

Southern California Gas Company 1171 More Ranch Road Goleta CA 93117

Mailing Address PO Box 818 Goleta, CA 93116-0818

Andrew Longworth alongworth@semprautilities.com
Desk: 805.681.8072

February 27, 2014

Mr. David Van Mullem
Air Polution Control Officer
County of Santa Barbara
Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA. 93110-1315

#### **Hand Delivery**

Subject:

**Annual Compliance Certification and Monitoring Data Report** 

Southern California Gas Company, La Goleta Plant,

Part 70/APCD Permit No. 9584-R4, ATCs 13699 & 14159

FID #1734, SSID #5019

Dear Mr. Van Mullem

Pursuant to the requirements of Part 70/APCD Permit to Operate 9584-R4 and ATCs #13699 and 14159, enclosed with this letter are the compliance certifications and monitoring data report for Southern California Gas Company's La Goleta Plant for the period January 1, 2014, through December 31, 2014. The report consists of the following:

- Certification Reports (SBCAPCD Form 1302-K1, K2, etc.) [Tab 1]
- Compliance Certification Report for 9584-R4 and ATCs 13699 and 14159 (SBCAPCD Form A, Jan - Dec) [Tab 2]
- Annual Reporting Requirements for SoCalGas of its Monitoring Data Summary [Tab 5]
- Monitoring Data [Tabs 6 33]
- Summary of Permit Deviations (SBCAPCD Form B, Jan Dec [Tab 30]
- Summary of Breakdowns and Variances [Tab 31]

The information submitted in the enclosed report fully addresses the applicable requirements of PTO No. 9584-R4, ATC 13699, ATC 14159, and is in the format required by the District.

Should there be any questions or a need for additional information, please contact me at 805.681.8072 or cell 805.617.5501.

Sincerely.

Andrew Longworth

Principal Environmental Specialist

Enclosures

Copy of Part 70 Report Submittal Letter to USEPA Annual Compliance Certification and Monitoring Reports

CC.

- B Ellenberger, SBAPCD (w/o attachments) C. Strommen, SBAPCD (w/o attachments)
- D Freund SoCalGas, (w/o attachments)
- E Wiegman, SoCalGas (w/o attachments)
- USEPA (w/o attachments)



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February 27, 2014

Mr. Gerardo Rios Chief (AIRS-3) USEPA, Region IX 75 Hawthorne St. San Francisco, CA. 94105

#### **Certified Return reciept**

Subject: Calendar Year 2014 Annual Compliance Certification Report

Southern California Gas Company, La Goleta Plant,

Part 70/APCD Permit to Operate 9584-R4, ATCs 13699 & 14159

FID: 01734 SSID: 05019

Dear Mr. Rios:

Pursuant to Standard Administrative Conditions 9.A.10 of Part 70/APCD Permit to Operate 9584-R4, issued June 29, 2012 and ATC-13699 issued October 5, 2011 and ATC-14159 issued November 19, 2013, to Southern California Gas Company (The Gas Company) for its La Goleta Plant, enclosed is the Compliance Certification Report for January 1st to December 31st calendar year 2014. The report contains all compliance information, summarized in Santa Barbara County Air Pollution Control District - approved forms, and written certification statements from the responsible official. A copy of the submittal letter of this report to the Santa Barbara County Air Pollution Control District is also enclosed.

Should there be any questions or a need for additional information, please contact me at 805.681.8072 or cell 805.617.5501.

Sincerely

Andrew Longworth

Principal Environmental Specialist.

#### **Enclosures**

Copy of Part 70 Report Submittal Letter to SBCAPCD Certification Report (SBCAPCD Forms 1302- I 1, I 2, K1,K2) Compliance Reports (SBCAPCD Forms A and B)

#### Cc w/o attachments:

- D. Van Mullem, APCO, SBAPCD
- D. Freund, SoCalGas
- E. Wiegman, SoCalGas

## CERTIFICATION REPORT (Form 1302-K1)

APCD:	➤ APCD USE ONLY <	
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:	
COMPANY NAME: Southern California Gas Company	SOURCE NAME: La Goleta Plant	

	Southern California Gas Company				SOURCE NAME: La Goleta Flaiit			
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	1.	Company Name:S	Souther	<u>n California Gas Com</u>	pany			
	2.	Source Name (if differ	rent thar	n Company Name): <u>La</u>	Goleta Plant			
	3.	Mailing Address:	PO Bo	ox 818, Goleta CA 93	116			
	4.	Street Address of Sou	rce Loca	ation:1171 More R	oad, Goleta CA 93117			
	5.	Source Permit Number	er: <u>Pa</u>	rt 70 PTO 9584-R4, P	TO 13699, ATC 14287 and ATC 14159			
П.	GF	NERAL INFORMAT	TION					
	1.	Reporting period (spe		es): January – Dece	ember 2014			
	2.	Due date for submitta			<del></del>			
	2. Due date for submittal of report.							
	3.	Type of submittal:	[X]	Monitoring Report (comp	elete Section III below)			
			[]	Compliance Schedule Pro	ogress Report (complete Section IV of Form 1302-K2)			
			[X]	Compliance Certification	(complete Section V of Form 1302-K2)			

#### III. MONITORING REPORT INFORMATION

1. Were deviations from monitoring requirements encountered during the reporting period?

[] No [X] Yes (If Yes, complete Form 1302-L)

### **CERTIFICATION REPORT** (Form 1302-K2)

APCD:	➤ APCD USE ONLY ≺	
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:	
COMPANY NAME: Southern California Gas Company	SOURCE NAME: La Goleta Plant	

### IV. COMPLIANCE SCHEDULE PROGRESS INFORMATION

	OMFLIANCE SCHEDULE PROGRESS INFORMATION
1.	Dates the activities, milestones, or compliance required by schedule of compliance was achieved/will be achieved:
2.	Provide explanation of why any dates in schedule of compliance were not/will not be met:

3. Describe in chronological order preventive or corrective action taken:

#### V. COMPLIANCE CERTIFICATION

[]Yes

1.	Was source in compliance during the reporting period specified in Section II of Form 1302-K1 and is source currently i
	compliance with all applicable federal requirements and permit conditions?

[X] No (If no, re-submit Forms 1302-I and 1302-J)

I certify based on information and belief formed after reasonable in supplements are true, accurate, and complete.	quiry, the statement and information in this document and
EA Wilgins	2/27/2015
Signature of Responsible Official	Date
Edward Wiegman	
Print Name of Responsible Official	
Storage Operations Manager	
Title of Responsible Official and Company Name	
Telephone Number of Responsible Official: (805) 681-80	68

### DEVIATION REPORT (FORM 1302-L)

APCD:	APCD USE ONLY		
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:		
COMPANY NAME:	SOURCE NAME:		
Sempra Energy	Southern California Gas Co. – La Goleta Station		

#### DEVIATION INFORMATION

#### 1. Permit number(s) of emission unit or control unit affected:

IC Engine: Gas Compressors #s 2 – 8 (District IDs 1199, 1200, 1201, 1202, 1203, 1204, and 1205)

#### 2. Description of deviation:

Goleta missed a semiannual monitoring test which measures the total sulfur content and  $H_2S$  content of the natural gas that fuels Gas Compressors #2 - 8 as required by condition 9.C.1.c.iii.C.

#### 3. Description and identification of permit condition(s) deviated:

PTO 9584-R4 condition 9.C.1.c.iii.C is a general monitoring requirement for testing the total sulfur content and  $H_2S$  of the fuel for Gas Compressors #2 - 8. The permit condition requires the measurement of these components of the fuel using approved ASTM or ARB test methods.

#### 4. Associated equipment and equipment operation (if any):

Not applicable.

#### 5. Date and time when deviation was discovered:

This deviation was discovered on February 23, 2015 during an internal audit of Compliance Year 2014 environmental documents.

#### 6. Date, time and duration of deviations:

The second semiannual fuel heating value monitoring test was not performed in Compliance Year 2014.

#### 7. Probable cause of deviation:

The second semiannual testing was not performed due to a lapse in scheduling the test.

#### 8. Preventive or corrective action taken:

Goleta will implement a routine testing schedule in their work management system to prevent future lapse in monitoring.

Note: Excess emissions, if any, should also be noted under Item #3 above. If excess emissions are less than or equal than one pound per day, then a minor emissions violation (MIN) may apply if all 11 criterion in APCD Policy and Procedure 3100.VII.A.7 1999 are satisfied. The operator must provide the required documentation to be eligible for a MIN within seven days of detection of the violation.

### DEVIATION REPORT (FORM 1302-L)

APCD:	APCD USE ONLY		
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:		
COMPANY NAME:	SOURCE NAME:		
Sempra Energy	Southern California Gas Co. – La Goleta Station		

#### I. DEVIATION INFORMATION

#### 1. Permit number(s) of emission unit or control unit affected:

IC Engine: Gas Compressors #s 2 - 8

(District IDs 1199, 1200, 1201, 1202, 1203, 1204, and 1205)

#### 2. Description of deviation:

Goleta missed a semiannual monitoring test which measures the gross heating value of the natural gas that fuels Gas Compressors #2 - 8 as required by condition 9.C.1.c.iii.B.

#### 3. Description and identification of permit condition(s) deviated:

PTO 9584-R4 condition 9.C.1.c.iii.B is a general monitoring requirement for testing the heating value of the fuel for Gas Compressors #2 - 8. The permit condition requires the measurement of the gross heating value of the fuel using approved ASTM or ARB test methods.

#### 4. Associated equipment and equipment operation (if any):

Not applicable.

#### 5. Date and time when deviation was discovered:

This deviation was discovered on February 23, 2015 during an internal audit of Compliance Year 2014 environmental documents.

#### 6. Date, time and duration of deviations:

The second semiannual fuel heating value monitoring test was not performed in Compliance Year 2014.

#### 7. Probable cause of deviation:

The second semiannual testing was not performed due to a lapse in scheduling the test.

#### 8. Preventive or corrective action taken:

Goleta will implement a routine testing schedule in their work management system to prevent future lapse in monitoring.

#### Note:

Note: Excess emissions, if any, should also be noted under Item #3 above. If excess emissions are less than or equal than one pound per day, then a minor emissions violation (MIN) may apply if all 11 criterion in APCD Policy and Procedure 3100.VII.A.7 1999 are satisfied. The operator must provide the required documentation to be eligible for a MIN within seven days of detection of the violation.

### DEVIATION REPORT (FORM 1302-L)

APCD:	APCD USE ONLY	
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:	
COMPANY NAME:	SOURCE NAME:	
Sempra Energy	Southern California Gas Co. – La Goleta Station	

#### I. DEVIATION INFORMATION

1. Permit number(s) of emission unit or control unit affected:

Flares (District IDs 1211 and 1212)

1. Description of deviation:

Goleta missed a semiannual monitoring test which measures the total sulfur content of the gaseous fuel for the flares (IDs 1211 and 1212) as required by condition 9.C.5.c.ii.

2. Description and identification of permit condition(s) deviated:

PTO 9584-R4 condition 9.C.5.c.ii is a general monitoring requirement for testing the total sulfur content of the gaseous fuel for the flares. The permit condition requires the measurement of these components of the fuel using methods listed in Rule 359.E.

3. Associated equipment and equipment operation (if any):

The flares serve the Glycol unit.

4. Date and time when deviation was discovered:

This deviation was discovered on February 23, 2015 during an internal audit of Compliance Year 2014 environmental documents.

5. Date, time and duration of deviations:

The second semiannual total sulfur content monitoring test was not performed in Compliance Year 2014.

6. Probable cause of deviation:

The second semiannual testing was not performed due to a lapse in scheduling the test.

7. Preventive or corrective action taken:

Goleta will implement a routine testing schedule in their work management system to prevent future lapse in monitoring.

#### Note:

Note: Excess emissions, if any, should also be noted under Item #3 above. If excess emissions are less than or equal than one pound per day, then a minor emissions violation (MIN) may apply if all 11 criterion in APCD Policy and Procedure 3100.VII.A.7 1999 are satisfied. The operator must provide the required documentation to be eligible for a MIN within seven days of detection of the violation.

### COMPLIANCE PLAN (Form 1302-I1)

APCD:	➤ APCD USE ONLY <
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:
COMPANY NAME: Southern California Gas Company	SOURCE NAME: La Goleta Station

#### I. PROCEDURE FOR USING FORM 1302-I

This form shall be submitted as part of the SBCAPCD's Regulation XIII Application. The Responsible Official shall identify the applicable federal requirement(s) to which the source is subject. In the Compliance Plan (Form 1302-I), a Responsible Official shall identify whether the source identified in the SBCAPCD's Regulation XIII Application currently operates in compliance with all applicable federal requirements.

#### II. APPLICABLE FEDERAL REQUIREMENTS

Applic	able Federal Requirement <sup>1</sup>	Affected Emission Unit	In compliance?	Effective
Regulatory Regulation Title <sup>2</sup>			(yes/no/exempt <sup>3</sup> )	Date <sup>4</sup>
Reference <sup>2</sup>			25	
APCD Rule 101	Compliance by Existing Installations	All emission units	Yes	May 18, 1981
APCD Rule 102	Definitions	All emission units	Yes	May 4, 2012
APCD Rule 103	Severability	All emission units	Yes	May 18, 1981
APCD Rule 201	Permits Required	All emission units	Yes	May 5, 1982
APCD Rule 202	Exemptions to Rule 201	Applicable emission units, as listed in Part 70 renewal	Yes	May 5, 1982
APCD Rule 203	Transfer	All emission units	Yes	May 18, 1981
APCD Rule 205	Standards for Granting Permits	All emission units	Yes	May 5, 1982
APCD Rule 206	Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Yes	May 18, 1981
APCD Rule 212	Emission Statements	All emission units	Yes	May 26, 2004
APCD Rule 301	Circumvention	All emission units	Yes	May 18, 1981
APCD Rule 302	Visible Emissions	All emission units	Yes	May 18, 1981
APCD Rule 303	Nuisance	All emission units	Yes	May 31, 1972
APCD Rule 305	PM Concentration - South Zone	Each PM source	Yes	May 18, 1981
APCD Rule 309	Specific Contaminants	All emission units	Yes	May 18, 1981
APCD Rule 311	Sulfur Content of Fuel	All combustion units	Yes	May 18, 1981
APCD Rule 317	Organic Solvents	Emission units using solvents	Yes	May 18, 1981
APCD Rule 321	Solvent Cleaning Machines and Solvent Cleaning	Emission units using solvents	Yes	January 30, 2014

### COMPLIANCE PLAN (Form 1302-I2)

App	olicable Federal Requirement <sup>1</sup>	Affected Emission Unit	In compliance?	Effective	
Regulatory Reference <sup>2</sup>	Regulation Title <sup>2</sup>		(yes/no/exempt <sup>3</sup> )	Date <sup>4</sup>	
APCD Rule 324	Disposal and Evaporation of Solvents	Emission units using solvents	Yes	May 18, 1981	
APCD Rule 326	Storage of Reactive Organic Compound Liquids.	Tanks, Sumps, Vessels.	Yes	July 8, 2002	
APCD Rule 333	Control of Emissions from Reciprocating IC Engines	IC engines at the facility driving compressors and emergency fire pumps.	Yes	May 31, 2011	
APCD Rule 346	Loading of Organic Liquids	Loading rack at the facility.	Yes	October 29, 2002	
APCD Rule 352	Natural Gas-Fired Fan-Type Central Furnaces and Small Water Heaters	New water heaters and furnaces	Yes	April 11, 2013	
APCD Rule 353	Adhesives and Sealants	Emission units using adhesives and sealants	Yes	August 30, 2013	
APCD Rule 359	Flares and Thermal Oxidizers	Flares.	No	May 7, 1996	
APCD Rule 360	Emissions of Oxides of Nitrogen from Large Water Boilers and Small Boilers	Gas Preheaters and any new small boiler installed at the facility.	Yes	October 14, 2003	
APCD Rule 361	Small Boilers, Steam Generators, and Process Heaters	Hot Oil Heaters.	Yes	May 31, 2011	
APCD Rule 505	Breakdown Conditions	All emission units	Yes	May 18, 1981	
APCD Rule 603	Emergency Episode Plans	Stationary sources with PTE greater	Yes	June 21, 1982	
APCD Rule 1301	Part 70 Operating Permits	than 100 toy. All emission units	Yes	November 26, 1997	
40 CFR Parts 51/52	New Source Review	All Emission units	Yes	November 25, 1971	
40 CFR 63 Subpart ZZZZ		Internal combustion Engines 2-9, Firewater pump engines 4A and 5A,	Yes	January 30, 2013	

<sup>1</sup> Review APCD SIP Rules, NSPS, NESHAPS, and MACTs.

<sup>2</sup> Regulatory Reference is the abbreviated citation (e.g. 40 CFR 60 Subpart OOO, APCD Rule 325.H) and Title is the prosaic title (e.g. NSPS Standards of Performance for Nonmetallic Mineral Processing Plants, Crude Oil Production and Separation, Inspection)

<sup>3</sup> If exempt from applicable federal requirement, include explanation for exemption.

<sup>4</sup> Indicate the date during the permit term that the applicable federal requirement will become effective for the emission unit.

<sup>\*\*\*</sup> If more than one page is used, please ensure that "Santa Barbara APCD", stationary source name and "Form 1302-I1" appear on each page. \*\*\*

### COMPLIANCE PLAN (Form 1302-I3)

APCD:	➤ APCD USE ONLY <
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:
COMPANY NAME: Southern California Gas Company	SOURCE NAME: La Goleta Station

#### III. COMPLIANCE CERTIFICATION

#### Under penalty of perjury. I certify the following:

Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s) with which the source is in compliance identified in form 1302-I1;

Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with the future-effective applicable federal requirement(s) identified in form 1302-I1, on a timely basis<sup>1</sup>;

Based on information and belief formed after reasonable inquiry, the source identified in this application is not in compliance with the applicable federal requirement(s), identified in form 1302-I1, and I have attached a compliance plan schedule.<sup>2</sup>

Signature of Responsible Official

Date

- 1. Unless a more detailed schedule is expressly required by the applicable federal requirement.
- 2. At the time of expected permit issuance, if the source expects to be out of compliance with an applicable federal requirement, the applicant is required to provide a compliance schedule with this application, with the following exception. A source which is operating under a variance that is effective for less than 90 days need not submit a Compliance Schedule. For sources operating under a variance, which is in effect for more than 90 days, the Compliance Schedule is the schedule that was approved as part of the variance granted by the hearing board.

The compliance schedule shall contain a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with this applicable federal requirement. For sources operating under a variance, the compliance schedule is part of the variance granted by the hearing board. The compliance schedule shall resemble, and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. For sources not operating under a variance, consult the Air Pollution Control Officer regarding procedures for obtaining a compliance schedule.

# COMPLIANCE PLAN CERTIFICATION (Form 1302-J1)

APCD:	➤ APCD USE ONLY <
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:
COMPANY NAME: Southern California Gas Company	SOURCE NAME: La Goleta Station

#### I. CERTIFICATION STATUS

	ntends to submit the COMPLIANCE		
during the entire permit term. Th	ne district federal operating permits rul	e requires the applicant to submit t	his report at
least annually.			

By due data annually

2.	For sources required to have a schedule of compliance to remedy a violation,	indicate the	dates the app	plicant i	ntends to
	submit CERTIFIED PROGRESS REPORTS to the district during the per	rmit term.	The district	federal	operating
	permits rule requires the applicant to submit this report at least semiannually.				

Not applicable

3. Describe the compliance status of the source with respect to applicable enhanced monitoring, and compliance certification requirements of Section 114(a)(3) of the Clean Air Act:

Not applicable

## COMPLIANCE PLAN CERTIFICATION (Form 1302-J2)

APCD:	➤ APCD USE ONLY <
Santa Barbara County Air Pollution Control District	APCD IDS Processing ID:
COMPANY NAME: Southern California Gas Company	SOURCE NAME: La Goleta Station

#### II. CERTIFICATION INFORMATION

Applicable Federal 40 CFR 63 Subpart ZZZZ, RICE MACT EMISSION UNIT: Internal Combustion Engines - District ID #1199-#1205 (Plant ID #2-#8)

Applicable Federal 40 CFR 63 Subpart ZZZZ, RICE MACT Equirement & its Title:

Method			Description or Reference Method
Monitoring	. :	The equipn	nent permitted herein is subject to the following monitoring requirements:
			Exceedance — Any District-certified IC engine source test result which indicates the
100 100			Rule 333 emission limits or NSR permit-specified limits have been exceeded shall
	: <i>'</i>		a violation of this permit.
	, .		ance Assurance Monitoring: SoCalGas shall implement the following CAM
		required m	
			Monitor all compliance assurance indicators for the engines in conformance with
7 1			the requirements listed in the CAM Plan.
	i	В.	Log any excursions of each indicator from its limits that are set forth in the latest
	٠.	ے.	CAM Plan.
		C.	Log all periods of monitor shutdowns, monitoring malfunctions and associated
-			monitor repairs and any required quality assurance/quality control activity periods
-			for the monitors (i.e., the AFRC controller and the catalyst thermocouple units) as
			listed in the CAM Plan [Ref: 40 CFR 64.7.(c)]. The reason for each shutdown,
			e.g., indicator range excursion or malfunction, shall also be listed in the log.
		D.	Per 40 CFR 64.6.(c)(4), a minimum 90 percent data capture rate on a quarterly
			basis is required for each indicator. For the purposes of minimum data capture
N			computations, any data obtained during the following periods are not included:
			• Routine monitor calibrations and inspections;
	, ,		• Sudden and infrequent monitor malfunctions beyond the operator's
			reasonable control [Ref: 40 CFR 64.7(c)]; and,
			• IC engine start-up periods.
		E.	A Quality Improvement Plan (QIP) is triggered for any engine subject to CAM
			Rule, if more than one (1) percent [per 40 CFR 64.8 (a)] of valid individual data
			points obtained in any calendar quarter lie outside the CAM Plan established
			indicator ranges. SoCalGas shall immediately notify the District if a QIP has been
	٠,		triggered and shall develop and submit such a Plan to the District for approval as
			expeditiously as practicable. The QIP submitted by SoCalGas shall meet all the
the second			requirements specified for it in 40 CFR Section 64.8 [QIP Requirements], at a
			minimum.
	٠.		

