-33-2	Isopropyl Mercaptan	ND	3.1	
75-66-1	tert-Butyl Mercaptan	ND	3.1	
107-03-9	n-Propyl Mercaptan	ND	3.1	
110-01-0	Tetrahydrothiophene	ND	3.1	

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

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-02-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-002

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 18:49
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 10:31

Container ID: AS00794 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -2.34 Final Pressure (psig): 1.13

Canister Dilution Factor: 1.28

CAS#	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	6.4	
463-58-1	Carbonyl Sulfide	ND	6.4	
74-93-1	Methyl Mercaptan	ND	3.2	
75-08-1	Ethyl Mercaptan	ND	3.2	
75-18-3	Dimethyl Sulfide	ND	3.2	
75-15-0	Carbon Disulfide	ND	3.2	
75-33-2	Isopropyl Mercaptan	ND	3.2	
75-66-1	tert-Butyl Mercaptan	ND	3.2	
107-03-9	n-Propyl Mercaptan	ND	3.2	
110-01-0	Tetrahydrothiophene	ND	3.2	

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

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-03-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-003

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 18:06
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 10:43

Container ID: AS00903 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -1.12 Final Pressure (psig): 1.02

Canister Dilution Factor: 1.16

CAS#	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
7783-06-4	Hydrogen Sulfide	ND	5.8	
463-58-1	Carbonyl Sulfide	ND	5.8	
74-93-1	Methyl Mercaptan	ND	2.9	
75-08-1	Ethyl Mercaptan	ND	2.9	
75-18-3	Dimethyl Sulfide	ND	2.9	
75-15-0	Carbon Disulfide	ND	2.9	
75-33-2	Isopropyl Mercaptan	ND	2.9	
75-66-1	tert-Butyl Mercaptan	ND	2.9	
107-03-9	n-Propyl Mercaptan	ND	2.9	
110-01-0	Tetrahydrothiophene	ND	2.9	

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

RESULTS OF ANALYSIS Page 1 of 1

Southern California Gas Company

Client:

Client Sample ID: AA-04-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-004

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 19:20
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 10:54

Container ID: AS00942 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -1.52 Final Pressure (psig): 1.20

Canister Dilution Factor: 1.21

CAS#	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	6.1	-
463-58-1	Carbonyl Sulfide	ND	6.1	
74-93-1	Methyl Mercaptan	ND	3.0	
75-08-1	Ethyl Mercaptan	ND	3.0	
75-18-3	Dimethyl Sulfide	ND	3.0	
75-15-0	Carbon Disulfide	ND	3.0	
75-33-2	Isopropyl Mercaptan	ND	3.0	
75-66-1	tert-Butyl Mercaptan	ND	3.0	
107-03-9	n-Propyl Mercaptan	ND	3.0	
110-01-0	Tetrahydrothiophene	ND	3.0	

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

RESULTS OF ANALYSIS Page 1 of 1

Southern California Gas Company

Client:

Client Sample ID: AA-05-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-005

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 18:53
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 11:05

Container ID: AS00901 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -2.18 Final Pressure (psig): 1.00

Canister Dilution Factor: 1.25

CAS#	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	6.3	Quanner
463-58-1	Carbonyl Sulfide	ND	6.3	
74-93-1	Methyl Mercaptan	ND	3.1	
75-08-1	Ethyl Mercaptan	ND	3.1	
75-18-3	Dimethyl Sulfide	ND	3.1	
75-15-0	Carbon Disulfide	ND	3.1	
75-33-2	Isopropyl Mercaptan	ND	3.1	
75-66-1	tert-Butyl Mercaptan	ND	3.1	
107-03-9	n-Propyl Mercaptan	ND	3.1	
110-01-0	Tetrahydrothiophene	ND	3.1	

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

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-06-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-006

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 19:02
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister

Test Notes: Time Analyzed: 11:16

Container ID: AS00974 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -1.57 Final Pressure (psig): 1.22

Canister Dilution Factor: 1.21

CAS#	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	6.1	-
463-58-1	Carbonyl Sulfide	ND	6.1	
74-93-1	Methyl Mercaptan	ND	3.0	
75-08-1	Ethyl Mercaptan	ND	3.0	
75-18-3	Dimethyl Sulfide	ND	3.0	
75-15-0	Carbon Disulfide	ND	3.0	
75-33-2	Isopropyl Mercaptan	ND	3.0	
75-66-1	tert-Butyl Mercaptan	ND	3.0	
107-03-9	n-Propyl Mercaptan	ND	3.0	
110-01-0	Tetrahydrothiophene	ND	3.0	

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

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company

AS00989

Container ID:

Client Sample ID: SS-3H-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-007

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 17:53
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16

Test Notes: Time Analyzed: 11:27

Initial Pressure (psig): -4.25 Final Pressure (psig): 1.36

Canister Dilution Factor: 1.54

 $2.0 \, \text{ml(s)}$

Volume(s) Analyzed:

CAS#	Compound	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.7	
463-58-1	Carbonyl Sulfide	ND	7.7	
74-93-1	Methyl Mercaptan	ND	3.9	
75-08-1	Ethyl Mercaptan	ND	3.9	
75-18-3	Dimethyl Sulfide	ND	3.9	
75-15-0	Carbon Disulfide	ND	3.9	
75-33-2	Isopropyl Mercaptan	ND	3.9	
75-66-1	tert-Butyl Mercaptan	ND	3.9	
107-03-9	n-Propyl Mercaptan	ND	3.9	
110-01-0	Tetrahydrothiophene	ND	3.9	

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

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: SF-1-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-008

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 18:13
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 11:51

Container ID: AS00939 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -2.74 Final Pressure (psig): 1.16

Canister Dilution Factor: 1.33

CAS#	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
7783-06-4	Hydrogen Sulfide	ND	6.7	
463-58-1	Carbonyl Sulfide	ND	6.7	
74-93-1	Methyl Mercaptan	ND	3.3	
75-08-1	Ethyl Mercaptan	ND	3.3	
75-18-3	Dimethyl Sulfide	ND	3.3	
75-15-0	Carbon Disulfide	ND	3.3	
75-33-2	Isopropyl Mercaptan	ND	3.3	
75-66-1	tert-Butyl Mercaptan	ND	3.3	
107-03-9	n-Propyl Mercaptan	ND	3.3	
110-01-0	Tetrahydrothiophene	ND	3.3	

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

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: SF-2/5-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-009

Test Code: ASTM D 5504-12 Date Collected: 1/19/16
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: 18:24
Analyst: Mike Conejo Date Received: 1/20/16
Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 1/20/16

Container ID: AS00971 Volume(s) Analyzed: 2.0 ml(s)

Initial Pressure (psig): -3.44 Final Pressure (psig): 1.18

Canister Dilution Factor: 1.41

CAS#	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.1	
463-58-1	Carbonyl Sulfide	ND	7.1	
74-93-1	Methyl Mercaptan	ND	3.5	
75-08-1	Ethyl Mercaptan	ND	3.5	
75-18-3	Dimethyl Sulfide	ND	3.5	
75-15-0	Carbon Disulfide	ND	3.5	
75-33-2	Isopropyl Mercaptan	ND	3.5	
75-66-1	tert-Butyl Mercaptan	ND	3.5	
107-03-9	n-Propyl Mercaptan	ND	3.5	
110-01-0	Tetrahydrothiophene	ND	3.5	

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

RESULTS OF ANALYSIS Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: Method Blank

ALS Project ID: P1600262

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

ALS Sample ID: P160120-MB

Test Code: ASTM D 5504-12 Date Collected: NA
Instrument ID: Agilent 7890A/GC22/SCD Time Collected: NA
Analyst: Mike Conejo Date Received: NA

Sample Type: 6.0 L Silonite Canister Date Analyzed: 1/20/16
Test Notes: Time Analyzed: 07:29

Volume(s) Analyzed: 2.0 ml(s)

CAS#	Compound	Result	MRL	Data
		ppbV	ppbV	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	
75-18-3	Dimethyl Sulfide	ND	2.5	
75-15-0	Carbon Disulfide	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	2.5	
75-66-1	tert-Butyl Mercaptan	ND	2.5	
107-03-9	n-Propyl 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

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: Lab Control Sample

ALS Project ID: P1600262

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

ALS Sample ID: P160120-LCS

Test Code: ASTM D 5504-12 Date Collected: NA
Instrument ID: Agilent 7890A/GC22/SCD Date Received: NA
Analyst: Mike Conejo Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: NA ml(s)

Test Notes:

					ALS	
CAS#	Compound	Spike Amount	Result	% Recovery	Acceptance	Data
		ppbV	${f ppbV}$		Limits	Qualifier
7783-06-4	Hydrogen Sulfide	1,000	1,140	114	65-138	
463-58-1	Carbonyl Sulfide	1,000	1,040	104	60-135	
74-93-1	Methyl Mercantan	1.000	1.070	107	57-140	

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-01-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-001

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00935

Initial Pressure (psig): -1.81 Final Pressure (psig): 1.22

Canister Dilution Factor: 1.24

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.19	0.039	_
108-88-3	Toluene	0.31	0.16	
100-41-4	Ethylbenzene	ND	0.14	
179601-23-1	m,p-Xylenes	0.16	0.14	
95-47-6	o-Xylene	ND	0.14	

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

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-02-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-002

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00794

Initial Pressure (psig): -2.34 Final Pressure (psig): 1.13

Canister Dilution Factor: 1.28

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.22	0.040	_
108-88-3	Toluene	0.36	0.17	
100-41-4	Ethylbenzene	ND	0.15	
179601-23-1	m,p-Xylenes	0.19	0.15	
95-47-6	o-Xylene	ND	0.15	

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

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: AA-03-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-003