# COMPLIANCE PLAN CERTIFICATION (Form 1302-J3)

<b>Emission Unit</b>	Internal Combustion Engines providing ERCs
Monitoring	<ul> <li>The following monitoring requirements apply: <ul> <li>A. Inspection and Maintenance Plan — SoCalGas shall implement all monitoring provisions of its IC Engine Inspection and Maintenance Plan approved by the District. This includes emissions monitoring of the 7 engines per District Rule 333.F.3.The inspections shall be conducted prior to any adjustments to the AFRC set points and shall consist of one (1) fifteen minute run at the previously established set point.</li> <li>B. Fuel Heating Value — The gross heating value of the gaseous fuel (Btu/scf) shall be measured using approved ASTM or ARB-approved test methods semi-annually.</li> <li>C. Fuel Sulfur Content — The total sulfur content and H2S content of the gaseous fuel burned on the property shall be determined semi-annually using approved ASTM or ARB-approved test methods.</li> <li>D. Operating Hours — The hours of operation each month of each engine shall be documented in a log.</li> <li>E. Fuel Use Metering — Fuel use for each engine shall be monitored by an in-line fuel meter. Meter design and specifications shall be approved by the District. The meters shall be calibrated per the latest District-approved Process Monitor Calibration and Maintenance Plan.</li> </ul> </li> </ul>
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the <i>Semi-Annual Compliance</i> *Verification Reports* condition and include information required by 40 CFR 63 Subpart ZZZZ  Table 7 and §63.6650 in addition to the material specified in Part-70/PTO 9584-R4 Condition 9.C.15. Information required by 40 CFR 63 Subpart ZZZZ Table 7 and §63.6650 are as follows:
	<ul> <li>A. The Compliance report must contain the information below: <ul> <li>a. Company name and address.</li> <li>b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</li> <li>c. Date of report and beginning and ending dates of the reporting period.</li> <li>d. If the equipment had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63 Subpart ZZZZ §63.6605(b), including actions taken to correct a malfunction.</li> <li>e. If there are no deviations from any emission or operating, a statement that there were no deviations from the emission or operating limitations during the reporting period.</li> </ul> </li> </ul>

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J4)

Emission Unit	Interna	l Combustion Engines providing ERCs
D		The second state of the second
Reporting	В.	For each deviation from an emission or operating limitation that occurs for a stationary RICE where the owner or operator are not using a CMS to comply with the emission or operating limitations, the Compliance report must contain the information in
		Conditions 5.a.i-iv of the PTO and the information below:  a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
		<ul> <li>b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.</li> </ul>
Record Keeping	The pe	ermittee shall record and maintain the following information. This data shall be
Record Recping		ained for a minimum of five (5) years from the date of each entry and made available to
	•	strict upon request:
	(i)	Hours — Records documenting hours of operation and days of operation for each IC
		engine each month. The record shall document any 60-minute start-up period required for the IC engine after it is shut-down.
	(ii)	Fuel Use — Records documenting IC engine(s) monthly fuel consumption (scf/month).
	(iii)	Fuel Heating Value — Records documenting the gross heating value of fuel (Btu/scf) on a semi-annual basis.
	(iv)	Fuel Sulfur Content — Records documenting the total sulfur content and H2S content of the gaseous fuel on a semi-annual basis.
	(v)	Equipment Maintenance Data — Records summary documenting engine/control device maintenance on an annual basis.
	(vi)	I&M Plan Logs — Logs documenting the parameter settings, NOx and CO level recorded, and other values required under the Inspection and Maintenance Plan for each anging shall be knot on gits.
	(vii)	each engine shall be kept on-site.  Equipment ID/Tags — If an operator's tag number is used in lieu of an IC engine identification plate, written documentation which references the operator's unique IC
		engine ID number to a list containing the make, model, rated maximum continuous BHP and the corresponding RPM.
	(viii)	Monitor Non-operational Time – Logs documenting all non-operational times for the AFRC controller units and the catalyst temperature measurement units including the reasons for all monitor shutdowns, as monitored per Condition 9.C.1.(c)(ii)(C) of the PTO.
	(ix)	Set Point Settings Data — A record of the most current Air Fuel Ratio Controller set points and the date these were established.
	(x)	Engine Operation Outside Settings — A record of any continuous engine operation outside of the indicator ranges established in the CAM Plan. All such excursions are to be flagged specifically in the CAM logs.
	(xi)	Maintenance Records — Records on all maintenance performed for all equipment specified in this permit including engine time settings, engine maintenance, catalyst maintenance, and air-fuel ratio controller.
	(xii)	
	(xiii)	CAM Plan Required Data – A monthly summary of all compliance indicator data excursions and all monitor non-operational times, obtained pursuant to Conditions
·		9.C.1 (c)(ii)B and C in the PTO.

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J5)

Emission Unit	Internal Combustion Engines providing ERCs
Recordkeeping	<ul> <li>(xiv) If the owner and operator must comply with the emission and operating limitations, the owner and operator must keep the records of the following:  A. A copy of each notification and report that the owner and operator submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner and operator submitted, according to the requirement in 40 CFR 63 Subpart ZZZZ §63.10(b)(2)(xiv).</li> <li>B. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) air pollution control and monitoring equipment.</li> <li>C. Records of performance tests and performance evaluations as required in 40 CFR 63 Subpart ZZZZ §63.10(b)(2)(viii) and §63.6655(a)(3).</li> <li>D. Records of all required maintenance performed on the air pollution control and monitoring equipment.</li> <li>E. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63 Subpart ZZZZ §63.6605(b), including corrective actions to restore malfunctioning process equipment to its normal or usual manner of operation.</li> <li>(xv) The owner and operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the owner and operator operated and maintained the stationary RICE according to the maintenance plan.</li> </ul>
Test Methods	Measure: CARB 1-100 for O2; CARB 1-100, or USEPA Method 7E and 10 for NOx and CO respectively; USEPA Method 18 for ROC

Applicable Federal 40 CFR 63 Subpart ZZZZ, RICE MACT Requirement & its Title:

EMISSION UNIT: Internal combustion units - District IDs #1206, #1221, #1222, #8665, #8666, #8668 (Plant ID #9, #4A, #5A, #12A, #13A, Emergency Generator)

Method	Description of Reference Method
Monitoring	The following source testing and monitoring conditions apply:
	(i) Limits Exceedance — Any District-certified IC engine source test result which indicates the applicable Rule 333 emission limits or NSR permit-specified limits (as specified in Table 5.1-3 of the PTO) have been exceeded shall constitute a violation of this permit.
	(ii) I&M Plan — SoCalGas shall implement all monitoring provisions of its IC Engine I&M Plan approved by the District.
	(iii) Fuel Heating Value — The gross heating value of the gaseous fuel (Btu/scf) shall be measured using approved ASTM or ARB-approved test methods annually.
	(iv) Fuel Sulfur Content — The total sulfur content and H <sub>2</sub> S content of the gaseous fuel burned on the property shall be analyzed and determined annually using approved ASTM or ARB-approved test methods.
	(v) Operating Hours — The hours of operation each month of each engine, including the IC engines exempt from permitting, shall be documented in a log. The log shall be made available for inspection upon request.
	(vi) Fuel Use Metering—Fuel use for the engine with plant ID #9 shall be monitored by an in-line fuel meter. Meter design and specifications shall be approved by the District. The meters shall be calibrated per the latest District-approved Process Monitor Calibration and Maintenance Plan.

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J6)

Emission Unit	Internal combustion units not providing ERCs		
Danostina	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the		
Reporting	District. The report must list all data required by the Semi-Annual Compliance Verification Reports		
-	condition of this permit and include information required by 40 CFR 63 Subpart ZZZZ Table 7 and		
	§63.6650 in addition to the material specified in Part-70/PTO 9584-R4 Condition 9.C.15. Information		
v	required by 40 CFR 63 Subpart ZZZZ Table 7 and §63.6650 are as follows:		
	A. The Compliance report must contain the information below:		
	a. Company name and address.		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	b. Statement by a responsible official, with that official's name, title, and signature,		
	certifying the accuracy of the content of the report.		
	c. Date of report and beginning and ending dates of the reporting period.		
- N	d. If the equipment had a malfunction during the reporting period, the compliance report		
` <u>-</u>	must include the number, duration, and a brief description for each type of malfunction		
	which occurred during the reporting period and which caused or may have caused any		
and the second of the second	applicable emission limitation to be exceeded. The report must also include a		
	description of actions taken by an owner or operator during a malfunction of an		
	affected source to minimize emissions in accordance with 40 CFR 63 Subpart ZZZZ		
<u>.</u>	§63.6605(b), including actions taken to correct a malfunction.		
	e. If there are no deviations from any emission or operating, a statement that there were		
	no deviations from the emission or operating limitations during the reporting period.		
	B. For each deviation from an emission or operating limitation that occurs for a stationary RICE		
	where the owner or operator are not using a CMS to comply with the emission or operating		
	limitations, the Compliance report must contain the information in Conditions 5.a.i-iv and the		
	information below:		
	a. The total operating time of the stationary RICE at which the deviation occurred during		
	the reporting period.		
	<ul> <li>Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.</li> </ul>		
	C. For emergency stationary RICE with a site rating of more than 100 brake HP that operates or is		
	contractually obligated to be available for more than 15 hours per calendar year (Firewater		
	Pumps- Device IDs #008666 and #008668; Emergency Generator-Device ID #008665), for the		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	purposes specified in 40 CFR 63 Subpart ZZZZ §63.6640(f)(2)(ii) and (iii) or that operates for		
	the purpose specified in $\S63.6640(f)(4)(ii)$ , the owner or operator must submit an annual report		
	containing the following information:		
	a. Company name and address where the engine is located.		
	b. Date of the report and beginning and ending dates of the reporting period.		
	c. Engine site rating and model year.		
, , ,	d. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal		
	place.		
	e. Hours operated by type of operation (maintenance, testing, emergency, non-		
	emergency, etc.), including the date, start time, and end time for engine operation. The		
	report shall also identify the entity that dispatched the engine and the situation that		
	necessitated the dispatch of the engine, as applicable.		
	f. Number of hours the engine is contractually obligated to be available.		
1	g. If there were no deviations from the fuel requirements that apply to the engine (if any),		
	a statement that there were no deviations from the fuel requirements during the		
	reporting period.		
	h. If there were deviations from the fuel requirements that apply to the engine (if any),		
	information on the number, duration, and cause of deviations, and the corrective action		
	taken.		
, , , , ,			

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J7)

Emission Unit	Internal combustion units not providing ERCs
Record Keeping	SoCalGas shall keep the required logs, as applicable to this permit, which demonstrate compliance with emission limits, operation limits and monitoring requirements listed in the PTO. All logs shall be available to the District upon request. Written information (logs) shall include:
Record Recping	emission limits, operation limits and monitoring requirements listed in the PTO. All logs shall be available to the District upon request. Written information (logs) shall include:  (i) Hours — Records documenting individual IC engine operating hours each month. (ii) Fuel Use — Records documenting IC engine Plant ID # 9 monthly fuel consumption (scf/month).  (iii) Fuel Heating Value — Records documenting the gross heating value of fuel (Btu/scf) on an annual basis.  (iv) Fuel Sulfur Content — Records documenting the total sulfur content and H2S content of the gaseous fuel on an annual basis.  (v) Equipment Maintenance Data — Records summary documenting engine/control device maintenance on an annual basis.  (vi) I&M Plan Logs — Logs documenting the parameter settings, NOx and CO level recorded, and other values required under the Inspection and Maintenance Plan for the engine shall be kept on-site.  (vii) Equipment ID/Tags — If an operator's tag number is used in lieu of an IC engine identification plate, written documentation which references the operator's unique IC engine ID number to a list containing the make, model, rated maximum continuous BHP and the corresponding RPM.  (viii) If the owner and operator must comply with the emission and operating limitations, the owner and operator must keep the records of the following:  1. A copy of each notification and report that the owner and operator submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner and operator submitted, according to the requirement in 40 CFR 63 Subpart ZZZZ §63.10(b)(2)(xiv).  2. Records of the occurrence and duration of each malfunction of operation (i.e.,
	process equipment) air pollution control and monitoring equipment.  3. Records of performance tests and performance evaluations as required in 40 CFR 63 Subpart ZZZZ §63.10(b)(2)(viii) and §63.6655(a)(3).  4. Records of all required maintenance performed on the air pollution control and monitoring equipment.  5. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63 Subpart ZZZZ §63.6605(b), including corrective actions to restore malfunctioning process equipment to its normal or usual manner of operation.  (ix) The owner and operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the owner and operator operated and maintained the stationary RICE according to the maintenance plan.

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J8)

Emission Unit	Internal combustion units not providing ERCs
Record Keeping	<ul> <li>(x) For the Firewater Pumps (Device IDs #008666 and #008668) and Emergency Generator (Device ID #008665), the owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.</li> <li>(xi) For the Firewater Pumps (Device IDs #008666 and #008668), the owner or operator must keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.</li> </ul>
Test Nicitods	IC engine #9: CARB 1-100 for O <sub>2</sub> ; CARB 1-100, or USEPA Method 7E and 10 for NO <sub>x</sub> and CO respectively; USEPA Method 18 for ROC  Emergency and firewater pumps: ASTM Method; Measure

# COMPLIANCE PLAN CERTIFICATION (Form 1302-J9)

EMISSION UNIT: Micro Turbines - District ID#107543-107546

Method	Description or Reference Method									
Monitoring	The permitted equipment is subject to the following monitoring requirements:  (i) Fuel Usage Metering. The permittee shall install and operate a dedicated, temperature and									
	1 ''	pressure-corrected, totalizing, non-resettable type fuel meter, to measure the amount of natural gas								
•	used.									
· · · · · · · · · · · · · · · · · · ·	(ii) Heating Value Data. On an annual basis maintain record of the heat content (HHV) basis of the									
	fuel gas in units of Btu/		C 4 4 - C41 C - 1							
	I	The permittee shall measure the total sulfur and H <sub>2</sub> s	s content of the fuel							
		nce with EPA Methods 15/16/16A.	11							
	, ,	requested in writing by the District the permittee sh								
		nstrate compliance with Condition 9.C.3 (a) in the F								
		are to be monitored when the micro-turbines are sou	irce tested are							
•	provided in the PTO.									
Reporting	On a semi-annual basis, a repo	ort detailing the previous six month's activities shall	be provided to the							
•		ude all data required by the Semi-Annual Complianc	e Verification Reports							
4 4	condition of this permit.									
Record Keeping	The following records shall be	e maintained by the permittee and shall be made avai	lable to the District							
	upon request:									
		The total amount of PUC quality natural gas used by								
		micro-turbines shall be recorded on a monthly, quar	terly, and annual basis							
•	1	in units of standard cubic feet and million Btus.								
		<ul> <li>(ii) Heat Content. Record the annual heating value results of the fuel gas.</li> <li>(iii) Operational Days. For each month, the number of days each micro-turbine operated.</li> </ul>								
200	ppmvd, of the	fuel gas burned in the micro-turbines.								
Test Methods	Turbine Exhaust:		······							
	NO <sub>x</sub>	EPA Method 7E, ARB 1-100	]							
	ROC	EPA Method 18								
	СО	EPA Method 10, ARB 1-100								
	Sampling Point Deter.	EPA Method 1								
	Stack Gas Flow Rate	EPA Method 2 or 19								
/ ÷	$O_2$	EPA Method 3								
1	Moisture Content	EPA Method 4								
	Fuel Gas:									
			_							
	Higher Heating Value	ASTM D 3588-88								
	Total Sulfur Content <sup>(d)</sup>	EPA 15/16/16A								
			J							

## COMPLIANCE PLAN CERTIFICATION (Form 1302-J10)

EMISSION UNIT: Process Heaters - District ID #001214, 107535, 113985, 113987

Method	Description or Reference Method	
Monitoring	The equipment permitted herein is subject to the following monitoring requirements:	·
	(i) Default Rating Method. The volume of natural gas used (in units of standard cubi feet) shall be reported as permitted annual heat input limit for the unit (Btu/year) divided by the District-approved heating value of the fuel (Btu/scf).	ıc
	(ii) Fuel Use Meter. The volume of fuel gas (in units of standard cubic feet) used in device IDs 113985 and 113987 shall be measured through the use of a dedicated District-approved fuel meter. Each heater is equipped with its own fuel meter. The meters shall be temperature and pressure corrected. The fuel meters shall be accur to within five percent (5%) of the full scale reading. The meters shall be calibrated according to manufacturer's specifications and/or SoCal Gas Company procedures.	rate d
	and the calibration records shall be made available to the District upon request.  (iii) Existing Units Rated Between 2.000 - 5.000 MMBtu/hr. These units are not subject tuning or source testing requirements.	ct to
	(iv) Units Rated at 2.000 MMBtw/hr or Below. Any unit manufactured after October 1 2003 shall be tuned once every 12 months following the manufacturer's recommendation tuning procedure or by an alternative tuning procedure approved by the District.	
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.	ie
Record Keeping	The permittee shall record and maintain the following information. This data shall be maintained for	
	minimum of five (5) years from the date of each entry and made available to the District upon reque (i) Fuel Use – Device IDs 1214 and 107535. The volume of fuel gas used each year (units of standard cubic feet) as determined by the Default Rating Method.	
	(ii) Fuel Use – Device IDs 113985 and 113987. The volume of fuel gas used each year units of standard cubic feet) as determined by the fuel meters.	ar (in
	(iii) Fuel Use Meter Calibration Records. Calibration records of District-approved fue meters.	el use
	(iv) Tuning Records. For units subject to Rule 360, maintain documentation verifying required tune-ups, including a complete copy of each tune-up report.	
	(v) Maintenance Logs. Maintenance logs for the unit(s) and fuel meter (as applicable)	).
Test Methods	None	

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J11)

EMISSION UNIT: Flares - District ID #1211, 1212, 1215, 104915, 113418, 104916, 107706

Method	Description or Reference Method						
Monitoring	The following monitoring conditions apply to the flare equipment items:						
	(i) Heating Value. The heating value of the 'gaseous fuel' (Btu/scf) shall be analyzed annually using the ASTM methods listed in Rule 359.E (test methods).						
	(ii) Fuel Sulfur Content: For flare unit 1215, 'gaseous fuel' sulfur content (H <sub>2</sub> S and TRS must be measured annually using the ASTM methods listed in Rule 359.E (test methods). For flare units 1211 and 1212, the total sulfur content in 'gaseous fuel' she measured semi-annually using the Rule 359.E listed methods.						
1 -	(iii) Purge Gas Sulfur Content: The purge gas sulfur content must be measured annually using Rule 359.E-listed ASTM methods, if such gas is not PUC quality natural gas an inert gas.						
	(iv) Media Bed Changes: SoCalGas shall maintain purchase records documenting the ty of material purchased for the SULFATREAT units and the CEI-KMN units.						
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.						
Record Keeping	SoCalGas shall keep the required logs, as applicable to this permit, which demonstrate						
	compliance with emission limits, operation limits and monitoring requirements in the PTO.						
	All logs shall be available to the District upon request. Written information (logs) shall						
	include:  (i) Heating Value: Annual records documenting the higher heating value of the 'gaseou fuel.' Such documents shall be the results of the laboratory analyses using ASTM to methods prescribed in Rule 359.E.						
	(ii) Fuel Sulfur Content: Records documenting annually the 'gaseous fuel' sulfur content as measured periodically, and, if applicable, the purge gas sulfur content for each flaunit.						
	(iii) Media Bed Change: Records documenting any media bed changes for the SULFATREAT units and the CEI-KMN units. The records shall include the dates a times of each change-out, the quantity of material replaced, and the type of material placed in the unit.						
Test Methods	None						

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J12)

EMISSION UNIT: Fugitive Hydrocarbon Emissions Components - District ID # 100882-100886

Method	Description or Reference Method
Monitoring	SoCalGas shall track the component leak path (clp) counts for all categories of components at the natural gas production facility that are listed in Table 5.1-2 in the PTO and log any clp count changes, including de minimis changes, in a clp inventory maintained by the natural gas production facility.
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.
	SoCalGas shall keep a log of the changes in fugitive emissions component count and the associated emissions changes summarized on a quarterly basis. All inspection and/or repair records shall be retained at the plant for a minimum of five years. In addition SoCalGas shall maintain the following records:  1. Carbon Canister Change: Records documenting carbon replacement for the canister serving the odorant system. The records shall include the dates of each change-out, the quantity of material replaced, and the type of material placed in the unit.
Test Methods	None

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J13)

EMISSION UNIT: Hydrocarbon Liquid Storage Tanks – District ID #1217-1220, 100899, 100901, 100910

Method	Description or Reference Method
Monitoring	The following monitoring conditions apply:
	(i) Hydrocarbon Liquid (Condensate) Volume: The volume of hydrocarbon liquid (condensate) produced annually shall be monitored by noting the volume (in gallons) flowing out of the hydrocarbon liquid storage tank (ID # 1217) into trucks on a monthly basis.
	(ii) API Gravity & True Vapor Pressure Of Stored HC — The API gravity and the true vapor pressure at 67.2 degrees F of the stored hydrocarbon liquid in each storage tank (ID # 1219, 1220 and 1217) shall be determined annually. Alternately, the Reid vapor pressure of the stored condensate may be measured by the ASTM D 323 Standard Method and the true vapor pressure calculated by API Bulletin 2517, or equivalent District-approved Reid/True vapor pressure correlation. The actual temperature of the stored hydrocarbon liquid shall be measured each time a sample is taken for API gravity and TVP analysis.
	Note: The API gravity and TVP analysis for the HC Condensate Storage tank may be used as representative values for all three tanks instead of sampling from each tank individually.
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.
Record Keeping	SoCalGas shall keep the required logs, as applicable to this permit, which demonstrate compliance with emission limits, operation limits and monitoring requirements listed in the PTO. All logs shall be available to the District upon request. Written information (logs) shall include:  (i) Hydrocarbon Liquid (Condensate) Volume: The volume of hydrocarbon liquid produced annually shall be recorded  (ii) API Gravity & True Vapor Pressure Of Stored HC — The API gravity, the true vapor pressure at 67.2 degrees F, and the actual storage temperature of the stored hydrocarbon liquid in each storage tank (ID # 1219, 1220 and 1217) shall be recorded annually.
	<ul> <li>(iii) Maintenance Records — Records of maintenance performed per Sections B.3 and B.5 of Rule 326. These records contain, at a minimum, the following: <ul> <li>A. Tank Identification: Tank identification type of vapor controls used, and initials of personnel performing maintenance.</li> <li>B. Maintenance Performed: Description of maintenance procedure performed.</li> <li>C. Estimated Excess Emissions: Excess emissions caused by maintenance and how determined.</li> <li>D. Maintenance Dates &amp; Times: Times and dates of maintenance procedure.</li> </ul> </li> </ul>
Test Methods	None

### COMPLIANCE PLAN CERTIFICATION (Form 1302-J14)

EMISSION UNIT: Loading Station - District ID # 8669

Federal Requirement & its Title:

Method	Description or Reference Method
Monitoring	SoCalGas shall monitor, via a log or a shipping invoices document, the daily and total annual volumes of hydrocarbon condensate shipment from the truck loading station.
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.
Record Keeping	SoCalGas shall record the daily and total annual volumes (in gallons) of HC condensate shipment from the loading station, in a log kept on-site. When vacuum trucks are used to empty the condensate tanks, the log shall include the operator's initials, date of loading operation, and the destination of the condensate. If vacuum trucks are not used to empty the condensate tanks, the log shall include the operator's initials, date of loading operation, transfer temperature, and method of determining throughput for each loading operation.
Test Methods	None

EMISSION UNIT: Wells – District ID # 8670,100903

Method	Description or Reference Method						
Monitoring	On an annual basis, SoCalGas shall (i) measure the reactive organic compound (ROC) content of the vented gas, using gas-liquid chromatography analysis, and the gas total sulfur (TRS) content, and (ii) annually record the computed volume of vented reservoir gas from each pipeline depressurization event.						
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Semi-Annual Compliance Verification Reports condition of this permit.						
Record Keeping	SoCalGas shall record the following:						
	<ul> <li>(i) The computed volume of gas (in units of scf) vented annually to the atmosphere resulting from all pipeline depressurizations; and the ROC and TRS content (by weight percent) of this gas.</li> <li>(ii) The dates and volumes of venting attributed to emergency events, and documentation of each emergency.</li> </ul>						
Test Methods	None						

## COMPLIANCE PLAN CERTIFICATION (Form 1302-J15)

EMISSION UNIT: Solvent Usage – District ID # 8680

Method	Description or Reference Method
Monitoring	None
Reporting	On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Semi-Annual Compliance Verification Reports condition of this permit.
Record Keeping	SoCalGas shall record in a log the following on a monthly basis for each solvent used: amount used; the percentage of ROC by weight (as applied); the solvent density; the amount of solvent reclaimed for District-approved disposal; whether the solvent is photochemically reactive; and, the resulting emissions to the atmosphere in units of pounds per month and pounds per day. Product sheets (MSDS or equivalent) detailing the constituents of all solvents shall be readily available.
Test Methods	None

<sup>\*\*\*\*\*</sup> If more than one page is used, please ensure that "Santa Barbara APCD", source name and "Form 1302-J2" appear on each page. \*\*\*\*\*

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Standard Administrative Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

N/A

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.A.1.(a). The permittee shall comply with all permit conditions.	С	N/A	Facility	No			
9.A.1.(b). This permit does not convey property rights or exclusive privilege of any sort.	С	N/A	Facility	No			
9.A.1.(c). Noncompliance with any permit conditions is grounds for permit termination, revocation and re-issuance, modification, enforcement action, or for denial of permit renewal. Any permit non-compliance constitutes a violation of the Clean Air Act and its implementing regulations or of District Rules or both, as applicable.	С	N/A	Facility	No			
9.A.1.(d). The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for noncompliance with any permit condition.	С	N/A	Facility	No			
9.A.1.(e). A pending permit action or notification of anticipated noncompliance does not stay any permit condition.	С	N/A	Facility	No			
9.A.1.(f). Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining: (i) compliance with the permit, or (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.	С	N/A	Facility	No			
9.A.1.(g). (g) In the event that any condition herein is determined to be in conflict with any other condition contained herein, then if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail. [Re: 40 CFR Part 70.6.(a)(6)(iii), District Rules 102, 1303.D.1.j, 1303.D.1.n, 1303.D.1.l, 1303.D.1.k, 1303.D.1.o]	С	N/A	Facility	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:

Part 70 Permit number: Calendar Period (e.g., Jan.- Dec 08): Operating Scenario ID, if applicable: Southern California Gas Company

La Goleta Plant

**Standard Administrative Conditions** 

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

NI/A

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.A.2. Emergency Provisions. The permittee shall comply with the requirements of the District, Rule 505 (Upset/Breakdown rule) and/or District Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the District, in writing, a "notice of emergency" within 2 working days of the emergency. The notice of emergency shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [Re: District Rule 1303.F.].	С	N/A	Facility	No	, , , , , , , , , , , , , , , , , , , ,		
9.A.3. Compliance Plan.  (a) The permittee shall comply with all federally enforceable requirements that become applicable during the permit term, in a timely manner.  (b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally enforceable rules or standards.  [Re: District Rule 1302.D.2]	С	N/A	Facility	No			
9.A.4. Right of Entry. The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 source is located or where records must be kept:  (a) To inspect the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;  (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;  (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times. Monitoring of emissions can include source testing. [Re: District Rule 1303.D.2.a]	C	N/A	Facility	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Standard Administrative Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

N/A

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.A.5. Severability. The provisions of this Permit to Operate are severable and if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [Re: District Rules 103, 1303.D.1.i ]	С	N/A	Facility	No			
9.A.6. Permit Life. The Part 70 permit shall become invalid three years from the date of issuance, unless a timely and complete renewal application is submitted to the District. Any operation of the source to which this Part 70 permit is issued beyond the expiration date of this Part 70 permit and without a valid Part 70 operating permit (or a complete Part 70 permit renewal application) shall be a violation of the CAAA, § 502(a) and 503(d) and of the District rules.  The permittee shall apply for renewal of the Part 70 permit no later than 6 months before the date of the permit expiration. Upon submittal of a timely and complete renewal application, the Part 70 permit shall remain in effect until the Control Officer issues or denies the renewal application. [Re: District Rules 1304.D.1.]	C	N/A	Facility	No			
9.A.7. Payment of Fees. The permittee shall reimburse the District for all its Part 70 permit processing and compliance monitoring expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the District and the USEPA pursuant to section 502(a) of the Clean Air Act. [Re: District Rules 1303.D.1.p, 1304.D.11 and 40 CFR 70.6(a)(7)]	C	N/A	Facility	No			

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N/A

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.A.8. Deviation from Permit Requirements. The permittee shall submit a written report to the District documenting each and every deviation from the requirements of this permit or any applicable federal requirements within 7 days after discovery of the violation, but not later than 180 days after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to District in accordance with Rule 505. Breakdown Conditions, or Rule 1303.F Emergency Provisions. [Re: District Rule 1303.D.1.g, 40 CFR 70.6(a)(3)(iii)(B)]	С	N/A	Facility	No			
9.A.9. Federally-enforceable Conditions. Each federally enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the District-only enforceable section of this permit are federally enforceable or subject to the public/USEPA review [Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)]	С	N/A	Facility	No			

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 $N/\Delta$ 

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.A.10. Reporting Requirements/Compliance Certification.  The permittee shall submit compliance certification reports to the USEPA annually and to the Control Officer semi-annually. These reports shall be submitted on District forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1 and March 1, respectively, each year. Supporting monitoring data shall be submitted in accordance with the "Semi-Annual Compliance Verification Report" condition in section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [Re: District Rules 1303.D.1, 1302.D.3, 1303.2.c.]	C	N/A	Facility	No			

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A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.A.11. Recordkeeping Requirements. The permittee shall maintain records of required monitoring information that include the following:  (a) The date, place as defined in the permit, and time of sampling or measurements;  (b) The date(s) analyses were performed;  (c) The company or entity that performed the analyses;  (d) The analytical techniques or methods used;  (e) The results of such analyses; and  (f) The operating conditions as existing at the time of sampling or measurement;  The records (electronic or hard copy), as well as all supporting information shall be maintained for a minimum of five (5) years from date of initial entry by SoCalGas and shall be made available to the District upon request. [Re: District Rule 1303.D.1.f]	С	N/A	Facility	No			
9.A.12. Conditions for Permit Reopening. The permit shall be reopened and revised for cause under any of the following circumstances::	С	N/A	Facility	No			
9.A.12.(a). Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30 day notice of intent to reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.	С	N/A	Facility	No			

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9.A.12.(b). Inaccurate Permit Provisions: If the District or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.	С	N/A	Facility	No			
9.A.12.(c) ) Applicable Requirement: If the District or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally enforceable requirement, the permit shall be reopened. Such reopenings shall be made as soon as practicable.	C	N/A	Facility	No			
9.A.13 Recordkeeping. All records and logs required by this permit and any applicable District, state or federal rule or regulation shall be maintained for a minimum of five calendar years from the date of information collection and log entry at the facility. These records or logs shall be readily accessible and be made available to the District upon request. [Re: District Rule 1303, 40 CFR 70.6]	C	N/A	Facility	No			

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				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.B.1. Circumvention (Rule 301). A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of District Rule 303.	С	N/A	Facility	No			
9.B.2. Visible Emissions (Rule 302). SoCalGas shall not discharge into the atmosphere from any single source of emission any air contaminants for a period or periods aggregating more than three minutes in any one hour which is:  (a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or  (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2.(a) above.  For the equipment listed below, SoCalGas shall determine compliance with this Rule as specified below:  • Flares. For both of its planned and unplanned flaring, SoCalGas shall perform a USEPA Method 9 visible emission evaluation (VEE) annually. The VEE shall be for a six-minute period or the duration of the flaring event, whichever is shorter.  • Diesel Fueled IC Engines. SoCalGas shall perform a USEPA Method 9 visible emission evaluation (VEE) for a six-minute period annually.	С	USEPA Method 9	Facility	No			

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A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
SoCalGas staff or its contractor, certified in VEE, shall perform the VEE and maintain logs in accordance with USEPA Method 9. SoCalGas shall obtain District approval of the VEE log required by this condition. The start-time, end-time and the date of each visible emissions inspection shall be recorded in the log. All VEE sheets and records shall be maintained consistent with the recordkeeping condition of this permit. [Re: District Rule 302].	С	USEPA Method 9	Facility	No			
9.B.3. Nuisance (Rule 303). No pollutant emissions from any source at SoCalGas shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business.	С	N/A	Facility	No			
9.B.4. PM Concentration - South Zone (Rule 305). SoCalGas shall not discharge into the atmosphere, from any source, particulate matter in excess of the concentrations listed in Table 305(a) of Rule 305.	С	N/A	Facility	No			
9.B.5. Specific Contaminants (Rule 309). SoCalGas shall not discharge into the atmosphere from any single source sulfur compounds, carbon monoxide and combustion contaminants in excess of the applicable standards listed in Sections A, E and G of Rule 309.	С	N/A	Facility	No			
9.B.6. Sulfur Content of Fuels (Rule 311). SoCalGas shall not burn fuels with a sulfur content in excess of 0.5% (by weight) for liquid fuels and 239 ppmvd or 15 grains per 100 cubic feet (measured as H2S at standard conditions) for 'gaseous fuel' or fuel gas to the combustion units. Compliance with this condition shall be based on periodic measurements of the fuel gas and gaseous fuel using District-approved methods, and vendor-submitted data showing certified sulfur content for diesel.	С	Compliance with this condition shall be based on periodic measurements of the fuel gas using District- approved methods and vendor- submitted data showing certified sulfur content for diesel.	Facility	No			
9.B.7. Organic Solvents (Rule 317). SoCalGas shall comply with the emission standards listed in Section B of Rule 317. Compliance with this condition shall be based on compliance by SoCalGas with Condition C.10 of this permit.	С	Compliance with this condition shall be based on compliance with Condition C.10 of this permit. Tab 17	Facility	No			

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9.B.8. Solvent Cleaning Operations (Rule 321). This rule stipulates equipment and operational standards for process activities using solvents. SoCalGas shall comply with its Part 70 permit application 9584 statement that, except for routine maintenance involving wipe cleaning etc., it does not operate any solvent cleaning unit at the facility subject to Rule 321.	С	N/A	Facility	No			
9.B.9. Architectural Coatings (Rule 323). SoCalGas shall comply with the coating ROC content and handling standards listed in Section D of Rule 323 as well as the Administrative requirements listed in Section F of Rule 323. Compliance with this condition shall be based on compliance by SoCalGas with Condition C.10 of this permit and facility inspections.	С	Compliance with this condition shall be based on compliance by SoCalGas with Condition C.10 of this permit and facility inspections.	Facility	No			
9.B.10. Disposal and Evaporation of Solvents (Rule 324). SoCalGas shall not dispose through atmospheric evaporation of more than one and a half gallons of any photochemically reactive solvent per day. Compliance with this condition shall be based on compliance by SoCalGas with Condition C.10 of this permit and facility inspections	С	Compliance with this condition shall be based on compliance by SoCalGas with Condition C.10 of this permit and facility inspections. Tab 17	Facility	No			
9.B.11.A). Adhesives and Sealants (Rule 353). The permittee shall not use adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless the permittee complies with the following:  A) Such materials used are purchased or supplied by the manufacturer or suppliers in containers of 16 fluid ounces or less; or alternately	С	Compliance shall be demonstrated by record keeping in accordance with Section B.2 and/or Section O of Rule 353. Tab 17	Facility	No			
9.B.11.B). B) When the permittee uses such materials from containers larger than 16 fluid ounces and the materials are not exempt by Rule 353, Section B.1, the total reactive organic compound emissions from the use of such material shall not exceed 200 pounds per year unless the substances used and the operational methods comply with Sections D, E, F, G, and H of Rule 353. Compliance shall be demonstrated by record keeping in accordance with Section B.2 and/or Section O of Rule 353.	С	NA	Facility	No			

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A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.B.12 Large Water Heaters and Small Boilers (Rule 360). Any boiler, water heater, steam generator, or process heater rated greater than or equal to 75,000 Btu/hr and less than or equal to 2.000 MMBtu/hr and manufactured after October 17, 2003 shall be certified per the provisions of Rule 360. An ATC/PTO permit shall be obtained prior to installation of any grouping of boilers, water heaters, steam generators, or process heaters subject to Rule 360 whose combined system design heat input rating exceeds 2.000 MMBtu/hr.	C C	NA	Facility	No	1. Deviation Type	C. # Of Deviations	Emission Unit 15
9.B.13. Breakdowns (Rule 505). SoCalGas shall promptly report: (a) breakdowns that result in violations of emission limitations or restrictions prescribed by District Rules or by this permit, or (b) any in-stack, continuous monitoring equipment breakdowns; such reporting shall be made in conformance with the requirements of Rule 505, Sections A, B1 and D.	С	N/A	Facility	No			
9.B.14. Emergency Episode Plan (Rule 603). During emergency episodes, SoCalGas shall implement the most current District-approved Emergency Episode Plan.	С	N/A	Facility	No			

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				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.1(a) Emission Limitations.  Mass emissions from the IC engines with Plant ID #s 2 through 8 shall not exceed the limits listed in Tables 5.1-3 and 5.1-4.  Allowable pollutant emission concentrations for the same engines are listed below. Compliance with these limits shall be assessed through compliance with the monitoring (includes source testing requirements, the ICE I&M Plan, and the CAM Plan), record keeping and reporting conditions listed below in this permit. SoCal Gas may demonstrate compliance with the NOx emission limits listed above either by meeting the exhaust concentration limit, or by both demonstrating at least 90% control of NOx across the catalyst and meeting the emission factor limit of 0.324 lb/MMBtu.	I	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. (includes source testing and ICE I& M Plan and the CAM Plan).	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
ATC 14287. Operational Restrictions. Operation of the equipment listed in this permit shall conform to the requirements listed in District Rule 333 and in Part-70/PTO 9584-R4 Conditions 9.C.1.b, 9.C.2.b, and 9.D.9.b. In addition, the following requirements shall be met: a. Gas Compressors #2 through #8 (Device IDs #001199 - #001205). i. Install a non-selective catalytic reduction (NSCR) device on each engine to reduce hazardous air pollutant (HAP) emissions, ii. Install equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1,250 °F., iii. Formaldehyde emissions shall not exceed 2.7 ppmvd at 15 percent oxygen. Compliance with this requirement shall be determined through annual source tests and an initial performance test. The initial performance test will satisfy the source testing requirement for formaldehyde for compliance year 2014.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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9.C.1(b)i. Operational Restrictions. The equipment permitted herein is subject to the following operational restrictions:  (i) Fuel Use — Only natural gas shall be used as fuel in the IC engines listed above.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b) ii. Engine Identification — Each internal combustion engine shall have an identification plate or tag permanently affixed listing the make, model and serial number (or the operator's tag number). During any inspection, all identification plates or tags shall be made accessible and legible to facilitate District inspection of the engine.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b) iii. Heat Input Limits - Limit the max hourly and annual heat input (MMBtu/hr) to the values shown in Table C.1-3. 7.3 MMBtu/hr for each engine, 63,498 MMBtu/yr	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)(iv) Inspection And Maintenance Plan (I&M Plan) — The permittee shall operate in accordance with the District-approved, Rule 333.F. required, IC engine Inspection and Maintenance Plan and any subsequent District-approved updates.	I	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)(v) Catalyst Operation — For all IC engines above, (i.e., Engines # 2 through # 8) equipped with three-way NSCR catalysts, the catalysts shall operate at all times the engines are operating to reduce exhaust emissions of NOx, ROC and CO from these engines.	I	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.1(b)vi.A. Air-Fuel Ratio Controllers — Each Air-Fuel Ratio Controller (AFRC) shall be operated, calibrated, and maintained at all times in accordance with manufacturer's recommendations.	I	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)vi.B. Oxygen Sensors — Oxygen sensors in the stack shall be replaced by SoCalGas according to the schedule in the IC Engine I&M Plan. The date of each replacement shall be recorded in the maintenance log and quarterly reports, and this data shall be made available to the District inspector upon request.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)vi.C. Engine/Catalyst Operation – The performance standards of each NOx emission control device shall be maintained consistent with the IC Engine I&M Plan.	I	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)vi.D. Maintenance Of Engines — Each engine shall be maintained in conformance with the permittee-designed operations and maintenance procedures necessary to minimize the pollutant emissions from the engine. A copy of these procedures shall be made available to the District upon request. For each engine, records shall be kept to document the maintenance activities along with any District-approved adjustment to the operations and maintenance procedures which may change the emissions. These maintenance and adjustment records shall be submitted to the District upon request.	С	Maintenance records and records of any changes to the O&M procedures. [see Tab 6]	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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9.C.1(b)vi.E. Replacement Reporting —SoCalGas shall inform the District via telephone within 24 hours and in writing within five working days of any replacement of the engines or their associated control equipment. Replacement of the engines or their associated control equipment is only allowed in accordance with the District Rules and Regulations. If an engine or catalyst is replaced, source testing shall be conducted in accordance with the procedures set forth in the source testing condition of this permit. Source testing shall be conducted within 60 calendar days of replacement to determine the actual emission reduction associated with the new equipment. This source testing shall be in addition to, and not a replacement of, the annual source test as required by Section 9.C.1(c)(i) of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)vi.F. Emission Reduction Credits Dedicated To Point Arguello Project — The emission reduction credits created by District PTO 7500 are offsets for use by the Point Arguello Project, to meet its offset requirements. Emission reduction measures implemented to create the above emission reductions shall be maintained according to the IC Engine I&M Plan. The emission reduction credits are valid for the life of the Point Arguello Project only.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(b)vi.G. Shifts In Load — To assure that offsets in District PTO 7500 are real, quantifiable, surplus, and enforceable, SoCalGas shall not utilize a shift in load from the controlled engines with Plant ID #'s 2 - 8 to other uncontrolled point sources at the stationary source as means of generating possible additional emission reduction credits (ERCs).	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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9.C.1(b)vi.H. Monitoring Of Engine Operation — Each engine shall be equipped with a non-resettable hour meter to record its hours of operation.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c). Monitoring for engines 2 - 8.Monitoring:	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. [Tab 6 & 7]	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c)i. Any District-certified IC engine source test result which indicates the applicable Rule 333 emission limits or NSR permit-specified limits (as specified in Table 5.1-3) have been exceeded shall constitute a violation of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. [Tab 7]	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).ii. CAM; SCG shall implement the following CAM required monitoring:	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).ii.A. Monitor all complaince assurance indicators for the engines in conformance with the requirments listed in the CAM Plan.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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9.C.1(c).ii.B. Log any excursions of each indicator from its limits that are set forth in the latest CAM Plan.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No	31		
9.C.1(c).ii.C. Log all periods of monitor shutdowns, monitoring malfunctions and associated monitor repairs and any required quality assuarance/quality control activity periods for the monitors (i.e., the AFRC controller and the catalyst thermocouple units) as listed in the CAM plan. The reason for each shutdown, e.g., indicator range excursion or malfunction, shall also be listed in the log.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).ii.D. A minimum 90 percent data capture rate on a quarterly basis is required for each indicator. For the purposes of minimum data capture computations, any data obtained during the following periods are not included: Routine monitor calibrations and inspections; sudden and infrequent monitor malfunctions beyond the operator's reasonable control, and engine start-ups.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).ii.E. A Quality Improvement Plan (QIP) is triggered for any engine subject to CAM Rule, if more than one percent of valid individual data points obtained in any calendar quarter lie outside the CAM Plan established indicator ranges. SCG shall immediately notify the District if a QIP has been triggered and shall develop and submit such a Plan to the District for approval as expeditiously as practicable. The QIP submitted by SCG shall meet all the requirments specified for it in 40 CFR Section 64.8 at a minimum.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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9.C.1(c).iii.A. SCG shall implement all monitoring provisions of its I & M Plan approved by the District. This includes emissions monitoring of the 7 engines per District Rule 333.F.3 The inspections shall be conducted prior to any adjustments to the AFRC set points and shall consist of one fifteen minute run at the previously established set point.	C C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No	1. Deviation Type	G. # Of Deviations	Emission Clift ID
9.C.1(c).iii.B. Fuel Heating Value — The gross heating value of the gaseous fuel (Btu/scf) shall be measured using approved ASTM or ARB-approved test methods semi-annually.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).iii.C. Fuel Sulfur Content — The total sulfur content and H2S content of the gaseous fuel burned on the property shall be determined semi-annually using approved ASTM or ARB-approved test methods.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).iii.D. The hours of operation each month of each engine shall be documented in a log.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1(c).iii.E. Fuel use for each engine shall be monitored by an inline fuel meter. Meter design and specifications shall be approved by the District. The meters shall be calibrated per the latest District approved Process Monitor Calibrations and Maintenance Plan.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.1.(d) Recordkeeping The permiitee shall record and maintain the following information. This data shall be maintained for a minimum of 5 years from the date of each entry and made available to the District upon request:	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).i. Hours - Records documenting hours of operation and days of operation for each IC engine each month. The record shall document any 60 minute start up period required for IC engine after it is shut down.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).ii. Fuel Use - Records documenting IC engines monthly fuel consumption (scf/month)	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).iii. Fuel Heating Value - Records documenting the gross heating value of fuel (btu/scf) on a semi annual basis.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	Yes	non- EE	1	
9.C.1.(d).iv. Fuel Sulfur Content - Records documenting total sulfur content and H2S content of the gaseous fuel on a semi-annual basis.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	Yes	non- EE	1	
9.C.1.(d).v. Equipment Maintenance Data - Records summary documenting engine/control device maintenance on an annual basis.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.1.(d).vi. I&M Plan Logs - Logs documenting the parameter settings , Nox and CO level recorded and other values required under the I & M Plan for each engine shall be kept on site.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).vii. Equipment ID/Tags - If an operator's tag number is used in lieu of an IC engine identification plate, written communication which references the operators's unique IC engine ID number to a list containing the make model rated maximum continuous BHP and the corresponding RPM.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).viii. Monitor Non-operational time - Logs documenting all non-operational times for the AFRC controller units and the catalyst temperature measurements units including the reasons for all monitor shutdowns, as monitored per Conditions 9.C.1.c(ii)(C) above.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).ix. Set Point Settings Data - A record of the most current AFRC setpoints and the date these were established.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).x. Engine Operation Outside Settings - A records of any continuous engine operation outside of the indicator ranges established in the CAM plan. All such excursions are to be flagged specifically in the CAM logs.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).xi. Maintenance Records - Records on all maintenance performed for all equipment specified in this permit including engine time settings, engine maintenance, catalyst maintenance, and AFRC	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			

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				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.1.(d).xii. Control Equipment Parameters - Records on catalyst (including manufacturer, model and serial numbers), engine, airfuel ratio controller, or sensor replacement.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(d).xiii. CAM Plan Required Data - A monthly summary of all compliance indicator data excursions and all monitor non-operational times, obtained pursuant to Conditions 9.C.1.c(ii)B and C above.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1199, 1200, 1201, 1202, 1203, 1204, 1205	No			
9.C.1.(e) Reporting On a semi annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Semi-Annual Compliance Verification reports condition of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.		No			
9.C.2(a) Mass emissions from IC engines listed in Table C.2-1 above shall not exceed the limits listed in Table 5.1-3 and 5.1-4 for the engines. Allowable pollutant emissions concentrations for the same engines are listed in Table C.2-2 above. Compliance with these limits shall be assessed through compliance with monitoring (includes source testing and I & M Plan), recordkeeping and reporting conditions listed below in this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			

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E. Deviation?