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00903

Initial Pressure (psig): -1.12 Final Pressure (psig): 1.02

Canister Dilution Factor: 1.16

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.22	0.036	_
108-88-3	Toluene	0.36	0.15	
100-41-4	Ethylbenzene	ND	0.13	
179601-23-1	m,p-Xylenes	0.18	0.13	
95-47-6	o-Xylene	ND	0.13	

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: AA-04-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-004

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00942

Initial Pressure (psig): -1.52 Final Pressure (psig): 1.20

Canister Dilution Factor: 1.21

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.26	0.038	_
108-88-3	Toluene	0.37	0.16	
100-41-4	Ethylbenzene	ND	0.14	
179601-23-1	m,p-Xylenes	0.18	0.14	
95-47-6	o-Xylene	ND	0.14	

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: AA-05-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-005

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00901

Initial Pressure (psig): -2.18 Final Pressure (psig): 1.00

Canister Dilution Factor: 1.25

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.21	0.039	_
108-88-3	Toluene	0.40	0.17	
100-41-4	Ethylbenzene	ND	0.14	
179601-23-1	m,p-Xylenes	0.20	0.14	
95-47-6	o-Xylene	ND	0.14	

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: AA-06-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-006

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00974

Initial Pressure (psig): -1.57 Final Pressure (psig): 1.22

Canister Dilution Factor: 1.21

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.22	0.038	
108-88-3	Toluene	0.39	0.16	
100-41-4	Ethylbenzene	ND	0.14	
179601-23-1	m,p-Xylenes	0.19	0.14	
95-47-6	o-Xylene	ND	0.14	

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-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-007

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00989

Initial Pressure (psig): -4.25 Final Pressure (psig): 1.36

Canister Dilution Factor: 1.54

CAS#	Compound	Result	MRL	Data
		ppbV	ppbV	Qualifier
71-43-2	Benzene	0.24	0.048	_
108-88-3	Toluene	0.39	0.20	
100-41-4	Ethylbenzene	ND	0.18	
179601-23-1	m,p-Xylenes	0.19	0.18	
95-47-6	o-Xylene	ND	0.18	

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

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: SF-1-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-008

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00939

Initial Pressure (psig): -2.74 Final Pressure (psig): 1.16

Canister Dilution Factor: 1.33

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.18	0.042	_
108-88-3	Toluene	0.24	0.18	
100-41-4	Ethylbenzene	ND	0.15	
179601-23-1	m,p-Xylenes	ND	0.15	
95-47-6	o-Xylene	ND	0.15	

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

RESULTS OF ANALYSIS

Page 1 of 1

Client: Southern California Gas Company

Client Sample ID: SF-2/5-B-011916 ALS Project ID: P1600262
Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Sample ID: P1600262-009

Test Code: EPA TO-15 Date Collected: 1/19/16
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/16
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container ID: AS00971

Initial Pressure (psig): -3.44 Final Pressure (psig): 1.18

Canister Dilution Factor: 1.41

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	ppbV	Qualifier
71-43-2	Benzene	0.15	0.044	_
108-88-3	Toluene	0.26	0.19	
100-41-4	Ethylbenzene	ND	0.16	
179601-23-1	m,p-Xylenes	ND	0.16	
95-47-6	o-Xylene	ND	0.16	

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: Method Blank

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

ALS Project ID: P1600262

ALS Sample ID: P160120-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS#	Compound	Result	MRL	Data
		${f ppbV}$	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

Page 1 of 1

Client: Southern California Gas Company

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424 ALS Project ID: P1600262

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 1/19/16

Analyst: Lusine Hakobyan Date(s) Received: 1/20/16

Sample Type: 6.0 L Silonite Canister(s) Date(s) Analyzed: 1/20/16

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	P160120-MB	100	100	105	70-130	
Lab Control Sample	P160120-LCS	96	98	107	70-130	
AA-01-B-011916	P1600262-001	102	100	105	70-130	
AA-02-B-011916	P1600262-002	100	100	105	70-130	
AA-03-B-011916	P1600262-003	100	99	104	70-130	
AA-04-B-011916	P1600262-004	99	100	105	70-130	
AA-05-B-011916	P1600262-005	100	100	105	70-130	
AA-06-B-011916	P1600262-006	100	101	106	70-130	
SS-3H-B-011916	P1600262-007	99	101	106	70-130	
SF-1-B-011916	P1600262-008	100	100	106	70-130	
SF-2/5-B-011916	P1600262-009	100	101	106	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: P1600262

Client Project ID: SOUTHERN CALIFORNIA GAS - ALISO CANYON STATION / 14424

ALS Sample ID: P160120-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 1/20/16

Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.125 Liter(s)

Test Notes:

		ALS				
CAS#	Compound	Spike Amount	Result	% Recovery	Acceptance	Data
		ppbV	${f ppbV}$		Limits	Qualifier
71-43-2	Benzene	70.8	55.7	79	61-110	
108-88-3	Toluene	57.9	49.3	85	67-117	
100-41-4	Ethylbenzene	50.2	45.7	91	69-123	
179601-23-1	m,p-Xylenes	98.6	88.5	90	67-125	
95-47-6	o-Xylene	48.4	43.6	90	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.