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A. Condition No.	B. C/I	C Monitoring Method	D. Emissions Unit ID	Yes / No	F Deviation Type	G # of Deviations	Emission Unit ID
A. Condition No.  ATC-14287 b. Gas Compressor #9 (Device ID #001206), i. Change the oil and filter every 4,320 hours of operation or annually, whichever comes first., 1. Alternatively, So Cal Gas may utilize an oil analysis program specified in 40 CFR 63 Subpart ZZZZ \$63.6625(i). If all the requirements detailed in this section of the regulation are satisfied, the owner or operator shall not be required to change the oil. If any of the limits are exceeded the engine owner or operator must change the oil within 2 business days ofreceiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later., ii. Inspect the spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. , iii. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	В. С/I	C. Monitoring Method  N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	D. Emissions Unit ID	Yes / No	r. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.2(b).i The operational limitations listed below shall apply to the IC engine #9. Natural gas used only as fuel.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2(b).ii Engine #9 shall have an identification plate or tag permanently affixed listing the make, model and serial number (or operator's tag number.)	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2(b).iii Engine #9 shall have heat limits of 10.02 MMBtu per hour and 87,795 MMBtu per year	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			

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9.C.2(b).iv Engine #9 permittee shall operate in accordance with District approved I&M plan and their subsequent updates for all engines subject to Rule 333	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No	2. 20.mmon 1,pc		
9.C.2(c).i Limits exceedance - Any District certified IC engine source test result which indicates the applicable emission limits i.e. Rule 333.D emission limits or NSR permit-specified limits have been exceeded shall constitue a violation of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2(c).ii. I & M Plan SoCalGas shall implement all monitoring provisions of its IC Engine I&M Plan approved by the District	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2(c).iii Fuel Heating Value - The gross heating value of the gaseous fuel (btu/scf) shall be measured using approved ASTM or ARB-approved test methods semi-annually.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2(c).iv. Fuel Sulfur Content - The total sulfur content and H2S content of the gaseous fuel burned on the property shall be analyzed and determined using approved ASTM or ARB-approved test methods annually.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2(c).v. Operating Hours - The hours of operation each month of each engine, including the IC engines exempt from permitting shall be documented in a log which would be available for inspection or upon request.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			

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9.C.2(c).vi. Fuel Use Metering - Fuel use for the engine with Plant Id #9 shall be monitored by an in-line fuel meter. Meter design and specifications shall be approved by the District. The meters shall be calibrated per the latest District approved Process Monitor Calibration and Maintenance Plan.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(d) SCG shall keep the required logs, as applicable to this permit, which demonstrate compliance with emisson limits, operation limits and monitoring requirements above. All logs shall be available to the District upon request. Written information (logs) shall include:	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(d).i. Hours - Records documenting individual IC engine operating hours each month	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(d).ii. Fuel Use - Records documenting IC engine Plant Id #9 monthly fuel consumption (scf/month)	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(d).iii Fuel Heating Value - Records documenting the gross heating value of fuel (Btu/scf) on an annual basis.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(d).iv. Fuel Sulfur Content - Records documenting the total sulfur content and H2S content of the gaseous fuel on an annual basis.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			

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A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.2.(d).v. Equipment Maintenance Data - Records summary documenting engine/control device maintenance on an annual basis	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(d).vi. I & M Plan Logs - Logs documenting the parameter settings, Nox and CO level recorded, an other values required under the I & M Plan for the engine shall be kept on site.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			
9.C.2.(e) Reporting On a semi annual basis, a report detailing the previous six month's activities shall be provided to the District.  The report must list all data required by the Semi-Annual Compliance Verification reports condition of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1206	No			

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ATC 14287. c. Firewater Pumps (Device IDs #008666 and #008668), i. Change the oil and filter every 500 hours of operation or annually, whichever comes first., 1. Alternatively, So Cal Gas may utilize an oil analysis program specified in 40 · CFR 63 Subpart ZZZZ §63.6625(i). If all the requirements detailed in this section of the regulation are satisfied, the owner or operator shall not be required to change the oil., If any of the limits are exceeded the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later., 11. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary., iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary., iv. Beginning January 1, 2015, these engines shall use diesel fuel that meets the requirements in 40 CFR 80.51 O(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	008666, 008668	No			

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ATC 14287, d. Emergency Generator (Device ID #008665), i. Change the oil and filter every 500 hours of operation or annually, whichever comesfirst., 1. Alternatively, So Cal Gas may utilize an oil analysis program specified in 40 CFR 63 Subpart ZZZZ §63.6625(i). If all the requirements detailed in this section of the regulation are satisfied, the owner or operator shall not be required to change the oil., If any of the limits are exceeded the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later., IL Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary., iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary., iv. This engine may be operated up to 100 hours per calendar year for maintenance, testing, and emergency demand response. The RICE may also be operated up to 50 hours per calendar year in non-emergency situations, but the 50 hours of operation in non-emergency situations are counted as part of the 100 hours. There is no time limit on the use of the RICE in emergency instructions.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	008665	No	2,,,,,		

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ATC 14287 e. Air Compressors (Device IDs #001221 and #001222), i. Change the oil and filter every 1,440 hours of operation or annually, whichever comes first., 11. Inspect the spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary., iii. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary., f. The operator shall minimize each engine's time at idle during startups to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes., g. The owner and operator must operate and maintain each engine and emission control device in a manner consistent with safety and good air pollution control practices for minimizing emissions or according to the manufacturer's emissions related operation and maintenance instructions.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	001221 and 001222	No			
9.C.3(a) Micro Turbines The mass emissions from the equipment permitted herein shall not exceed the values in Table 5.2. Compliance with the short-term and long-term mass emission limits for the Capstone C60 micro-turbines shall be based on the aggregated potential to emit of all four units. Compliance shall be based on the operational, monitoring, recordkeeping and reporting conditions of this permit.  Based on CARB DG-002, emissions from the Capstone C60 micro-turbines shall not exceed 0.5 lb/MW-hr NOx, 6 lb/MW-hr CO, and 1 lb/MW-hr ROC.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(b).i The total sulfur and hydrogen sulfide (H2S) content (calculated as H2S at standard conditions, 60oF and 14.7 psia) of the PUC quality natural gas used as fuel in the Capstone C60 micro-turbines shall not exceed 80 ppmv and 4 ppmv, respectively. Compliance with this condition shall be based on annual fuel gas sampling and analysis.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			

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9.C.3(b).ii The Capstone C60 micro-turbines shall only be operated using PUC quality natural gas. The permittee shall comply with the following fuel gas operational restrictions: The four Capstone C60 micro-turbines combined shall not use more than 73,508 scf/day, 6.71 MMscf/qtr, and 26.83 MMscf/yr of natural gas.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(c).i The permittee shall install and operate a dedicated, temperature and pressure-corrected, totalizing, non-resettable type fuel meter, to measure the amount of natural gas used.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(c).ii On a annual basis maintain records of the heat content of the fuel gas in units of (btu/scf)	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(c).iii The permittee shall measure the total sulfur and H2S content of the fuel gas annually in accordance with EPA Method 15/16/16A.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(c).iv When requetsed in writing, by the District, the permittee shall perform source testing for the C60 micro-turbines to demonstrate complaince with Condition 9.C.3. Table 4.B of this PTO shows the pollutants and process parameters that are to be monitored when the micro-turbines are source tested.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(d).i The total amount of PUC qulaity natural gas used bewteen the four Capstone C60 micro-turbines shall be recorded on a monthly, quarterly, and annual basis in units of scf and MMBtu.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Internal Combustion Engines

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.3(d).ii Record the annual heat value results of the fuel gas.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(d).iii For each month, the number of days each microturbine operated.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3(d).iv The annual measured total sulfur and H2S content, both in units of ppmdv, of the fuel gas burned in the microturbines.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			
9.C.3.(e) Reporting On a semi annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Semi-Annual Compliance Verification reports condition of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	107543, 107544, 107545, 107546	No			

Southern California Gas Company
La Goleta Plant
Process Heaters

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
C.4.a Emission Limitations - The emissions from the equipment permitted herein shall not exceed the values listed in Tables 5.1-3B and 5.1-4B. Compliance shall be based on the operational, monitoring, recordkeeping, and reporting conditions of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.i Heat Input Limits - The hourly, daily and annual heat input limits to each unit shall not exceed the values listed in Table 5.1-1B. The limits are based on the design rating of the unit and the annual heat input value as listed in the permit application. Unless othewise designated by the District 1050 Btu/scf shall be used for determining compliance.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.ii Public Utility Natural Gas Fuel Sulfur Limit - The total sulfur and H2S content (60F at 14.7 psia) of the public utility natural gas shall not exceed 80 ppmv and 4 ppmv respectively. Compliance with this condition shall be based on billing records or other data showing that the fuel gas is obtained from a public utility gas company.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.iii Existing Units - The owner or operator of any unit requesting the low use exemption in Section D.2 shall comply with the requirement to submit a Rule 361 Compliance Plan for District review and approval prior to March 15, 2016. Fuel meters installed pursuant to the approved Rule 361 Compliance Plan shall be installed prior to December 31, 2016.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.iii.A Existing Units - On or before Jan 20, 2019 the owner or operator of any existing unit shall: For units subject to Sectin D.1 emission standards, apply for Authority to Construct permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			

## **SBCAPCD Part 70 Annual Compliance Report**

Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Process Heaters

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
C.4.b.iii.B Existing Units - On or before Jan 20, 2019 the owner or operator of any existing unit shall: For units subject to Sectin D.2 low use provision, provide the annual fuel heat input data for years 2017 and 2018. Any existing unit that is replaced or modified is subject to requirements of Rule 361 and shall first obtain a District ATC permit prior to installation or modification.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.iv.A. A ATC/PTO permit shall be obtained prior to installations of any grouping of Rule 360 applicable boilers or hot water heaters whose combined system design heat input rating exceeds 2 MMBTU/hr.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.iv.B. An ATC permit shall be obtained prior to installation, replacement or modification of any existing Rule 361 applicable boiler or water heater rated over 2 MMBTU/hr.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.b.iv.C. An ATC shall be obtained for any size boiler or water heater if the unit is not fired on natural gas or propane.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			

## **SBCAPCD Part 70 Annual Compliance Report**

Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Process Heaters

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
C.4.c.i Default Rating Method - The volume of natural gas used (scf) shall be reported as permitted annual heat input limit for the unit (btu/yr) divided by the District approved heating value of the fuel (Btu/scf)	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.c.ii Existing Units Rated Between 2-5 MMBtu/hr. These units are not subject to tuning or source testing requirements.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.d.i Recordkeeping The permittee shall record and maintain the following information. This data shall be maintained for a minimum of 5 years from the date of each entry and made available to the District upon request: Fuel Use - Units Rated 5 MMBtu/hr. The volume of fuel gas used each year (scf) as determined by the Default Rating Method.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			
C.4.(e) Reporting. On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1214, 107535	No			

Southern California Gas Company
La Goleta Plant
Hot Water Heaters

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
1. Emission Limitations. The emissions from the equipment permitted herein shall not exceed the values listed in Table 1 and Table 2. Compliance shall be based on the operational, monitoring, recordkeeping and reporting conditions of this permit.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			
a. Heat Input Limits. The hourly, daily and annual heat input limits to each unit shall not exceed the values listed in Table 3. These limits are based on the design rating of the unit and the annual heat input value as listed in the permit application. Unless otherwise designated by the District, the following fuel content shall be used for determining compliance: Natural Gas = 1,050 Btu/scf.	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			
b. Public Utility Natural Gas Fuel Sulfur Limit. The total sulfur and hydrogen sulfide (H2S) content (calculated as H2S at standard conditions, 60°F and 14.7 psia) of the public utility natural gas fuel shall not exceed 80 ppmv and 4 ppmv respectively. Compliance with this condition shall be based on billing records or other data showing that the fuel gas is obtained from a public utility gas company.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			
c. Rule 360 Compliance. Any boiler or hot water heater rated at or less than 2.000 MMBtu/hr and manufactured after October 17, 2003 shall be certified per the provisions of Rule 360. An ATC/PTO permit shall be obtained prior to installation of any grouping of Rule 360 applicable boilers or hot water heaters whose combined system design heat input rating exceeds 2.000 MMBtu/hr	C	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			

Southern California Gas Company
La Goleta Plant
Hot Water Heaters

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
Recordkeeping. The permittee shall record and maintain the following information. This data shall be maintained for a minimum of five (5) years from the date of each entry and made available to the District upon request:  a. Fuel Use - Units Rated Under 5.000 MMBtu/hr. The volume of fuel gas used each year (in units of standard cubic feet) as determined by the fuel use monitoring option as listed in Table 4. Units that track fuel use using the Default Rating Method are not required to record the fuel usage.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			
b. Fuel Use Meter Calibration Records. Calibration records of District-approved fuel use meters.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			
c. Tuning Records. For units subject to Rule 360, maintain documentation verifying the required tune-ups, including a complete copy of each tune-up report.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			
d. Maintenance Logs. Maintenance logs for the unit(s) and fuel meter (as applicable).	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			

Southern California Gas Company
La Goleta Plant
Hot Water Heaters
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014
N/A

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
Reporting. By March 1 of each year, a written report documenting compliance with the terms and conditions of this permit for the previous calendar year shall be provided by the permittee to the District (Attn: Annual Report Coordinator). The report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit. The report shall be in a format approved by the District. All logs and other basic source data not included in the report shall be made available to the District upon request. The report shall include the following information:  a. Fuel Use Data. The fuel use data required in the Recordkeeping Condition above. Units that track fuel use using the Default Rating Method are not required to submit an annual report for fuel use.  b. Tune-Up Reports. Tuning Records as required in the Recordkeeping Condition above.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	113985, 113987	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Flares

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.5.(a). Emission Limits: The mass emissions from the equipment permitted herein shall not exceed the values listed in Tables 5.1-3 and 5.1-4 and the emission standards listed below. Compliance with the mass emission limits of this permit shall be based on the operational, monitoring, recordkeeping and reporting conditions of this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm, 104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No			
9.C.5.(b).i. (i) Flare units 1211 and 1212 shall not combust any waste gases that have not been treated by one of the SULFATREAT units (104915 or 113418) operating in series with one of the CEI-KMN units B (104916) or C (107706). CEI-KMN units B and C are designed to operate in parallel with each other; either one of these units shall operate all the time the waste gas stream is processed. SoCalGas must receive written District approval prior to using any alternate media in these units.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm, 104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No			
9.C.5.(b).ii. Smokeless Operation: All flares shall operate "smokeless," as defined in District Rule 359.C.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.(b)iii. All flares shall operate equipped with an automatic ignition system including a pilot-light gas source or equivalent system, or shall operate with pilot flames present at all times with the exception of purge periods for automatic ignition equipped flares.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.(b).iv. The presence of the flame in the flare pilots shall be continuously monitored using thermocouples or equivalent devices that detect the presence of flames.	С	Thermocouple and IR Camera	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.(b).v. The flare flames shall be operating at all times when combustible gases are vented through the flares.	С	Thermocouple and IR Camera	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Flares

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.5.(b).vi. The maximum hourly heat input to each flare is limited to the value listed below:  Flare ID# Max. Hourly Heat Input (MMBtu/hr)  1211, 1212, 1215 1.60 (each flare)	C	Dehydration Records [Tab 19]	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.(b).vii. The gases combusted in the flares shall not contain sulfur compounds in excess of 15 gr./100 scf (239 ppmv), calculated as H2S under standard conditions (i.e., 14.7 psia and $60 \Box F$ ). Only PUC-quality natural gas shall be used as pilot fuel gas, with total sulfur content less than 80 ppmv.	С	Monitoring Records [Tab 25]	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.(b).viii. (viii) The drains off of the SULFATREAT units and the CEI-KMN units shall remain connected to the existing low pressure condensate piping system at all times. No liquids shall be drained to the atmosphere from the units when they are operational; and no flash-offs to the atmosphere shall occur from this unit while operating and draining collected water.	С	N/A	104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No			
9.C.5.(c).i. The heating value of the 'gaseous fuel' (Btu/scf) shall be analyzed annually using the ASTM methods listed in Rule 359.E (test methods).	С	Measure sulfur content using ASTM methods as listed in Rule 359.E. [see Tab 25]	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.(c).ii. For flare unit 1215, 'gaseous fuel' sulfur content (H2S and TRS) must be measured annually using the ASTM methods listed in Rule 359.E (test methods). For flare units 1211 and 1212, the total sulfur content in 'gaseous fuel' shall be measured semi-annually using the Rule 359.E listed methods.	C	ASTM Methods listed in Rule 359 E.	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	Yes	non- EE	1	

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Flares
9584-R4, PTO 13699, ATC 14287 and ATC 14159

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.5.(c).iii. The purge gas sulfur content must be measured annually using Rule 359.E-listed ASTM methods, if such gas is not PUC quality natural gas or an inert gas.	C	Measure sulfur content using ASTM methods as listed in Rule 359.E.: [Tab 25]	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm, 104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No	T. Bernation Type	G. WOT DEVIATIONS	Emission City ID
9.C.5.(c) iv. SoCalGas shall maintain purchase records documenting the type of material purchased for the SULFATREAT units and the CEI-KMN units.	С	Purchase Records	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm, 104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No			
9.C.5.d.i Recordkeeping: Heating Value - Annual records documenting the higher heating value of the 'gaseous fuel.' Such documents shall be the results of the laboratory analyses using ASTM test methods prescribed in Rule 359.E.	С	Measure sulfur content using ASTM methods as listed in Rule 359.E.: [Tab 25]	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm	No			
9.C.5.d.ii Fuel Sulfur Content - Records documenting annually the 'gaseous fuel' sulfur content as measured periodically, and, if applicable, the purge gas sulfur content for each flare unit.	С	ASTM Methods listed in Rule 359 E.	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm, 104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No			
9.C.5.(d).iii. Media Bed Change- Records documenting any media bed changes for the SULFATREAT units and the CEI-KMN units. The records shall include the dates and times of each change-out, the quantity of material replaced, and the type of material placed in the unit.	С	SULFATREAT/KMN Logs [Tab 24]	104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.	No			

January 1st - December 31th 2014

## **SBCAPCD Part 70 Annual Compliance Report**

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company	
La Goleta Plant	
Flares	
9584-R4, PTO 13699, ATC 14287 and ATC 14159	
January 1st - December 31th 2014	
N/A	

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.5.(e). Reporting: On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.	C	N/A	Flare ID #s 1211 South, 1212 North, 1215 Tank Farm, 104915 Sulfatreat, 113418 Sulfatreat, 104916 CEI-KMN B, 107706 CEI-KMN C.				

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Fugitive HC Emissions Components
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.6.(a). Mass emissions from the fugitive HC components listed above shall not exceed the limits listed in Table 5.1-3 B and 5.1-4 B for these components.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	100882, 100883, 100884, 100885, 100886	No	7		
9.C.6.(b).i. Gas Collection System Use – The gas collection (GC) system shall be in operation when any of the equipment which is connected to the GC system at the facility is in use. The GC system shall be maintained and operated to minimize the release of emissions from all systems, including separators and storage vessels.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	100882, 100883, 100884, 100885, 100886	No			
9.C.6.(b).ii. Leak-Path Count – The total component and component-leak-path count listed in the SoCalGas I&M component and component-leak-path inventory shall not exceed the total leak-path component count assigned to these units in Table C.6 by more than five percent. This five percent range is to allow for minor differences due to component counting methods and does not constitute allowable emissions growth due to the addition of new equipment. The leak path count in Table C.6 will be verified by the District during inspections.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	100882, 100883, 100884, 100885, 100886	No			
9.C.6.(c). Recordkeeping: SoCalGas shall keep a log of the changes in fugitive emissions component count and associated emissions changes summarized on a quarterly basis. Retain inspection and/or repair records for a minimum of five years.	С	Fugitive emission component and emissions changes records [see Tab 27]	100882, 100883, 100884, 100885, 100886	No			
9.C.6.(c)(ii) Carbon Canister Change: Records documenting carbon replacement for the canister serving the odorant system. The records shall include the dates of each change-out, the quantity of material replaced, and the type of material placed in the unit.	С	Purchase records	Odorant System, Carbon Drum	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company	
La Goleta Plant	
Fugitive HC Emissions Components	
9584-R4, PTO 13699, ATC 14287 and ATC 14159	
January 1st - December 31th 2014	
N/A	

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.6.(d). Reporting: On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.	С	N/A	100882, 100883, 100884, 100885, 100886	No		

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
HC Liquid Storage Tanks

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.7.(a) - Mass emissions from the equipment items ID # 1219, 1220 and 1217 listed above shall not exceed the limits listed in Tables 5.1-3 and 5.1-4 for the items. Compliance with these limits shall be assessed through compliance with the monitoring, record keeping and reporting conditions listed below in this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	1219, 1220, 1217, 1218	No			
9.C.7.(b).i. Throughput Limitations: Annual hydrocarbon condensate production (dry) shall not exceed 125,000 gallons.	С	Production records [see Tab 20]	1219, 1220, 1217, 1218	No			
9.C.7.(b).ii. No volatile organic compound (VOC) liquid shall be stored in the hydrocarbon storage tanks (ID # 1219, 1220 and 1217) or brine water storage tank (ID # 1218) listed in Table C.7, unless the tanks are connected to the gas collection system and all collected gas is combusted by a flare with a destruction efficiency of at least 95%. All tanks listed in Table C.7 shall be operated in a leak-free condition to minimize the release of reactive organic vapors.	С	N/A	1219, 1220,1217	No			
9.C.7.(b).(iii). Prior to opening a tank for cleaning the tank shall be purged of ROC vapors and the purged gas shall be directed to a vapor control device with a destruction efficiency of at least 95%.	С	N/A	1219, 1220, 1217	No			
9.C.7.(b).(iv). Odorant Tank Filling: Emissions of VOCs to the atmosphere resulting from any odorant storage tank (ID # 100901) filling operations shall be reduced by passing displaced vapors through a vapor recovery system with control efficiency greater than 90 percent. Odorant emissions shall not be detectable, by olfactory senses, at or beyond the property boundary at any time during tank filling operations.	С	N/A	100901	No			
9.C.7.(c)(i). <b>Monitoring:</b> The volume of hydrocarbon liquid (condensate) produced annually shall be monitored by noting the volume (in gallons) flowing out of the hydrocarbon liquid storage tank (ID # 1217) into trucks on a monthly basis.	С	Production records [see Tabs 21]	1217	No			

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Company Name: Facility Name:

Equipment Category: Part 70 Permit number :

Calendar Period (e.g., Jan.- Dec 08): Operating Scenario ID, if applicable: Southern California Gas Company

La Goleta Plant

HC Liquid Storage Tanks

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.7.(c)(ii). The API gravity and the true vapor pressure at 67.2 degrees F of the stored hydrocarbon liquid in each storage tank (ID # 1219, 1220 and 1217) shall be determined annually. Alternately, the Reid vapor pressure of the stored condensate may be measured by the ASTM D 323 Standard Method and the true vapor pressure calculated by API Bulletin 2517, or equivalent District-approved Reid/True vapor pressure correlation. The actual temperature of the stored hydrocarbon liquid shall be measured each time a sample is taken for API gravity and TVP analysis. Note: The API gravity and TVP analysis for the HC Condensate Storage tank may be used as representative values for all three tanks instead of sampling from each tank individually	C	ASTM Method D 323 (RVP), TVP calc per API Bulletin 2517, ASTM Method D 287 (API gravity), and infra-red heat gun. [see Tab 15]	1219, 1220, 1217	No			
9.C.7(d).(i). <b>Recordkeeping</b> : The volume of hydrocarbon liquid produced annually shall be recorded. SoCalGas shall keep the required logs, as applicable to this permit, which demonstrate compliance with emission limits, operation limits and monitoring requirements above. All logs shall be available to the APCD upon request. Written information (logs) shall include:	С	Production records [see Tab 20]	1219, 1220, 1217, 1218, 100899, 100910, 100910, 100901				
9.C.7.(d).ii. The API gravity, the true vapor pressure at 67.2 degrees F, and the actual storage temperature of the stored hydrocarbon liquid in each storage tank (ID # 1219, 1220 and 1217) shall be recorded annually.	С	Lab analyses and calculation sheet [see Tab 15]	1219, 1220, 1217	No			

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Company Name:

Facility Name: Equipment Category: Part 70 Permit number :

Calendar Period (e.g., Jan.- Dec 08): Operating Scenario ID, if applicable: Southern California Gas Company

La Goleta Plant

HC Liquid Storage Tanks

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
<ul> <li>9.C.7.(d).iii. Records of maintenance performed per Sections</li> <li>B.3 and B.5 of Rule 326. These records contain, at a minimum, the following:</li> <li>A. Tank Identification: Tank identification type of vapor controls used, and initials of personnel performing maintenance.</li> <li>B. Maintenance Performed: Description of maintenance procedure performed.</li> <li>C. Estimated Excess Emissions: Excess emissions caused by maintenance and how determined.</li> <li>D. Maintenance Dates &amp; Times: Times and dates of maintenance procedure.</li> </ul>	С	Maintenance records	1219, 1220, 1217, 1218, 100899, 100910, 100910, 100901	No			
9.C.7.(e). Reporting: On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must include all data required by the Semi-Annual Compliance Verification Reports condition of this permit.	С	N/A	1219, 1220, 1217, 1218, 100899, 100910, 100910, 100901	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Loading Station

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.8.(a). <b>Loading Station</b> : Mass emissions from the equipment items listed above shall not exceed the emission limit listed for these items in Tables 5.1-3 and 5.1-4 of this permit. Compliance with these limits shall be assessed through compliance with the monitoring, record-keeping and reporting (MRR) conditions listed in this permit.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	8669	No			
9.C.8.(b).i. Loading Station must comply with Rule 346, (i) All tanker trucks receiving organic liquids shall be equipped with a submerged fill pipe;	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	8669	No			
9.C.8.(b).ii. SoCalGas shall restrict the HC condensate loading station operations so that the hourly volume of condensate into tanker trucks shall not exceed 170 barrels	С	Shipping records [see Tab 21]	8669	No			
9.C.8.(b).iii. The condensate volume loading shall be restricted to 476 barrels (i.e., 19.992 gallons) daily	С	Shipping records [see Tab 21]	8669	No			
9.C.8.(b).iv. Total condensate loading volume shall not exceed 2,976.19 barrels (i.e., 125,000 gallons) annually.	С	Shipping records [see Tab 21]	8669	No			
9.C.8.(c). SoCalGas shall monitor, via a log or a shipping invoices document, the daily and total annual volumes of hydrocarbon condensate shipment from the truck loading station.	С	Shipping records [see Tab 21]	8669	No			
9.C.8(d). SoCalGas shall record the daily and total annual volumes (in gallons) of HC condensate shipment from the loading station, in a log kept on-site. When vacuum trucks are used to empty the condensate tanks, the log shall include the operator's initials, date of loading operation, and the destination of the condensate. If vacuum trucks are not used to empty the condensate tanks, the log shall include the operator's initials, date of loading operation, transfer temperature, and method of determining throughput for each loading operation	С	Shipping records [see Tab 21]	8669	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Loading Station
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014
N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.8(e). Reporting: On a semi-annual basis, a report detailing							
the previous six month's activities shall be provided to the							
District. The report must include all data required by the Semi-	C	N/A	8669	No			
Annual Compliance Verification Reports condition of this							
permit.							

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Wells

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014 N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.9.(a) <b>Wells</b> : Mass emissions from the emission units listed above shall not exceed the emission limit listed for these items in Tables 5.2B of this permit. Compliance with these limits shall be assessed through compliance with the monitoring, record-keeping and reporting (MRR) conditions listed in this permit	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.	8670, 100903	No			
9.C.9.(b) On an annual basis, SoCalGas shall (i) measure the reactive organic compound (ROC) content of the vented gas, using gas-liquid chromatography analysis, and the gas total sulfur (TRS) content, and (ii) annually record the computed volume of vented reservoir gas from each pipeline depressurization event.	С	ASTM Method D 1945-81 in conjunction with ASTM Method D 3588-89, and gas venting records [see Tab 18]	8670, 100903	No			
9.C.9.(c)(i) The computed volume of gas (in units of scf) vented annually to the atmosphere resulting from all pipeline depressurizations; and the ROC and TRS content (by weight percent) of this gas	С	Gas venting records [see Tab 18]	8670, 100903	No			
9.C.9.(c)(ii) The dates and volumes of venting attributed to emergency events, and documentation of each emergency.	C	Emergency venting records [see Tab 22]	8670, 100903	No			
9.C.9.(d) Reporting: On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Semi- Annual Compliance Verification Reports condition of this permit.	С	N/A	8670, 100903	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Solvent Usage
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014 N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.10(a). Solvent Usage ROC mass emissions from solvent usage shall not exceed the limits listed in Tables 5.1-3 and 5.1-4.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. [Tab 17]	8680	No			
9.C.10(b). Use of solvents for cleaning/degreasing shall conform to the requirements of District Rules 317, 321, and 324. Compliance with these rules shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit and through facility inspections.	С	N/A - Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. [Tab 17]	8680	No			
9.C.10(b)(i). Containers - Vessels or containers used for storing materials containing organic solvents shall be kept closed unless adding to or removing material from the vessel or container.	С	N/A	8680	No			
9.C.10(b)(ii). Materials - All materials that have been soaked with cleanup solvents shall be stored, when not in use, in closed containers that are equipped with tight seals.	С	N/A	8680	No			
9.C.10(b)(iii). Solvent Leaks - Solvent leaks shall be minimized to the maximum extent feasible or the solvent shall be removed to a sealed container and the equipment taken out of service until repaired. A solvent leak is defined as either the flow of three liquid drops per minute or a discernable continuous flow of solvent.	С	N/A	8680	No			

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Company Name:
Facility Name:
Equipment Category:

Part 70 Permit number :
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID , if applicable :

Southern California Gas Company
La Goleta Plant
Solvent Usage

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.10(b)(iv). Reclamation Plan - SoCalGas may submit a Plan to the District for the disposal of any reclaimed solvent. If the Plan is approved by the District, all solvent disposed of pursuant to the Plan will not be assumed to have evaporated as emissions into the air and, therefore, will not be counted as emissions from the source. SoCalGas shall obtain District approval of the procedures used for such a disposal Plan. The Plan shall detail all procedures used for collecting, storing and transporting the reclaimed solvent. Further, the ultimate fate of these reclaimed solvents must be stated in the Plan.	С	N/A	8680	No			
9.C.10(c). Recordkeeping: SoCalGas shall record in a log the following on a monthly basis for each solvent used: amount used; the percentage of ROC by weight (as applied); the solvent density; the amount of solvent reclaimed for District-approved disposal; whether the solvent is photochemically reactive; and, the resulting emissions to the atmosphere in units of pounds per month and pounds per day. Product sheets (MSDS or equivalent) detailing the constituents of all solvents shall be readily available.	С	Solvent use records [see Tab 17]	8680	No			
9.C.10(d). Reporting: On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Semi-Annual Compliance Verification Reports condition of this permit.	С	Monitoring Records [Tab 17]	8680	No			

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Company Name:

Facility Name:

Equipment Category:

Part 70 Permit number:

Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID , if applicable:

Southern California Gas Company

La Goleta Plant

Process Monitoring Systems - Operations and Maintenance

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.11 All Plant process monitoring devices listed in Section 4.9.2 of this permit shall be properly operated and maintained according to manufacturer recommended specifications. SoCalGas shall implement an District-approved Process Monitor Calibration and Maintenance Plan for the life of the Plant.	C	Process Monitor Calibration and Maintenance Plan	All devices	No			

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Company Name:

Southern California Gas Company La Goleta Plant

Facility Name: Equipment Category:

Process Stream Sampling and Analysis

Part 70 Permit number :

9584-R4, PTO 13699, ATC 14287 and ATC 14159

Calendar Period (e.g., Jan.- Dec 08): Operating Scenario ID, if applicable: January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.12 SoCalGas shall sample analyze the process streams listed in Section 4.10 of this permit according to the methods and frequency detailed in that Section. All process stream samples shall be taken according to ASTM or other District-approved methods and must follow traceable chain of custody procedures.	С	ASTM Methods D 1945-81 in conjunction with ASTM Method D 3588-89, and USEPA Method 15/16 (Fuel Gas and Vented Gas); ASTM Method D 287-82, ASTM Method D 323-82, & API Bulletin 2517 (Hydrocarbon Condensate) [see Tabs 9, 10, 15, & 18]	Fuel Gas, Vented Gas, Hydrocarbon Condensate, Gaseous Fuel	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Source Testing

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

A. G. IV. M	D. CA		D.E.; H.; E.	E. Deviation?		C " ( D . ; ;	H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.13(i). SoCalGas shall conduct 'third party' source testing of air emissions and process parameters listed in Section 4.10 and Table 4.1 of this Permit to Operate. More frequent source testing may be required if the equipment does not comply with permitted limitations or if other compliance problems, as determined by the APCO, occur. A source test shall not be required for equipment that is documented to have been in out-of-service status, and is not operational at the time of annual source testing. However, when such equipment becomes operational, a source test shall be performed within 30 calendar days of start-up. The District shall be notified in writing at least 3 working days before the affected equipment will become operational.	С	ASTM Method; Measure	All engines subject to testing	No			
9.C.13(ii). (ii) SoCalGas shall submit a written source test plan to the APCD for approval at least thirty (30) calendar days prior to initiation of each source test. The source test plan shall be prepared consistent with the APCD's Source Test Procedures Manual (revised May 1990 and any subsequent revisions). If SoCalGas wants to demonstrate NOx emissions compliance for its IC engines #2 through #8 utilizing the 90% control option listed in Rule 333, the Plan shall include proposed procedures to measure simultaneously the catalyst inlet and outlet NOx concentrations. SoCalGas shall obtain written APCD approval of the source test plan prior to commencement of source testing. The APCD shall be notified at least fourteen (14) calendar days prior to the start of source testing activity to arrange for a mutually agreeable source test date when APCD personnel may observe the test.	C	N/A	All engines subject to testing	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Source Testing

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
performed on the scheduled day of testing (the test day mutually agreed to) unless circumstances beyond the control of the operator prevent completion of the test on the scheduled day. Such circumstances include but are not limited to mechanical malfunction of the equipment to be tested, malfunction of the source test equipment, delays in source test contractor arrival and/or set-up, or unsafe conditions on site. Except in cases of an emergency, the operator shall seek and obtain District approval before deferring or discontinuing a scheduled test, or performing maintenance on the equipment item on the scheduled test day. Once the sample probe has been inserted into the exhaust stream of the equipment unit to be tested (or extraction of the sample has begun), the test shall proceed in accordance with the approved source test plan. In no case shall a test run be aborted except in the case of an emergency or unless approval is first obtained from the District. If the test cannot be completed on the scheduled day, then the test shall be rescheduled for another time with prior authorization by the District. Failing to perform the source test of an equipment item on the scheduled test day without a valid reason and without District's	С	N/A	All engines subject to testing	No			
9.C.13(iv) A source test report shall be submitted to the District within forty-five (45) calendar days following the date of source test completion and shall be consistent with the requirements approved within the source test plan. The source test report shall include all data and calculations to determine compliance with emission rates in Sections 5 and 9 and applicable permit conditions. All reasonable District costs associated with the review and approval of all plans and reports and the witnessing of tests shall be paid by SoCalGas as provided for by District Rule 210.	С	N/A	All engines subject to testing	No			
9.C.13.v The District may at its discretion, extend any of the timelines listed in this conditon for good cause.	С	N/A	All engines subject to testing	No			

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Company Name:

Southern California Gas Company

Facility Name:

La Goleta Plant

Equipment Category: Part 70 Permit number : ICE Particulate Matter Operations and Maintenance Plan

Calendar Period (e.g., Jan.- Dec 08):

9584-R4, PTO 13699, ATC 14287 and ATC 14159

Operating Scenario ID, if applicable:

January 1st - December 31th 2014 N/A

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.C.14 To ensure compliance with District Rules 205.A, 302, 304, 309 and the California Health and Safety Code Section 41701 by the dieselfired emergency fire-water pumps, SoCalGas shall implement its District-approved IC Engine Particulate Matter Operation and Maintenance Plan for the life of the project. [Re: District Rules 205.A, 302, 304, 309]	С	USEPA Method 9 Visible Emissions Evaluation Maintenance Logs	8666, 8668	No			

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Company Name: Facility Name: Equipment Category: Part 70 Permit number:

Calendar Period (e.g., Jan.- Dec 08): Operating Scenario ID, if applicable: Southern California Gas Company

La Goleta Plant

Semi-Annual Compliance Verification Reports 9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.15 Twice a year, SoCalGas shall submit a compliance verification report to the District. Each report shall be used to verify compliance with the prior two calendar quarters. The first report shall cover calendar quarters 1 and 2 (January through June) and shall be submitted no later than September 1. The second report shall cover calendar quarters 3 and 4 (July through December) and shall be submitted no later than March 1. Each report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit (if applicable for that reporting period). These reports shall be in a format approved by the District. The permittee may, with prior approval from the District, submit the report on a computer disk instead of a hard copy medium. The District will specify the format for such disk reporting. All logs and other basic source data not included in the report shall be available to the District upon request. The second report shall also include an annual report summarizing the activities for the calendar year. Pursuant to Rule 212, a completed District Annual Emissions Inventory questionnaire shall be included in the annual report or submitted electronically via the District web site.	C	N/A	Facility	No			
9.C.15 (a)(i). ICEs - (i) Records documenting hours of operation and days of operation for each IC engine each month. The record shall document any 60-minute start-up period.	С	N/A	Facility	No			
9.C.15.(a)(ii). ICEs - Records documenting each permitted IC engine's monthly fuel consumption (scf/month)	С	N/A	Facility	No			
9.C.15.(a)(iii). The higher heating value of the fuel (Btu/scf) as measured by the most recent fuel analysis.	С	N/A	Facility	No			
9.C.15(a)(iv). ICEs - The fuel sulfur content as measured by the most recent fuel analysis.	C	N/A	Facility	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
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Southern California Gas Company
La Goleta Plant
Semi-Annual Compliance Verification Reports
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.15(a)(v). ICEs - Documentation of any equivalent routine IC engine replacement.	С	N/A	Facility	No			
9.C.15.(a)(vi) Summary results of all compliance emission source testing and inspections performed.	С	N/A	Facility	No			
9.C.15.(a)(vii) A summary of CAM monitoring, including a count of all excursions each quarter.	С	N/A	Facility	No			
9.C.15.(b)(i) <b>Micro-Turbines</b> : The total amount of PUC quality natural gas used between the four Capstone C60 micro-turbines shall be recorded on a monthly, quarterly, and annual basis in units of standard cubic feet and million Btus	С	N/A	Facility	No			
9.C.15.(b)(ii) The annual measured heating value of the fuel gas.	С	N/A	Facility	No			
9.C.15.(b)(iii)For each month, the number of days each microturbine operated.	С	N/A	Facility	No			
9.C.15.(b)(iv) Micro-Turbines Sulfur Content annual total sulfur and H2S content, both in units of PPMv of fuel gas burned in Capstone C60 Micro turbines	С	N/A	Facility	No			
9.C.15.c <b>Hot Oil Heaters</b> - The volume of natural gas used (scf) shall be reported as permitted annual heat input limit for each unit (Btu/yr) divided by the District approved heating value of fuel Btu/scf)	С	N/A	Facility	No			
9.C.15(d).i. Flares - Results of the most recent high heating value analysis.	С	N/A	Facility	No			
9.C.15(d).ii. Flares -Records of the fuel gas and if conducted the purge gas sulfur analyses for each flare.	С	N/A	Facility	No			
9.C.15(d).iii. (iii) Media Bed Change: Records documenting any media bed changes for the SULFATREAT unit and the CEI-KMN units. The records shall include the dates of each changeout, the quantity of material replaced, and the type of material placed in the unit.	С	N/A	Facility	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
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Southern California Gas Company
La Goleta Plant
Semi-Annual Compliance Verification Reports
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014 N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.15(e). Changes in the fugitive emissions component count, the total component count, and the associated emission changes at the stationary source.	С	N/A	Facility	No			
9.C.15(f).i HC Liquid Storage Tanks - The hydrocarbon liquid throughput for the prior two calendar quarters.	С	N/A	Facility	No			
9.C.15(f).ii. HC Liquid Storage Tanks - Annually: The API gravity, true vapor pressure at 67.2 degrees and the actual storage temperature of the stored hydrocarbon liquid in each storage tank.	С	N/A	Facility	No			
9.C.15(f).iii. HC Liquid Storage Tanks - Records of each tank maintenance.	С	N/A	Facility	No			
9.C.15(g) Loading Station - The daily and annual volume of HC condensate loaded and the dates of shipments from the loading rack.	С	N/A	Facility	No			
9.C.15(h). The volume (scf) of gas vented, the ROC and TRS content of the gas, and the weight (in pounds) of ROC and TRS vented.	С	N/A	Facility	No			
9.C.15(i). Glycol Unit - the total volume (in MMSCF units) of gas flow through the unit.	С	N/A	Facility	No			
9.C.15(j). Solvent Usage - On a semi-annual basis: the amount of solvent used; the % ROC by weight (as applied); the solvent density; the amount of solvent reclaimed; whether the solvent is photo-chemically reactive; and, the resulting emissions of ROC and photo-chemically reactive solvents to the atmosphere in units of pounds per month	С	N/A	Facility	No			
9.C.15(k)(i). On an annual basis, the emissions from each exempt emission unit for ROC and NOx.	С	N/A	Facility	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:

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Semi-Annual Compliance Verification Reports
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014 N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.15(k)(ii) A summary of each and every occurrence of non-compliance with the provisions of this permit, District rules, and any other applicable air quality requirement (for this purpose, any breakdown report submitted to the District per Regulation V for the non-compliance event need not be repeated; a brief reference will be sufficient)	С	N/A	Facility	No			
9.C.15(k)(iii) A summary list of breakdowns and variances reported/obtained per Regulation V along with the excess emissions that accompanied each occurrence.	С	N/A	Facility	No			
9.C.15(1) Odorant System.  Records documenting carbon replacement for the canister serving the odorant system. The records shall include the dates of each change-out, the quantity of material replaced, and the type of material placed in the unit.	С	Purchase Records	Odorant System Carbon Drum	No			

2/26/2015

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
Documents Incoporated by Reference
9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.C.16.i. (i) IC Engine Particulate Matter Operation and Maintenance Plan. (Ref: Permit condition 9.C.15)	С	N/A		No			
9.C.16.ii. (ii) Emergency Episode Plan (Rule 603) (submitted in 12/2008)	С	N/A		No			
9.C.16.(iii) (iii) IC Engine I&M Plan (12/12/2011)	C	N/A		No			
9.C.16.iv. (iv) Process Monitor Calibration and Maintenance Plan. (2/8/2012)	С	N/A		No			
9.C.16.v. (v) Processed Gas Flow Measurement Plan. (2/8/2012)	C	N/A		No			
9.C.16.vi. (vi) Compliance Assurance Monitoring (CAM) Plan. (12/12/2011)	С	N/A		No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
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District-Only Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.D.1. Condition Acceptance - Acceptance of this operating permit by SoCalGas shall be considered as acceptance of all terms, conditions, and limits of this permit. [Re: District Rule 206]	C	N/A	Facility	No			
9.D.2. Compliance - Nothing contained within this permit shall be construed to allow the violation of any local, State or Federal rule, regulation, ambient air quality standard or air quality increment.	С	N/A	Facility	No			
9.D.3. Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the District's project file) and the District's analyses, as shown in this permit, of the same under which this permit is issued.	C	N/A	Facility	No			
9.D.4. Consistency with Federal, State and Local Permits - Nothing in this permit shall relax any applicable air pollution control requirement or mitigation requirement imposed on SoCalGas by any other governmental agency.	С	N/A	Facility	No			
9.D.5. Odorous Organic Sulfides - SoCalGas shall not discharge into atmosphere H2S and organic sulfides that result in a ground level impact beyond the SoCalGas property boundary in excess of either 0.06 ppmv averaged over 3 minutes or 0.03 ppmv averaged over 1 hour.	С	N/A	Facility	No			

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):

Operating Scenario ID, if applicable:

Southern California Gas Company
La Goleta Plant
District-Only Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

N/A

E. Deviation? H. Breakdown # and B. C/I Emission Unit ID A. Condition No. C. Monitoring Method D. Emissions Unit ID Yes / No F. Deviation Type G. # of Deviations 9.D.6. Throughput Limit The total gas processed by dehy plant 14 shall not exceed 680 MMscf/day, calculated as monthly total gas processed at the plant divided by the number of gas processing days. The monthly gas volume flow shall be measured, using District-approved flow meter(s)/device(s). Gas withdrawal records C 8670 No SoCalGas shall monitor the monthly total volume (in MMscf [see Tab 19] units) of gas processed and the number of processing days via a log to be kept on site. The calculated daily average volume of gas withdrawn/processed shall also be recorded in this log each month 9.D.7. Gas Venting. Only gas from planned pipeline depressurizations may be vented without control. The total volume of gas vented from the facility due to planned pipeline depressurization shall not exceed 10 MMscf annually. If gas is C Gas venting records [Tab 18]. 100903 No vented without control from unplanned pipeline depressurizations the permittee may seek relief from this requirement under the provisions of Rule 505 or Rule 1303 F. 9.D.8.a. Plant-wide Gas Processing: Volume of gas withdrawn/processed per month, the number of days of Gas withdrawal records C 8670 No withdrawal/processing per month and average daily volume [see Tab 19] (in MMscf) of gas withdrawn/processed for the month. Annual Emissions Summary, 9.D.8.b. The March annual report shall list total tons per year C Annual Emissions Inventory Facility No of each criteria pollutant emitted from each emissions unit. Questionaire [Tab33] 9.D.9.a The mass emissions from the E/S DICE unit 008666 and 08668 listed above shall not exceed the values listed in C Table 5.1-3 and 5.1-4. Compliance shall be based on 8666, 8668 No operational, monitoring, recordkeeping and reporting conditions of this permit.

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Company Name:
Facility Name:
Equipment Category:
Part 70 Permit number:
Calendar Period (e.g., Jan.- Dec 08):
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Southern California Gas Company
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District-Only Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.D.9.b The E/S DICE unit #3 008666 and 008668 listed above are subject to the following operational restrictions listed below. Emergency use operations as defined in Section d(25) of the ATCM, have no operational hours limitations.	C C	C. Monitoring Method	8666, 8668	No	T. Deviation Type	G. # 01 Deviations	Emission Cilit ID
9.D.9.b.i. The in use stationary emergency standby diesel fueld CI engines subject to this permit shall not be operated for more than 20 hours per year.	С		8666, 8668	No			
9.D.9.b.ii. The permittee may only add fuel and/or fuel additives to the engine or any fuel tank directly attached to the engine that comply with Section e(1)(B) of the ATCM.	C		8666, 8668	No			
9.D.9.c. Non-Resettable Hour Meter: The E/S DICE 008666 and 008668 Each in use stationary emergency standby diesel fueled a minimum display capability of 9999 hours unless the District has determined (in writing) that a non resettable hour meter with a different minimum display capability is appropiate in consideration of the historical use of the engine and the owner or operator's compliance history.	С		8666, 8668	No			
9.D.9.d. The permittee shall record and maintain the information listed below. Log entries shall be retained for a minimum of 36 months from the date of entry. Log entries made within 24 months of the most recent entry shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request. Log entries made from 25 to 36 months from most recent entry shall be made available to District staff within 5 working days from request. District Form ENF-92 (Diesel-Fired Emergency Standby Engine Recordkeeping Form) can be used for this requirement.	С		8666, 8668	No			
9.D.9.d.i Emergency use hours of operation	С		8666, 8668	No			

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Company Name: Facility Name: Equipment Category: Part 70 Permit number: Calendar Period (e.g., Jan.- Dec 08): Operating Scenario ID, if applicable: Southern California Gas Company La Goleta Plant District-Only Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159 January 1st - December 31th 2014

N/A

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.D.9.d.ii Maintenance and testing hours of operation.	C		8666, 8668	No			
9.D.9.d.iii hours of operation for emission testing to show compliance with Section e(2)(B)(3) {specifically allowed for under this permit}	С		8666, 8668	No			
9.D.9.d.iv initial start up hours {if specifically allowed for under this permit}	C		8666, 8668	No			
9.D.9.d.v hours of operation to comply with requirements of NFPA 25/100 {if applicable}	С		8666, 8668	No			
9.D.9.d.vi hours of operation for all uses other than those specified in items (i)-(iv) above along with a description of what those hours were for.	С		8666, 8668	No			
9.D.9.d.vii The owner or operator shall document fuel use through the retention of fuel purchase records that account for all fuel used in the engine and all fuel purchased for use in the engine, and, at a minimum, contain the following information for each individual fuel purchase transaction	C		8666, 8668	No			
9.D.9.d.vii.A identification of the fuel purchased as either CARB Diesel, or an alternative diesel fuel that meets the requirments of the Verification Procedure or an alternative fuel or CARB Diesel fuel used with additives that meet the requirements of the Verification Procedure or any combination of the above.	С		8666, 8668	No			
9.D.9.d.vii.B amount of fuel purchased	С		8666, 8668	No			
9.D.9.d.vii.C date when the fuel was purchased	С		8666, 8668	No			
9.D.9.d.vii.D. Signature of owner or operator or representative of owner or operator who received fuel.	С		8666, 8668	No			
9.D.9.d.vii.E. Signature of fuel provider indicating fuel was delivered.	С		8666, 8668	No			

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Part 70 Permit number:
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La Goleta Plant
District-Only Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.D.9.(e) By March 1 of each year, a written report documenting compliance with the terms and conditions of this permit and the ATCM for the previous calendar year shall be provided by the permittee to the District (Attn: Annual Report Coordinator). All logs and other basic source data not included in the report shall be made available to the District upon request. The report shall include the information required in the Recordkeeping Condition above.	C C	N/A	8666, 8668	No	T. Deviation Type	C. # 01 Deviations	Emission Cint ID
9.D.9.(f) Temporary engines can replace existing engines only if the requirements (i - vi) listed herein are satisfied.	С	N/A	8666, 8668	No			
9.D.9.(f).i The permitted engine is in need of routine repair or maintenance	С	N/A	8666, 8668	No			
9.D.9.(f).ii The permitted engine that is undergoing routine repair or maintenance is returned to its original serivce within 180 days of installation of the temporary engine.	С	N/A	8666, 8668	No			
9.D.9.(f).iii The temporary replacement engine has the same or lower manufacturer rated horsepower and same or lower potential to emit of each pollutant as the permitted engine that is being temporarily replaced. At the written request of the permittee the District may approve a replacement engine with a larger rated horsepower that the permitted engine if the proposed temporary engine has manufacturer guaranteed emissions (for a brand new engine) or source test data (for a previously used engine) less than or equal to the permitted engine.	С	N/A	8666, 8668	No			
9.D.9.(f).iv. The temporary replacement engine shall comply with all rules and permit requirements that apply to the permitted engine that is undergoing routine repair or maintenance.	С	N/A	8666, 8668	No			

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Company Name: Facility Name:

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La Goleta Plant

**District-Only Conditions** 

9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

N/A

		~		E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.D.9.(f).v. For each permitted engine to be temporarily replaced, the permittee shall submit a completed Temporary IC Engine Replacement Notification form (ENF-94) within 14 days of the temporary engine being installed. This form shall be sent electronically to:temp-engine@sbcDistrict.org	С	N/A	8666, 8668	No			
9.D.9.(f).vi.Within 14 days upon return of the original permitted engine to service, the permittee shall submit a completed Temporary IC Engine Replacement Report form (Form ENF-95). This form shall be sent electronically to: temp-engine@sbcDistrict.org.	С	N/A	8666, 8668	No			
9.D.9.g The permittee may install a new engine in place of a permitted E/S engine, fire water pump engine or engine used for an essential public service that breaks down and can not be repaired, without first obtaining an ATC permit only if the requirements (i - v) listed herein are satisfied.	С	N/A	008666, 008668	No			
9.D.9.g.i. The permitted stationary diesel IC engine is an E/S engine, a fire water pump engine or an engine used for an essential public service (as defined by the District).	С	N/A	008666, 008668	No			
9.D.9.g.ii.The engine breaks down, cannot be repaired and needs to be replaced by a new engine.	С	N/A	008666, 008668	No			

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Company Name:
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Part 70 Permit number:
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9584-R4, PTO 13699, ATC 14287 and ATC 14159

January 1st - December 31th 2014

A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	E. Deviation? Yes / No	F. Deviation Type	G. # of Deviations	H. Breakdown # and Emission Unit ID
9.D.9.g.iii. The facility provides "good cause" (in writing) for the immediate need to install a permanent replacement engine prior to the time period before an ATC permit can be obtained for a new engine. The new engine must comply with the requirements of the ATCM for new engines. If a new engine is not immediately available, a temporary engine may be used while the new replacement engine is being procured. During this time period, the temporary replacement engine must meet the same guidelines and procedures as defined in the permit condition above (Temporary Engine Replacements - DICE ATCM).	C	N/A	008666, 008668	No	1, 20, miss. 1, pe		
9.D.9.g.iv.An Authority to Construct application for the new permanent engine is submitted to the District within 15 days of the existing engine being replaced and the District permit for the new engine is obtained no later that 180 days from the date of engine replacement (these timelines include the use of a temporary engine).	С	N/A	008666, 008668	No			
9.D.9.g.v. For each permitted engine to be permanently replaced pursuant to the condition, the permittee shall submit a completed Permanent IC Engine Replacement Notification form (Form ENF-96) within 14 days of either the permanent or temporary engine being installed. This form shall be sent electronically to: temp-engine@sbcDistrict.org.	С	N/A	008666, 008668	No			
Any engine installed (either temporally or permanently) pursuant to this permit condition shall be immediately shut down if the District determines that the requirements of this condition have not been met.	C	N/A	008666, 008668	No			

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Company Name:
Facility Name:
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January 1st - December 31th 2014

A. G. Till V	D. Ca	C.W. ii . W.d. i	D. E W.: ID	E. Deviation?	F D : :: #	C # 6 D	H. Breakdown # and
A. Condition No.  9.D.9.(h) Notification of Non-Compliance. Owners or operators who have determined that they are operating their stationary diesel-fueled engine(s) in violation of the requirements specified in Sections (e)(1) or (e)(2) of the ATCM shall notify the District immediately upon detection of the violation and shall be subject to District enforcement action.	B. C/I	C. Monitoring Method  N/A	D. Emissions Unit ID  008666, 008668	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.D.9.(i) Notification of Loss of Exemption. Owners or operators of in-use stationary diesel-fueled CI engines, who are subject to an exemption specified in Section (c) from all or part of the requirements of Section (e)(2) of the ATCM, shall notify the District immediately after they become aware that the exemption no longer applies and pursuant to Section (e)(4)(F)(1) of the ATCM shall demonstrate compliance within 180 days after notifying the District.	С	N/A	008666, 008668	No			
9.D.10 Equipment Identification. Identifying tag(s) or name plate(s) shall be displayed on the equipment to show manufacturer, model number, and serial number. The tag(s) or plate(s) shall be issued by the manufacturer and shall be affixed to the equipment in a permanent and conspicuous position	С	N/A	Facility	No			
9.D.11 Emission Factor Revisions. The District may update the emission factors for any calculation based on USEPA AP-42 or District emission factors at the next permit modification or permit reevaluation to account for USEPA and/or District revisions to the underlying emission factors.	С	N/A	Facility	No			
9.D.12. CARB-Registered Portable Equipment. State-registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the equipment is at the facility. [Re: District Rule 202]	С	N/A	Facility	No			

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Company Name:

Facility Name:

La Goleta Plant

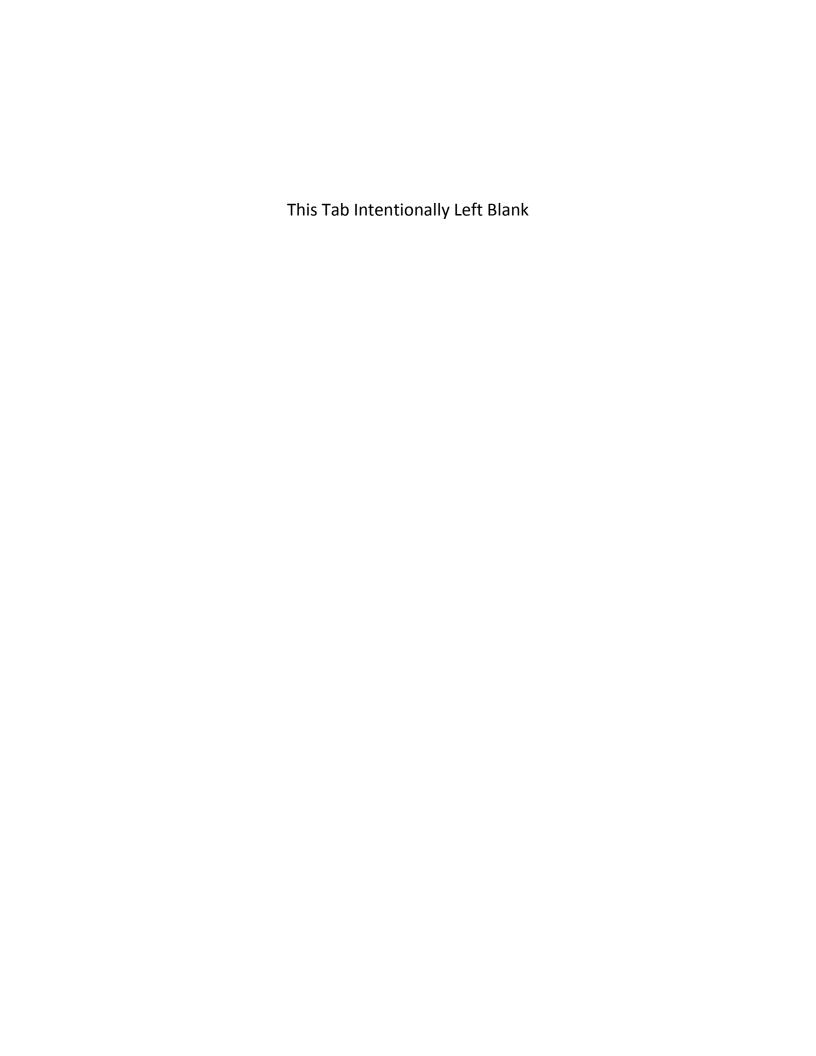
Equipment Category:

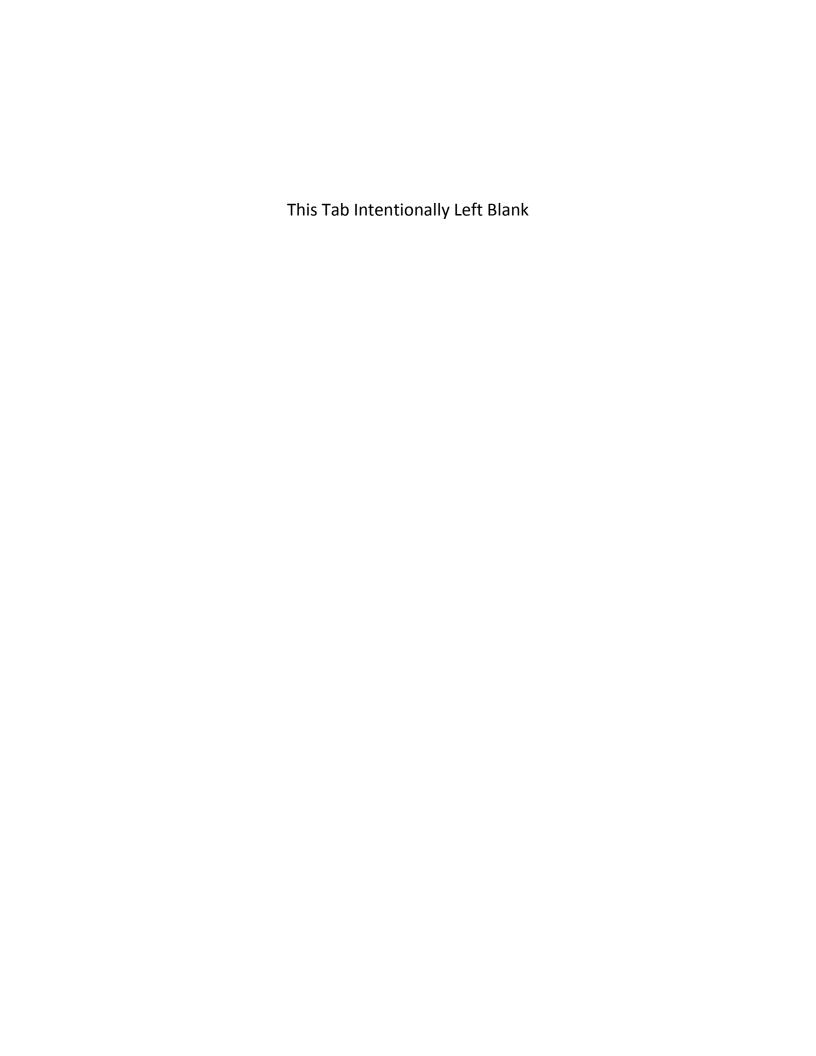
Part 70 Permit number:

District-Only Conditions

9584-R4, PTO 13699, ATC 14287 and ATC 14159

				E. Deviation?			H. Breakdown # and
A. Condition No.	B. C/I	C. Monitoring Method	D. Emissions Unit ID	Yes / No	F. Deviation Type	G. # of Deviations	Emission Unit ID
9.D.13. Abrasive Blasting Equipment. All abrasive blasting activities performed on La Goleta facility shall comply with the requirements of the California Administrative Code Title 17, Sub-Chapter 6, Sections 92000 through 92530.	С	N/A	Facility	No			





# Semi-Annual and Annual Reporting Requirements

Item #	Reporting Item Description	Frequency	APCD Only Requirement	Index Tab
	IC Er	ngines MU2-MU8		
1	Operating Hours	Monthly	No	6
2	Fuel Use (mscf)	Monthly	No	6
3	Fuel Heating Value (Btu/scf)	Semi-Annual	No	6
4	Fuel Sulfur Content (TRS & H2S)	Semi-Annual	No	6
5	Engine/Control Device Maintenance Data	Annual	No	6
6	I&M Plan Required Logs: Parameter Settings, Nox Levels	Quarterly	No	6
7	Equipment Tags	As Recorded	No	13
8	AFRC Setpoing Settings Data	As Performed	No	6
9	Engine Operations Outside Settings Data	Quarterly	No	6
10	Maintenance Records: Engine, Catalyst, AFRC	Quarterly	No	6
11	Control Equipment Parameters: Catalyst, Engine, AFRC, O2 sensor Replacements	Quarterly	No	6
12	CAM Indicator Data Summary	Monthly	No	6
13	Summary of Source Testing	As Performed	No	7
	All C	Other IC Engines		
1	Operating Hours	Monthly	No	8
2	Fuel Use (mscf)	Monthly	No	8
3	Fuel Heating Value (Btu/scf)	Annual	No	9
4	Fuel Sulfur Content (TRS & H2S)	Annual	No	10
5	Engine/Control Device Maintenance Data	Annual	No	11
6	I&M Plan Required Logs: Parameter Settings, Nox Levels	Quarterly	No	12
7	Equipment Tags	As Recorded	No	13
8	Engine Hours: Fire Water Pumps & Emergency Generator	Monthly	No	8
9	Diesel Fuel:Total Sulfur & HHV	Annual	No	28
10	Equivalent Routine IC Engine Replacement	As Recorded	No	29
11	Summary of Source Testing	As Performed	No	14

# Semi-Annual and Annual Reporting Requirements

Item #	Reporting Item Description	Frequency	APCD Only Requirement	Index Tab
		Flares	r regumentent	
1	Gaseous Fuel: HHV	Annual	No	25
2	Gaseous Fuel: Sulfur Content	Annual (Tank Farm) Semi-Annual for Dehy	No	25
3	Purge Gas Sulfur Content	If Applicable	No	25
4	Media Bed Change Records	Semi-Annual	No	24
	Fugitive Hydroc	arbon Component Emission	ns	
1	Changes in Component Count and Associated Emissions	As Recorded	No	27
	Hydrocarbo	on Liquid Storage Tanks		
1	Volume of Condensate Produced	Annual	No	20
2	API Gravity and True Vapor Pressure	Annual	No	15
3	Tank Maintenance Activity	Annual	No	20
	L	oading Station		
1	Volume of Condensate Shipped, Dates Shipped & # of Trucks	Monthly	No	21
		Wells		
1	Volume, ROC & TRS of Gas Vented	Annual	No	18
2	Emergency Gas Vented	Semi-Annual	Yes	22
		Glycol Unit		
1	Volume of Gas Flow (MMscf)	Annual	No	19
		Solvent Usage		
1	Amount Used, ROC & PC Reactive Content, Emissions	Monthly	No	17
	General R	eporting Requirements		
1	ROC & Nox Emissions from Each Exempt Emission Unit	Annual	No	32
2	Summary of Deviations/Non-Compliance	As Recorded	No	30
3	Summary of Breakdowns/Variences	As Recorded	No	31
	N	/licro-Turbines		
1	Fuel and Operating Data	Monthly	No	26
	F	lot Oil Heaters	<u> </u>	
1	Hot Oil Heaters	In Table 5.1-1B we use the Di This assumes 8760 operating h		

# Semi-Annual and Annual Reporting Requirements

Item #	Reporting Item Description	Frequency	APCD Only Requirement	Index Tab
	Ar	nnual Reporting		
1	Volume, Days and Average Daily Volume of Gas Withdrawn/Processed	Monthly	Yes	19
2	Total Criteria Pollutant Emissions For Each Emissions Unit, and Annual Emissions Inventory Questionnnaire	Annual	Yes	33
3	Hot Water Heaters	Annual	Yes	23

Summary of Engine Use - fulfillment of 9.C.15(a)(i) and 9.C.15(a)(ii)

		MU2			MU3		MU4			
	DCL I	ntl. Ingersoll-Rand L	.VG-82	DCL I	ntl. Ingersoll-Rand L	.VG-82	DCL Intl. Ingersoll-Rand LVG-82			
	S	Serial Number: 1647	28	S	erial Number: 1647	29	Serial Number: 164724			
	6	50 HP, 8 Cyls, 300 R	PM	65	50 HP, 8 Cyls, 300 RI	PM	65	50 HP, 8 Cyls, 300 R	PM	
	Operating Days	Operating Hours	Fuel Consumption	Operating Days	Operating Hours	Fuel Consumption	Operating Days	Operating Hours	<b>Fuel Consumption</b>	
January 2014	0	0	0	0	0	0	0	0	0	
Feburary 2014	0	0	0	1	3	15	4	32	168	
March 2014	0	0	0	11	191	1028	17	219	1179	
April 2014	0	0	0	2	10	48	4	24	127	
May 2014	0	0	0	14	237	1299	7	104	568	
June 2014	0	0	0	23	395	2321	28	542	3172	
July 2014	0	0	0	11	152	931	18	308	1852	
August 2014	0	0	0	23	426	2558	26	571	3362	
September 2014	0	0	0	20	317	1926	21	325	1939	
October 2014	0	0	0	20	234	1450	23	280	1698	
November 2014	0	0	1	14	183	1137	14	188	1136	
December 2014	0	0	1	15	252	1553	15	266	1598	
<b>Grand Total</b>	0	0	1.9	154	2400	14265.2	177	2859.0	16799.1	

191.0

**Grand Total** 

3073.0

18400.9

Summary of Engine I	L										
		MU5			MU6			MU7			
	DCL I	ntl. Ingersoll-Rand L	VG-82	DCL I	ntl. Ingersoll-Rand K	VG-62	DCL Intl. Ingersoll-Rand KVG-62				
	S	erial Number: 1647	23	S	erial Number: 16472	27	Si	Serial Number: 164725			
	65	50 HP, 8 Cyls, 300 Rf	PM	66	60 HP, 6 Cyls, 330 RF	PM	66	60 HP, 6 Cyls, 330 Rf	PM		
	Operating Days	Operating Hours	<b>Fuel Consumption</b>	Operating Days	<b>Operating Hours</b>	<b>Fuel Consumption</b>	Operating Days	<b>Operating Hours</b>	<b>Fuel Consumption</b>		
January 2014	0	0	0	0	0	0	0	0	0		
Feburary 2014	3	28	156	1	3	12	0	0	1		
March 2014	14	153	835	8	73	385	1	5	32		
April 2014	11	129	712	17	241	1199	19	277	1385		
May 2014	14	180	978	24	469	2334	29	620	3108		
June 2014	29	633	3750	29	643	3469	28	612	3301		
July 2014	23	371	2257	26	446	2510	22	447	2517		
August 2014	29	615	3685	13	236	1354	30	654	3804		
September 2014	21	324	1997	18	258	1510	21	330	1922		
October 2014	23	316	1976	19	288	1700	22	324	1915		
November 2014	13	165	1043	12	166	980	12	160	949		
December 2014	11	160	1011	17	282	1657	15	230	1353		

3105.0

17110.9

199.0

3659.0

20287.0

184

Summary of Engine	Summary of Engine L										
		MU8									
	DCL Ir	ntl. Ingersoll-Rand K	(VG-62								
	S	erial Number: 1647	26								
	66	60 HP, 6 Cyls, 330 R	PM								
	Operating Days	Operating Hours	Fuel Consumption								
January 2014	0	0	0								
Feburary 2014	1	3	14								
March 2014	7	54	285								
April 2014	18	317	1604								
May 2014	29	566	3074								
June 2014	19	328	1787								
July 2014	23	415	2403								
August 2014	30	609	3592								
September 2014	19	284	1671								
October 2014	19	306	1819								
November 2014	12	147	871								
December 2014	14	248	1459								
Grand Total	191	3277.0	18580.6								

#### ENGINEERING ANALYSIS CENTER

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14
TEST LOCATION: Goleta plant fuel OM 3464

SAMPLE DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	93.2314	1012.3	911.5	0.5539	14.9263	85.6779	943.8	849.8	0.5164
ETHANE	3.4601	1773.8	1622.8	1.0382	1.0405	5.9722	61.4	56.1	0.0359
PROPANE	1.1674	2521.9	2320.4	1.5225	0.5147	2.9544	29.4	27.1	0.0178
iso-BUTANE	0.1260	3259.4	3006.9	2.0068	0.0732	0.4204	4.1	3.8	0.0025
n-BUTANE	0.2195	3269.8	3017.4	2.0068	0.1276	0.7323	7.2	6.6	0.0044
iso-PENTANE	0.0406	4010.2	3707.6	2.4911	0.0293	0.1681	1.6	1.5	0.0010
n-PENTANE	0.0312	4018.0	3715.6	2.4911	0.0225	0.1292	1.3	1.2	0.0008
C6 plus	0.0475	5194.5	4812.8	3.2521	0.0447	0.2568	2.5	2.3	0.0015
CARBON DIOXIDE	1.0616	0.0	0	1.5195	0.4671	2.6812	0.0	0.0	0.0161
OXYGEN	0.0850	0.0	0	1.1048	0.0272	0.1561	0.0	0.0	0.0009
NITROGEN	0.5297	0.0	0	0.9672	0.1483	0.8513	0.0	0.0	0.0051
Totals>	100.000				17.4	100.0	1051.3	948.4	0.6026

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons	1.7
A = (Total SG)(0.0101)	0.00609
B = (Total Non-HC)(.0070)	0.00012
Z = 1.00369 - A + B	0.99772

Total Mol Wt. ROC C3 to C6+ = 0.8121 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 4.66%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1053.7 BTU/real cubic foot
LHV	950.6 BTU/real cubic foot
Specific Gravity	0.6039

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0021$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

ex; (BTU/Ideal Gas Volume)/Z where Z=(Real Gas Volume/Ideal Gas Volume)



#### Oilfield Environmental and Compliance, INC.

Southern California Gas Company	Project: La Goleta Storage	
PO BOX 818	Project Number: TS2014-C015	Reported:
Goleta CA, 93116	Project Manager: Dennis Lowrey	12-Feb-14 15:54

### **Goleta Plant Fuel OM 3464** 1400558-03 (Air)

	1400330-03 (All.)											
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
	Oilfield E	Environm	ental a	and Co	mplian	се						
Sulfur Compounds												
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16				
Carbonyl Sulfide	ND	0.050	"	"	"	"	"	"				
Carbon disulfide	ND	0.050	"	"	"	"	"	"				
Sulfur dioxide	ND	0.050	"	"	"	"	"	"				
Methyl Mercaptan	ND	0.050	"	"	"	"	"	"				
Ethyl Mercaptan	ND	0.050	"	"	"	"	"	"				
Dimethyl Sulfide	ND	0.050	"	"	"	"	"	"				
Total Unknown Sulfur Compounds as H2S	ND	0.050	"	"	"	"	"	"				
Total Reduced Sulfur as S	ND	0.050	"	"	"	"	"	"				
		Tank Far 14005	rm Flar 558-04 ( <i>A</i>									
Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
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### **Oilfield Environmental and Compliance**

Sulfur Compounds								
Hydrogen Sulfide (H2S)	0.77	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16
Carbonyl Sulfide	0.20	0.050	"	"	"	"	"	"
Carbon disulfide	0.21	0.050	"	"	"	"	"	"
Sulfur dioxide	ND	0.050	"	"	"	"	"	"
Methyl Mercaptan	4.4	0.050	"	"	"	"	"	"
Ethyl Mercaptan	2.3	0.050	"	"	"	"	"	"
Dimethyl Sulfide	3.3	0.050	"	"	"	"	"	"
Total Unknown Sulfur Compounds as	ND	0.050	"	"	"	"	"	"
H2S								
Total Reduced Sulfur as S	11	0.050	"	"	"	"	"	"

Oilfield Environmental and Compliance

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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TEL: (805) 922-4772 FAX: (805) 925-3376

#### Summary CAM Data - fulfillment of 9.C.15(a)(vii)

	Average MU2 -	Minimum MU2	Maximum MU2	Average MU3 -	Minimum MU3	Maximum MU3	Average MU4 -	Minimum MU4 ·	Maximum MU4	Average MU5 -	Minimum MU5	Maximum MU5
	O2 MV	CAT Inlet Temp	- CAT Outlet	O2 MV	CAT Inlet Temp	- CAT Outlet	O2 MV	CAT Inlet Temp	- CAT Outlet	O2 MV	CAT Inlet Temp	- CAT Outlet
Date			Temp			Temp			Temp			Temp
January 2014	N/A	N/A	N/A									
February 2014	N/A	N/A	N/A	0.684	787	890	0.744	775	917	0.698	821	933
March 2014	N/A	N/A	N/A	0.717	804	979	0.743	789	952	0.699	823	971
April 2014	N/A	N/A	N/A	0.715	833	920	0.740	786	946	0.698	811	1045
May 2014	N/A	N/A	N/A	0.716	810	968	0.740	807	942	0.698	829	933
June 2014	N/A	N/A	N/A	0.713	853	988	0.740	828	969	0.699	857	970
July 2014	N/A	N/A	N/A	0.711	874	994	0.739	859	1117	0.700	884	1163
August 2014	N/A	N/A	N/A	0.716	865	1000	0.718	848	972	0.723	887	974
September 2014	N/A	N/A	N/A	0.715	866	997	0.712	861	968	0.728	883	973
October 2014	N/A	N/A	N/A	0.714	859	1010	0.713	860	970	0.731	886	1021
November 2014	N/A	N/A	N/A	0.714	869	1009	0.714	861	976	0.734	895	1026
December 2014	N/A	N/A	N/A	0.714	871	987	0.715	862	975	0.734	890	1037

	Average MU6 -	Minimum MU6	Maximum MU6	Average MU7 -	Minimum MU7	Maximum MU7	Average MU8 -	Minimum MU8	Maximum MU8
	O2 MV	CAT Inlet Temp	- CAT Outlet	O2 MV	CAT Inlet Temp	- CAT Outlet	O2 MV	CAT Inlet Temp	- CAT Outlet
Date			Temp			Temp			Temp
January 2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
February 2014	0.721	826	941	N/A	N/A	N/A	0.730	805	969
March 2014	0.709	845	1096	0.714	877	1042	0.736	794	1076
April 2014	0.706	841	1071	0.717	801	1052	0.735	843	1062
May 2014	0.707	845	1067	0.722	839	1049	0.735	855	1062
June 2014	0.707	902	1085	0.723	843	1067	0.733	865	1071
July 2014	0.708	902	1097	0.724	881	1080	0.735	895	1079
August 2014	0.709	909	1108	0.727	922	1092	0.707	907	1105
September 2014	0.705	913	1119	0.723	905	1085	0.694	895	1103
October 2014	0.704	913	1105	0.725	907	1093	0.694	913	1125
November 2014	0.703	930	1110	0.725	900	1096	0.688	902	1107
December 2014	0.705	945	1103	0.723	886	1088	0.695	912	1108

N/A - Indicates unit was not operated or did not operate long enough to require logging a reading. Oxygen Sensor mV Output Within 5% of the set point, with the set point between 650 and 875 mV.

Catalyst Inlet Temperature Greater than 610 deg F 2

Catalyst Outlet Temperature Between 610 and 1400 deg F

### Summary of CAM Excursions and Errors - fulfillment of 9.C.15(a)(vii)

Engine	Error Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
MU2	Out of Limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0
MU3	Out of Limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0
MU4	Out of Limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0
MU5	Out of Limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0
MU6	Out of Limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0
MU7	Out of Limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0
MU8	Out of limits (excursions)	0	0	0	0	0	0	0	0	0	0	0	0	0
	System Error (during operation)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2-1
Summary of Results
Southern California Gas Company
Goleta Compressor Station
Main Unit No. 3
March 24, 2014

Run Oxygen, %	1 0.00	2 0.00	3 0.00	Average 0.00	Emission Limit	
Flow Rate, dscfm	797	891	824	837		
Formaldehyde (Outlet),						
ppm	< 0.572	< 0.559	< 0.631	< 0.587	•	
ppm @ 15% O <sub>2</sub>	< 0.162	< 0.158	< 0.178	< 0.166	2.7	
lb/hr	< 0.00213	< 0.00233	< 0.00243	< 0.00230		
g/bHp-hr	< 0.00151	< 0.00166	< 0.00173	< 0.00163		
Operating Parameters,						
Load, %	98.3	98.0	98.1	98.1		
Fuel Flow, scfh	5,399	6,036	5,583	5,673		
Heat Rate, MMbtu/hr	5.55	6.20	5.73	5.83		
Horsepower, bHp	639	637	638	638		
RPM	300	299	299	299		
Catalyst Temperature In, °F	923	921	923	922		
Catalyst Temperature Out, °F	972	969	970	970		
Lambda Sensor Voltage, mV	0.738	0.724	0.737	0.733		

Table 2-2
Summary of Results
Southern California Gas Company
Goleta Compressor Station
Main Unit No. 4
March 24, 2014

Run Oxygen, %	1 0.00	2 0.00	3 0.00	Average 0.00	Emission Limit
Flow Rate, dscfm	914	979	979	957	
Formaldehyde (Outlet),					
ppm	< 0.590	< 0.593	< 0.578	< 0.587	
ppm @ 15% O $_{ m 2}$	< 0.166	< 0.167	< 0.163	< 0.166	2.7
lb/hr	< 0.00252	< 0.00271	< 0.00265	< 0.00263	
g/bHp-hr	< 0.00181	< 0.00195	< 0.00190	< 0.00189	
Operating Parameters,					
Load, %	97.2	97.2	97.1	97.1	
Fuel Flow, scfh	6,192	6,632	6,632	6,485	
Heat Rate, MMbtu/hr	6.36	6.81	6.81	6.66	
Horsepower, bHp	632	632	631	631	•
RPM	302	301	301	301	
Catalyst Temperature In, °F	902	909	910	907	
Catalyst Temperature Out, °F	945	953	953	950	
Lambda Sensor Voltage, mV	0.746	0.746	0.747	0.746	

Table 2-3
Summary of Results
Southern California Gas Company
Goleta Compressor Station
Main Unit No. 5
March 25, 2014

Run Oxygen, %	1 0.30	2 0.29	3 0.34	Average 0.31	Emission Limit
Flow Rate, dscfm	917	944	941	934	
Formaldehyde (Outlet),					
ppm	< 0.551	< 0.546	< 0.572	< 0.556	
ppm @ 15% O 2	< 0.158	< 0.156	< 0.164	< 0.159	2.7
lb/hr	< 0.00236	< 0.00241	< 0.00252	< 0.00243	
g/bHp-hr	< 0.00171	< 0.00174	< 0.00182	< 0.00175	
Operating Parameters,	0.4 7	0.4.0			
Load, %	96.7	96.8	96.6	96.7	
Fuel Flow, scfh	6,118	6,300	6,264	6,227	
Heat Rate, MMbtu/hr	6.30	6.48	6.45	6.41	
Horsepower, bHp	629	629	628	629	
RPM	300	300	301	300	`
Catalyst Temperature In, °F	905	905	906	905	
Catalyst Temperature Out, °F	953	953	953	953	
Lambda Sensor Voltage, mV	0.700	0.698	0.700	0.699	

Table 2-4
Summary of Results
Southern California Gas Company
Goleta Compressor Station
Main Unit No. 6
March 25, 2014

Run Oxygen, %	1 0.00	2 0.00	3 0.00	Average 0.00	Emission Limit
Flow Rate, dscfm	910	899	1015	941	
Formaldehyde (Outlet),	•				
ppm	< 0.529	< 0.569	< 0.607	< 0.568	
ppm @ $15\%$ O $_2$	< 0.149	< 0.161	< 0.171	< 0.160	2.7
lb/hr	< 0.0022	5 < 0.00239	< 0.00288	< 0.00251	
g/bHp-hr	< 0.0016	3 < 0.00179	< 0.00215	< 0.00185	
Operating Parameters,					
Load, %	95.2	92.0	92.0	93.1	
Fuel Flow, sofh	6,158	6,078	6,866	6,368	
Heat Rate, MMbtu/hr	6.34	6.25	7.07	6.55	
Horsepower, bHp	628	607	608	614	
, RPM	330	330	330	330	,
Catalyst Temperature In, °F	1023	1025	1033	1027	
Catalyst Temperature Out, °	F 1068	1070	1077	1072	
Lambda Sensor Voltage, mV	0.713	0.704	0.696	0.704	

Table 2-5
Summary of Results
Southern California Gas Company
Goleta Compressor Station
Main Unit No. 7
March 26, 2014

Run Oxygen, %	1 0.00	2 0.00	3 0.03	Average 0.01	Emission Limit
Flow Rate, dscfin	863	956	959	926	
Formaldehyde (Outlet),					
ppm	< 0.592	< 0.573	< 0.544	< 0.570	
ppm @ 15% O $_{\mathrm{2}}$	< 0.167	< 0.162	< 0.154	< 0.161	2.7
lb/hr	< 0.00239	< 0.00256	< 0.00244	< 0.00246	
g/bHp-hr	< 0.00172	< 0.00191	< 0.00184	< 0.00182	
Operating Parameters,					
Load, %	95.3	92.3	91.2	92.9	
Fuel Flow, scfh	5,836	6,462	6,474	6,257	
Heat Rate, MMbtu/hr	6.01	6.65	6.67	6.44	
Horsepower, bHp	629	609	602	613	
RPM	331	331	331	331	,
Catalyst Temperature In, °F	1008	1005	1001	1004	
Catalyst Temperature Out, °F	1037	1036	1031	1035	
Lambda Sensor Voltage, mV	0.717	0.717	0.716	0.717	

Table 2-6
Summary of Results
Southern California Gas Company
Goleta Compressor Station
Main Unit No. 8
March 26, 2014

Run	1	2	3	Average	Emission Limit
Oxygen, %	0.00	0.01	0.00	0.00	
Flow Rate, dscfm	930	984	818	911	
Formaldehyde (Outlet),					
ppm	< 0.527	< 0.587	< 0.563	< 0.559	
ppm @ 15% O <sub>2</sub>	< 0.149	< 0.166	< 0.159	< 0.158	2.7
lb/hr	< 0.00229	< 0.00270	< 0.00215	< 0.00238	
g/bHp-hr	< 0.00170	< 0.00200	< 0.00159	< 0.00176	
Operating Parameters,					
Load, %	92.9	92.9	92.9	92.9	
Fuel Flow, scfh	6,288	6,654	5,531	6,158	
Heat Rate, MMbtu/hr	6.47	6.85	5.70	6.34	
Horsepower, bHp	613	613	613	613	
RPM'	331	331	330	331	
Catalyst Temperature In, °F	1019	1015	1007	1014	
Catalyst Temperature Out, °F	1068	1065	1058	1064	
Lambda Sensor Voltage, mV	0.734	0.736	0.740	0.737	

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL129/MU#3	Part 70/SBAPCD Permit 9584-R4

Passed As Found

Date - 3.4.14

Inspector Name - Buckfiret, CHRIS.D, CHRIS.H/RODVIGNOZI

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	BID			
CO corrected to 15% O2	≤ 1700 PPMV	53.5			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NR			
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	18.60			
Fuel Pressure	3." - 9." WC	6"			
Manifold Vacuum	2" - 10" HG	10,25"			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company
Stationary Source Name	La Goleta
Stationary Source Address	1171 More Ranch Road, Goleta

8AL128/MU#4

Engine Serial/ID Number

7

Date - 3.4,14

Inspector Name - Gere Hower, Cohers. H/Rodrigue

Part 70/SBAPCD Permit 9584-R4

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	15,0			
CO corrected to 15% O2	≤ 1700 PPMV	1.077.8			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NIR			
02	≤.6%	600			
Ignition Timing	12° - 20° BTDC	18.9°			
Fuel Pressure	3." - 9." WC	5,75"			
Manifold Vacuum	2" - 10" HG	9"			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company
Stationary Source Name	La Goleta
Stationary Source Address	1171 More Ranch Road, Goleta

Engine Serial/ID Number

8AL127/MU#5

Part 70/SBAPCD Permit 9584-R4

Passed As Found

Date - 3.4.14

Inspector Name - Gere HAMET, CHEIS. H/ROSTIGUET

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	9.2			
CO corrected to 15% O2	≤ 1700 PPMV	246,20			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	11/21			
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	19.50			
Fuel Pressure	3." - 9." WC	9,75"			
Manifold Vacuum	2" - 10" HG	7"			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	6EL265/MU#6	Part 70/SBAPCD Permit

Passed As Found

Date - 3/5/14 Inspector Name - D/

/Rodviguest

9584-R4

	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	4,0			
CO corrected to 15% O2	≤ 1700 PPMV	177.5			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NR			
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	18.6			
Fuel Pressure	3." - 9." WC	5.8			
Manifold Vacuum	2" - 10" HG	7.05			

# INTERNAL COMBUSTION ENGINE INSPECTION AND MAINTENANCE LOG

Anglin Care

Testo tasc () Testo tasc KL

SM: 01073873 WESA

The Gas Io. A@CS USL BOS 551-3611

MU47

	, ,		
Company Name	Southern California Gas Company	!	Sample time: 16 min Rinse time: 15 min
Stationary Source Name	La Goleta		Sample time: 16 min Rinse time: 15 min Data rate: 15 sec Calc. Mean value: Yes
Stationary Source Address	1171 More Ranch Road, Goleta		Tail. avecage mean: 101.5 of Ta 65.5 of Ta 6.16 . 12 7.16 ppm 100 2635 ppm 100
Engine Serial/ID Number	6EL266/MU#7	Part 70/SBAPCD Permit 9584-I	PPM 555 PPM 555 PPM 56
Passed As Found			15.0 PPW CN5X 0.95 1/M Fump 0.95 1/M Fump
Date - 3/36/14	Inspector Name - flustig		5.1 V 5.11 50 PPM NO C.3 PPM NOS PPM CNO
	/ //		

		iron tron	): 23./26./14 12:44:28 03/26/14 _3:01:44		
	Parameter Compliance	2	Corrective Action		
	Value		(Date and Description)	[ შალხ	e,: 0064
Parameter	Allowed	Measured		pate	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	14.2			
CO corrected to 15% O2	≤ 1700 PPMV	750.4			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NA			
02	≤.6%	0.16%			
Ignition Timing	12° - 20° BTDC	19.50			
Fuel Pressure	3." - 9." WC	5.6"			
Manifold Vacuum	2" - 10" HG	7.71			

## Goleta Storage MU7 3/26/2014

Measured Parameters	Units	Run 1
Oxygen, O <sub>2</sub>	%vd	0.16
Carbon Monoxide, CO	ppmvd	2638
Nitric Oxide, NO	ppmvd	50
Nitrogen Dioxide, NO <sub>2</sub>	ppmvd	0
Nitrogen Oxides, NO <sub>x</sub>	ppmvd	50

Calculated Results	Units	Run 1
СО	ppmvd @ 15%O <sub>2</sub>	750.4
NO <sub>x</sub>	ppmvd @ 15%O <sub>2</sub>	14.2

CO ppmvd @ 15%  $O_2$  = (5.9/(20.9-% $O_2$ )) \* ppmvd CO  $NO_x$  ppmvd @ 15%  $O_2$  = (5.9/(20.9-% $O_2$ )) \* ppmvd  $NO_x$ 

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	6EL267/MU#8	Part 70/SBAPCD Permit 9584-R4

Date - 2/5/14 Inspector Name - D/

/Radnigrez

	Parameter Compliance	2	Corrective Action Follow-Up		ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	29,0			
CO corrected to 15% O2	≤ 1700 PPMV	1.127,8			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NIR			
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	19.8			
Fuel Pressure	3." - 9." WC	5.6			
Manifold Vacuum	2" - 10" HG	7.65			

Company Name	Southern California Gas Company		
Stationary Source Name	La Goleta		
Stationary Source Address	1171 More Ranch Road, Goleta		
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4	
Passed) Ast	Tourd		
Date - <u>3.3-14</u>	Inspector Name - Gue Hunes	Rodrinee	

	Parameter Compli	ance	Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	≤ 125 PPMV	27.3			
CO corrected to 15% O2	≤ 4500 PPMV	152.6			
02	≥ 13.5%	14.6			
Ignition Timing	0-10°	7°			
Engine Speed	≤ 305 RPM	302			

#### ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

LOCATION Goleta EQUIPMENT TESTED <u>LVG-82</u>. Unit#3 Unit # 4 JUnit # 5 Unit# Unit# **Engine Unit** AS Found AS Found AS Found Run# 3/4/14 3/4/14 Date Start Time Finish Barometer (in.Hg) Dry Bulb (F) Wet Bulb (F) Lambda Sensor **EGO 1** 801 140 EGO<sub>3</sub> 69B 650 Rated HP Actual HP 603 596 9/1 % of Rated Load RPM Rated/Actual 300/301 8.6 Manifold Depress. Fyra, Loc (in. Hg) (BTDC) 8.6 Timing 914 886 Up stream 896 Stack Temp (F) Down stream 95 433 938 Oil Pressure (psig) **Engine Hours** (hr) Catalyst Hours (hr) (scfh) Fuel Flow (INO Fuel Man. Press.\* Up stream NOx (ppm) Down stream Up stream CO (ppm) Down stream てもをなって Total HC Down stream (ppm) Up stream CO2 (%) Down stream Up stream (%)  $O_2$ Down stream 9,2 NO<sub>x</sub> @ 15% O<sub>2</sub> (ppm) Down stream CO @ 15% O<sub>2</sub> (ppm) 24/0,21 1,077,8 Down stream 37,9 HC @ 15% O<sub>2</sub> (mqq) Down stream

TEST CONDUCTED BY

\* Record measured units (psig, "Hg, "wc)

# ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

Total HC   CO2   CO2   CM   CO2   CM   CO2   CM   CO2   CM   CM   CO2   CM   CM   CM   CM   CM   CM   CM   C	LOCATION Goleta EQUIPMENT TESTED KGV-62							
Run #   As Found SFa.md     Date   3/5/14   3/5/14     Time   Start   10/52   4/12     Finish   1/13   74/32     Barometer   (in.Hg)   3/14   3/5/14     Dry Bulb   (F)   6/5   6/5     Wet Bulb   (F)   6/0   5/9     Lambda Sensor   (mV)   EGO 1   79/2   8/01     Lambda Sensor   (mV)   EGO 3   70/3   74/0     Actual HP   6/45   6/5   3/2     Actual HP   6/45   6/5     Actual HP   6	Engine Unit			Unit # 6	Unit# 🛱	Unit #	Unit #	Unit #
Date     3   5   1   4   3   5   1   4   1   5   5   4   1   1   5   5   4   1   1   5   5   4   1   1   5   5   4   1   5   5   5   5   5   5   5   5   5								
Time   Start   10,52   14112   Finish   1/13   14132			<del> </del>	3/5/1A	3/5/14			
Barometer			Start	10.50	14:12			
Barometer   (in.Hg)   30, 10, 30, 12, 30, 12, 30, 12, 30, 30, 30, 30, 30, 30, 30, 30, 30, 30	Time			1//:1.3	14:32		<del>-                                    </del>	
Dry Bulb   (F)   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5	<u></u>		11 1111011	1////	1/0/07	1		
Dry Bulb   (F)   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5   6.5	Barometer	<del> </del>	(in.Ha)	31116	30,12,			T
Lambda Sensor				65				
Lambda Sensor   (mV)   EGO 1   79.2   80/   EGO 3   70.3   74.0     EGO 3   70.3     EGO 3   70.3     EGO 3					59			
Rated HP			<u>V</u>	<u> </u>		<del></del>		
Rated HP			EGO 1	792	1801	T		
Rated HP  Actual HP  Actual HP  & 45 & 53  % of Rated Load  RPM Rated/Actual  SUETION / DISCLANAGE (PSIG)  Manifold Depress-Eng / Scc. (In.Hg)  Manifold Depress-Eng / Scc. (In.Hg)  Timing  (BTDC) / 8,6 / 9,8  Up stream / J.047 / J.073  Down stream / J.00 / J.60  Oil Pressure  (hr)  Catalyst Hours  Catalyst Hours  Chel How  (scfh)  Cog (ppm)  Cog (%)  Down stream / J.03 / J.246  Down stream / J.03 / J.246  Oco (ppm)  Cog (%)  Down stream / J.03 / J.27 / J.07  Down stream / J.03 / J.03  Down stream / J.04 / J.07  Down stream / J.04 / J.07  Down stream / J.07 / J.07  Down stream / J.0	Lambda Sensor	· (mv)		703				
Actual HP % of Rated Load RPM Rated/Actual % of Rated Load % of Rated Load RPM Rated/Actual % of Rated Load % of Rated Loa	Rated HP			660	60		<u>- †</u>	1
% of Rated Load       971,7 98,9         RPM Rated/Actual       338/331 330/330         Sustion / Distrate Press. Final Nation (In.Hg)       71.8         Manifold Depress. Final Nation (In.Hg)       71.8         Timing       (BTDC)       71.8         Stack Temp       (F)       Up stream 1.047 1.013         Down stream (1.100 1.060       Down stream (1.100 1.060         Oil Pressure       (psig)       47         Engine Hours       (hr)       52.953 43.764         Catalyst Hours       (hr)       52.953 43.764         Fuel Flow       (scfh)       6.085 6.094         Fuel Man. Press.*       (TWO)       5.7       5.6         NOx       (ppm)       Up stream 2.490.5 2.795.5       Down stream 7.0,3       10.26         CO       (ppm)       Down stream 3.63.6 331.3       Up stream 2.603.7 3.151.7       Up stream 2.603.7 3.151.7         CO2       (%)       Up stream 7.6.7 4.15       Up stream 7.6.7 4.15       Up stream 7.0.0       Up stream 7.0.0 </td <td></td> <td></td> <td></td> <td>645</td> <td>7653</td> <td></td> <td></td> <td></td>				645	7653			
RPM Rated/Actual  SuzTon   DisCharde (PSis)   91811,720 946/1731  Manifeld-Déprese-Eng   1/6.0. (in.Hg)   7/6   7/3  Timing (BTDC)   7/8   7/8  Stack Temp (F)   Up stream   7.047   7.073   Down stream   7.100   7/60   Down stream   7/7   5/7    Engine Hours (hr)   52,953   43,76   Catalyst Hours (hr)   52,953   43,76   Fuel Flow (scfh)   6,085   6,094   Fuel Man. Press.* (TWO)   5.7   5/6    NO <sub>X</sub> (ppm)   Up stream   2/490.5   2/95.5   Down stream   7/3   1/2-6   Down stream   7/3   1/2-6   Down stream   7/3   1/2-6   Down stream   7/3   1/3   Down stream   7/4   7/4   Down stream		d		97,7	407			
Suration   Distinguish   Psig   9181,1720 946/1731     Manifeld Dépress. Eng   Va.c. (in.Hg)   7.8   7.3     Timing   (BTDC)   /8.6   /9.8     Stack Temp   (F)   Up stream   7.047   7.043     Down stream   7.108   7.8     Down stream   7.108				330/33	1330/330		<del>                                     </del>	
Manifold Déprèse- Eng   Max. (in.Hg)   7.8   7.3   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7.8   7			(P51G)	918/17/2	946/1731	L	<del></del>	<u> </u>
Timing Stack Temp  (F)    Up stream	Manifold Depres	8-Enalt	(in.Hg)		17/3			T
Stack Temp   (F)   Up stream   1,047   1,013   Down stream   1,108   1,060   Down stream   1,108   1,060   Down stream   1,108   1,060   Down stream   1,108   1,060   Down stream   1,108   Down st		0	(BTDC)		19.8			<u> </u>
Down stream   1,100   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060   1,060								<u> </u>
Coli   Pressure	Stack Temp	(F)		CIOR			<u> </u>	
Engine Hours (hr) 52,953 43764 Catalyst Hours (hr) ————————————————————————————————————	Oil Pressure			47	157		-	1
Catalyst Hours  Fuel Flow  Fuel Flow  (scfh)  6,085 6,094  Fuel Man. Press.*  (TWO)  5-7 546  NO <sub>X</sub> (ppm)  Up stream  Down stream  Dow			\FS/	<del></del>	<u> </u>		<del>l </del>	- <del>-                                    </del>
Catalyst Hours  Fuel Flow  Fuel Flow  (scfh)  6,085 6,094  Fuel Man. Press.*  (TWO)  5-7 546  NO <sub>X</sub> (ppm)  Up stream  Down stream  Dow	Engine Hours		(hr)	52,953	43764			T
Fuel Flow (scfh) 6,085 6,094  Fuel Man. Press.* (TWO) 5.7 546  NO <sub>X</sub> (ppm) Up stream 2,490.5 2,195.5  Down stream 3,603.7 5,151.7  Down stream 6,28,7 3,993.3  Fotal HC (ppm) Down stream 3,03.6 3,31.3  Up stream 7,0 1/15  Down stream 7,2 4 12.7  Up stream 7.0 0,0  O <sub>2</sub> (%) Up stream 7.0 0,0  O <sub>3</sub> (ppm) Down stream 7,0 0,0  O <sub>4</sub> (ppm) Down stream 7,0 0,0  O <sub>5</sub> (ppm) Down stream 7,5 1,527,8				1	-			
Total HC   CO2   CO2   CM   CO3   CM   CO4   CM   CO4   CM   CO5   CM   CO5   CM   CM   CO5   CM   CM   CM   CM   CM   CM   CM   C	Fuel Flow			6.085	6.094			
NO <sub>X</sub> (ppm) Up stream 2/490.5 2.195.5 Down stream 14,3 102.6 Up stream 3.603.7 5.151.7 Down stream 3.603.7 5.151.7 Down stream 3.03.6 331.3 Up stream 17.6 11.5 Down stream 17.4 12.7 Up stream 17.4 12.7 Down stream 17.5 1.5 Down stream 17.5 Down stream 17.5 1.5 Down stream 17.5 Down stream		*		5.7	546			<u> </u>
Down stream   1/3   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/		<u>-</u>			1. 19 10. 1	<del></del>	_1	J
Down stream	NO	/nnm)						
Down stream	NOX	(ppin)	Down stream	94,3	1020			
Down stream	CO	/nnm\	Up stream	3.603.1	51511			
Total HC       (ppm)       Down stream       303.6       331.3         CO2       (%)       Up stream       11.5         Down stream       12.4       12.7         Up stream	CO	(ppin)		6281	3,993,3		T	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Total HC	(ppm)	Down stream					
CO2     (%)     Down stream     /2,4     /2,/       O2     (%)     Up stream     —     —       Down stream     Ø, Ø     Ø, Ø       NOx @ 15% O2     (ppm)     Down stream     4.0     29, Ø       CO @ 15% O2     (ppm)     Down stream     / 77,5     /,/27,8				11,6				
$O_2$ (%) Up stream — — — — — — — — — — — — — — — — — — —	$CO_2$	(70)		12.4	12,1	***********		
Down stream 0,0 0,0  Ox @ 15% O2 (ppm) Down stream 4.0 29,0  O @ 15% O2 (ppm) Down stream 177.5 1,727.8	^	/0/ \		<del></del>	-			
CO @ 15% O <sub>2</sub> (ppm) Down stream / 77.5 1,727.8	O <sub>2</sub>	(70)	Down stream	0.0	0,0			
CO @ 15% O <sub>2</sub> (ppm) Down stream / 77.5 1,727.8								
CO @ 15% O <sub>2</sub> (ppm) Down stream / 77.5 1,727.8	VO <sub>x</sub> @ 15% O <sub>2</sub>	(ppm)	Down stream	4.0	29.0			,
	CO @ 15% O <sub>2</sub>		1					
	HC @ 15% O <sub>2</sub>	(ppm)		~~~	7	<del></del>		

\*Record measured units (psig, "Hg, "wc)

#### Field Data Sheet

#### **ENGINES WITH PC NOX REDUCTION SYSTEMS**

**Equipment:** CB GMVC-10C Location: GOLETA **UNIT #9** UNIT# Run# FOUND Date Time Barometer (in Hg) Dry Bulb (°F) Wet Bulb (°F) Rated HP or Rated KW \$ H Actual HP or Actual KWL PSH % of Rated Load RPM (rated/actual) **Engine Run Time** (Hrs) SIR MANIFOLD PRESS (in Hg) Air Manifold Temp (°F) Fuel Manifold Pressure (psig) Timing (°BTDC) Fuel Flow <del>-(acfh)-</del> **Fuel Temperature** (°F) **Fuel Pressure** 58 (psig) あみえん **Fuel Flow** (scfh) NOX (ppm) CO (ppm) **Total HC** (ppm) CO<sub>2</sub> (%)02 (%)NOX corrected @ 15% O2 (ppm) CO corrected @ 15% O2 (ppm) HC corrected @ 15% O2 (ppm)

Test Conducted By: RodviqueZ

<sup>\*</sup> Record measured units,: psig, in. Hg, or in. WC, ppm, etc...

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL129/MU#3	Part 70/SBAPCD Permit 9584-R4
		PASSED AS FOUND

Date - 6/10/14 Inspector Name - ERIC HART / 4 MAR

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	14.6			
CO corrected to 15% O2	≤ 1700 PPMV	537.7			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NA			
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	18.6°			
Fuel Pressure	3." - 9." WC	6"			
Manifold Vacuum	2" - 10" HG	9.4".			

Company Name	Southern California Gas Company		
Stationary Source Name	La Goleta		
Stationary Source Address	1171 More Ranch Road, Goleta		
Engine Serial/ID Number	8AL128/MU#4	Part 70/SBAPCD Permit 9584-R4	
		PASSED AS FOUND	
Date - 6/10/14	Inspector Name - Exic HareT		

	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	15.2			
CO corrected to 15% O2	≤ 1700 PPMV	664.9			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NA			
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	18.9°			
Fuel Pressure	3." - 9." WC	6"			
Manifold Vacuum	2" - 10" HG	9.5"			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL127/MU#5	Part 70/SBAPCD Permit 9584-R

PASSED AS FOUND

Date - 6/10/14

Inspector Name - ERICHAM / LOZANO
\* MAR

	Parameter Compliance		Corrective Action	Folle	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	8.2			
CO corrected to 15% O2	≤ 1700 PPMV	338.1			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NA			
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	190			
Fuel Pressure	3." - 9." WC	6"			
Manifold Vacuum	2" - 10" HG	8.3			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	6EL265/MU#6	Part 70/SBAPCD

PASSED AS FOUND

Permit 9584-R4

Date - 6/11/14 Inspector Name - GRIC HANT/ & MAR

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	4.5			
CO corrected to 15% O2	≤ 1700 PPMV	267,1			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/A			
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	18.5°			
Fuel Pressure	3." - 9." WC	£ 4			
Manifold Vacuum	2" - 10" HG	8.7."			

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	6EL266/MU#7	Part 70/SBAPCD Permit 9584-R4
		PASSED AS FOUND
Date - 6/11/14	Inspector Name - ELIC HART	/LOZAWO & MAR

	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	10.6			
CO corrected to 15% O2	≤ 1700 PPMV	937,7			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NA			
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	19.50			
Fuel Pressure	3." - 9." WC	6"			
Manifold Vacuum	2" - 10" HG	8.5"			

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	6EL267/MU#8	Part 70/SBAPCD Permit 9584-R4  PASSED AS FOUND
Date - 6/11/14	Inspector Name - Exic Harr	LOZANO & MAR

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	12.4			
CO corrected to 15% O2	≤ 1700 PPMV	916,3			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/A			
02	≤.6%	0,6			
Ignition Timing	12° - 20° BTDC	19.80			
Fuel Pressure	3." - 9." WC	6"			
Manifold Vacuum	2" - 10" HG	7.94			

Company Name	Southern California Gas Company		
Stationary Source Name	La Goleta		
Stationary Source Address	1171 More Ranch Road, Goleta		
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4	
		PASSED AS FOUND	
Date - 6/9/14	Inspector Name - ERICHART 4	MAR	

	Parameter Compl:	Parameter Compliance		Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	≤ 125 PPMV	11.0	,		
CO corrected to 15% O2	≤ 4500 PPMV	256.8			
02	≥ 13.5%	15.2			
Ignition Timing	0-10°	6°			
Engine Speed	≤ 305 RPM	300			

# ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

LOCATION Goleta - EQUIPMENT TESTED\_

Engine Unit			Unit #3	Unit# ¥	Unit # 5	Unit # 6	Unit # フ
Run #		······································	ASFD	AS FO	AS F O	ASFE	
Date			6/10/14			6/1/14	
		Start	12,02		19351		10:29
Time		Finish	12"29	14:25	15:13	10:00	10:53
<u></u>		<u></u>	1. 1.				<u> </u>
Barometer		(in.Hg)	29.90	129,90	29,90	29.9	29.90
Dry Bulb		(F)	68	169.5	70,0	66.0	65.5
Wet Bulb		(F)	43	63.5	64.0	62.5	64.0
			<del> </del>				-
Lambda Sensor	(mV)	EGO 1	<u> </u>	1843	.768	1.726	
		EGO 3	1712	. 740	.707	. 731	1.721
Rated HP			650	650	650	660	660
Actual HP	<del>,                                     </del>		603	601	1601	600	602
% of Rated Load			92.7	92%	92.49		
RPM Rated/Actu		300/300	300/300	300/294		339/352	
Suction/ Disc			915/1560		2 938/156		427/1630
Manifold Depres	8.	(in.Hg)	9.0	910	813	8.7	8.4
Timing		(BTDC)	18.6	18.9	19.5	18.5	14.5
Stack Temp	(F)	Up stream	930	940	940	1059	1039
		Down stream	910	940	954	1079	1065
Oil Pressure	<del></del>	(psig)		<u> </u>	1		
Engine Hours		(hr)	35750	32302	16363	53929	45/43
Catalyst Hours		(hr)				1 - / - /	1
Fuel Flow		(scfh)	5939	5851	5981.	5747	5620
Fuel Man. Press.	¥	(RWC)	5:9	5.8	5.9	5.8	5.8
				•			
NOx	(ppm)	Up stream	2342,4	2450.3	2509.3.	2510,4	2291.0
	(PP)	Down stream	51.5	54,0	29,2-	15.8.	37.5
co	(ppm)	Up stream	3234.7	3918.3	2652,3.	3578.6	4640,3
		Down stream	1903	23,53,2	1196.7	945.4.	3318.5
Total HC	(ppm)	Down stream	11.0	-particular range			
CO2	(%)	Up stream	11,8	11.7-	11.8	.//.6	11.6
		Down stream	11, 9	11,9	12.0	11.8	11,/
O <sub>2</sub>	(%)	Up stream	-	~ ~			
	l	Down stream	0,0	0.0	6,0	6.6	0,0
NO <sub>x</sub> @ 15% O <sub>2</sub>	(nnm)	<u> </u>	111	10.3	02.	1) C T	10 /
		Down stream	14.6.	15,2	8,2	4.5	10.6
CO @ 15% O <sub>2</sub>	(ppm)	Down stream .	537.7	664,9.	338.1	267.1	937.7
HC @ 15% O <sub>2</sub>	(ppm)	Down stream					
			1				

TEST CONDUCTED BY

LOZAND/MAR

<sup>\*</sup> Record measured units (pşig, \*Hg, \*wc)

# ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

LOCATION GOLDA EQUIPMENT TESTED

Date   Color   Date   Color   Date   Date   Color   Date   Date	Engine Unit			Unit # 8	Unit #	Unit #	Unit #	Unit #
Start								
Barometer   (in.Hg)   29,90	Date			6/11/14				
Barometer   (in.Hg)   29,90	Time			11.129				
Dry Bulb   (F)   61.5	111110		Finish	11:50				
Dry Bulb   (F)   61.5	Parameter		(in Ha)	1 26 60	1	· F	<del></del>	<del></del>
Lambda Sensor		· · · · · · · · · · · · · · · · · · ·		127.90		<del>  `                                   </del>		
Lambda Sensor				1.2.0	<del>                                     </del>			
Rated HP	AAGI DUD	<del></del>	(F)	1 62.0	<u> </u>			
Rated HP			EGO 1	0.19%				
Rated HP	Lambda Sensor	(mv)		0.135	İ	Ì		İ.
% of Rated Load   RPM Rated/Actual   33				660				
RPM Rated/Actual   33    31   32    33    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34    34				593				
Manifold Depress.   (in.Hg)   7, 9	% of Rated Load	1		89.8				
Manifold Depress.	RPM Rated/Actu							
Timing	Suction				-8			
Stack Temp   (F)   Up stream   10 v 9		s.′				<u> L</u>		<u> </u>
Down stream   1062	Timing			119.8				
Down stream   1062	Stack Temp	· (F)		1009	<u>.</u>			
Engine Hours (hr) 4475  Catalyst Hours (hr)  Fuel Flow (scfh) 5148  Fuel Man. Press.* (tu.c.) 5.7   NO <sub>X</sub> (ppm) Up stream 2261.1  Down stream 43.7  CO (ppm) Up stream 4723.0  Down stream 3242.7  Total HC (ppm) Down stream  CO <sub>2</sub> (%) Up stream //, 7  O <sub>2</sub> (%) Up stream //, 7  O <sub>3</sub> (ppm) Down stream //, 7  NO <sub>X</sub> @ 15% O <sub>2</sub> (ppm) Down stream //, 3  NO <sub>X</sub> @ 15% O <sub>2</sub> (ppm) Down stream //, 3		· · ·				<del></del>	<del></del>	<b>}</b>
Catalyst Hours       (hr)         Fuel Flow       (scfh)       5748         Fuel Man. Press.*       (w.c.)       5.7         NOx       (ppm)       Up stream       22.61.1         Down stream       43.7       1.0         CO       (ppm)       Up stream       47.23.0         Down stream       3.242.7       1.0         Total HC       (ppm)       Down stream       11.6         Down stream       11.6       1.6         Down stream       11.6       1.6         Down stream       10.0       1.0         NOx @ 15% O2       (ppm)       Down stream       12.4         CO @ 15% O2       (ppm)       Down stream       11.6         Down stream       0.0       0.0	Oil Pressure		(psig)	1 56	<u> </u>	<u> </u>		<u> </u>
Catalyst Hours       (hr)         Fuel Flow       (scfh)       5748         Fuel Man. Press.*       (w.c.)       5.7         NOx       (ppm)       Up stream       22.61.1         Down stream       43.7       1.0         CO       (ppm)       Up stream       47.23.0         Down stream       3.242.7       1.0         Total HC       (ppm)       Down stream       11.6         Down stream       11.6       1.6         Down stream       11.6       1.6         Down stream       10.0       1.0         NOx @ 15% O2       (ppm)       Down stream       12.4         CO @ 15% O2       (ppm)       Down stream       11.6         Down stream       0.0       0.0	Engine Hours		(hr)	44275	<u> </u>	1	T	
Fuel Flow         (scfh)         5748           Fuel Man. Press.*         (w.c.)         5.7           NO <sub>X</sub> (ppm)         Up stream 2.2.61.1   Down stream 43.7   Down stream 2.2.61.1   Down stream 47.2.3.0   Down stream 3.2.42.7   Down stream 3.2.42.7   Down stream 7.6							1	
Fuel Man. Press.*   (w.c.)   5.7				5148		1	1	1
Down stream   \( \frac{4}{3.7} \)		*	<del></del>					
Down stream   \( \frac{4}{3.7} \)								
CO (ppm)   Up stream   4723,0	NOx	(mqq)						ļ
Down stream   32 42, 7			<del></del>	43.7	,	<b></b>	<b></b>	<b></b>
Total HC (ppm) Down stream	co	(mag)		47230	· , ' )		<del> </del>	
CO <sub>2</sub> (%) Up stream /1.6 Down stream //. 7  O <sub>2</sub> (%) Up stream //. 7  O <sub>3</sub> (%) Up stream //. 7  NO <sub>4</sub> @ 15% O <sub>2</sub> (ppm) Down stream   12.4  CO @ 15% O <sub>2</sub> (ppm) Down stream   9/6.3	Total UC	<del></del>	<del></del>	3242.1	<del></del>		ļ	
O <sub>2</sub> (%) Down stream //. 7 O <sub>2</sub> (%) Up stream Down stream O. 0  NO <sub>X</sub> @ 15% O <sub>2</sub> (ppm) Down stream   12. 4  CO @ 15% O <sub>2</sub> (ppm) Down stream   9/b. 3	TOTAL FILE	(ppm)	·	11 /			<b>_</b>	<b></b>
O2       (%)       Up stream   Down stream   O. 6         NOx @ 15% O2 (ppm)       Down stream   12.4         CO @ 15% O2 (ppm)       Down stream   9/16.3	CO <sub>2</sub>	(%)		11.6			-	
NO <sub>x</sub> @ 15% O <sub>2</sub> (ppm) Down stream   12.4   CO @ 15% O <sub>2</sub> (ppm) Down stream   9/6.3			<del> </del>	-//-/				
NO <sub>x</sub> @ 15% O <sub>2</sub> (ppm) Down stream 12.4 CO @ 15% O <sub>2</sub> (ppm) Down stream 9/b.3	O <sub>2</sub>	(%)		0,0		<u> </u>		
CO @ 15% O <sub>2</sub> (ppm) Down stream 916, 3						<del> </del>	l	
CO @ 15% O <sub>2</sub> (ppm) Down stream 916, 3	NO <sub>x</sub> @ 15% O <sub>2</sub>	(ppm)	Down stream	12.4				
110 0 4504 0 4	CO @ 15% O <sub>2</sub>	(ppm)						
	HC @ 15% O <sub>2</sub>		Down stream				_	

\*\*TEST CONDUCTED BY LOZANO / MAKE

\*Record measured units (psig, "Hg, "wc)

## **ENGINES WITH PC NOx REDUCTION SYSTEMS**

LOC	CATION <u>Sole</u>	tA	EQU	IPMENT	<del></del>
			Unit#%#	Unit#	Unit#
Run#			AS FOUND		
Date	·		6/10/14		
Time	······································		8:53AM		
<u> </u>			9:15 An		· · · · · · · · · · · · · · · · · · ·
Barome	eter	(in. Hg)	29.88		
Dry Bu	lb	(F)	64		
Wet Bu	lb	(F)	60		
ENGIN	5 HRS		63440,2		
Rated I			1100		
Actual	HP		1009		-
% of Ra	ted Load		91 %		
RPM (ra	ated / actual)		300 300		
2 Air M	anifold Pres	\$5			
		Hg	9.5		
Air Man	ifold Temp	(F)	109		
Fuel Ma	nifold Press	(psig)	22,8		
Pilot Fu	iel Press	(psig)			
Timing		(°BTDC)	6,		
Stack T	emp	(F)			
Suc	tion/DISCHARG	૯	915/1561		
Fuel Flo		(acfh)	r		
Fuel Te	mp	(F)			
Fuel Pro		(psig)			
Fuel Flo	ow	(scfh)	8825 SCFH		
<del></del>					· <del></del>
NOx		(ppm)	16,7		
CO		(ppm)	250,2		
Total H	<u> </u>	(ppm)			
CO2		(%)	3,3 15.2		
O2		(%)	15.2		
NOx @		(ppm)	11.0		
CO @ 1	5%O2	(ppm)	256.8		
TEST C	ONDUCTED BY_	LOZANO	/MAR		

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL129/MU#3	Part 70/SBAPCD Permit 9584-R4

Passed As Found

Date - E/12/14 Inspector Name - CHRIS HARWIN/G, RACW, C. RODYWEL

	Parameter Compliance	<del></del>	Corrective Action	Follow-Up Inspecti	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	10,3			
CO corrected to 15% O2	≤ 1700 PPMV	356,7			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/R			
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	18			
Fuel Pressure	3." - 9." WC	5.8			
Manifold Vacuum	2" - 10" HG	8.8			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL128/MU#4	Part 70/SBAPCD Permit 9584-R4

Passed As Found

Date - 8 12 (14

Inspector Name

CHRIS HARWIN/C, Rodrigtez, G. ROCK

	Parameter Compliance		Corrective Action	Foll	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured	1	Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	29.8	PRINCES ST	PS. 12/3	17.6
CO corrected to 15% O2	≤ 1700 PPMV	1,555,5	mis -740		576.6
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	NIR	New . TIZ		
02	≤.6%	0.0			0
Ignition Timing	12° - 20° BTDC	19			)9
Fuel Pressure	3." - 9." WC	5,7			4.7
Manifold Vacuum	2" - 10" HG	8,8			8.8

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL127/MU#5	Part 70/SBAPCD Permit 9584-R4
Passed As Four	nd	
Date - 8/13/14	Inspector Name - CHRIS	HARWIN/M.Bell, C. Rodriguez, 6. Racu

	Parameter Compliance		Corrective Action	Follo	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured	<u> </u>	Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	5,5	16/10/15/24 26	9-13-14	1 5,5
CO corrected to 15% O2	≤ 1700 PPMV	78,7			411.4
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/R	New 173)		,
02	≤.6%	0.0			0
Ignition Timing	12° - 20° BTDC	19			19
Fuel Pressure	3." - 9." WC	5.8			5.8
Manifold Vacuum	2" - 10" HG	8.5			8,5

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company			
Stationary Source Name	La Goleta			
Stationary Source Address	1171 More Ranch Road, Goleta			
Engine Serial/ID Number	6EL265/MU#6	Part 70/SBAPCD Permit 9584-R4		
Passed As Found				

Date - 8/13/14

Inspector Name - CHRIS DE LA LUZ/M. Bell, C. Rodriguez, 6. Rucu

	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	6-1			
CO corrected to 15% O2	≤ 1700 PPMV	295,5			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/R			
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	18°			
Fuel Pressure	3." - 9." WC	5.8			
Manifold Vacuum	2" - 10" HG	1.6			

## INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	6EL266/MU#7	Part 70/SBAPCD Permit 9584-R4
Dassed As Fo	11 12 A -	

Date - 8/13/14

Inspector Name - CHRIS HARWIN/M. Bell, C. Rodriguez, b. Rucu

	Parameter Compliance	Corrective Action	Follow-Up Inspecti		
	Value	(Date and Description)		Parameter	
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	8.5			
CO corrected to 15% O2	≤ 1700 PPMV	718,1			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/R			
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	19			
Fuel Pressure	3." - 9." WC	5.9			
Manifold Vacuum	2" - 10" HG	7.8			

#### INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company
Stationary Source Name	La Goleta
Stationary Source Address	1171 More Ranch Road, Goleta

Engine Serial/ID Number

6EL267/MU#8

Part 70/SBAPCD Permit 9584-R4

Passed As Found

Date - 8/14/14 Inspector Name - CHRIS HARWIN/MiBell, C. Rodriguez, G. Racu

	Parameter Compliance	:	Corrective Action	Follow-Up Inspection		
	Value	(Date and Description)		Parameter		
Parameter	Allowed	Measured		Date	Value	
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	31,8	PTINITA SET	8/14/14	11.1	
CO corrected to 15% O2	≤ 1700 PPMV	1658,8	Acres 15		709,9	
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test	N/R	1640 ,790 New ,689			
02	≤.6%	0.0			0	
Ignition Timing	12° - 20° BTDC	20		_	20	
Fuel Pressure	3." - 9." WC	5.6			9.6	
Manifold Vacuum	2" - 10" HG	7.4			7.4	

FIELD DATA SHEET	FIF	LD	DA	TA	SH	IEET
------------------	-----	----	----	----	----	------

		·		Ges wy	Serving MIN				
		ENGINE	S WITH NSCR	NOX REDU	CTION CAT	TALYST SYS	/		KNY,
	L	OCATIO	· Goleta		_ EQUIPME	NT TESTE	MUH	3/	/((
	Engine Unit		<del></del> .	Unit # 3	Unit # A/	Unit # 4	Unit # 4	Unit # 4	Onit#4 Set point4
	Run#		<del>*************************************</del>	la found	AS FOUNCE	<i>f</i>	SOTRITO		3 set point 4
	Date			8/52/14	8/12/14	8/12/14		8/12/14	8/12/14
			Start	12:33	/3:52	14155		16:44	17.09
	Time		Finish	12:52	14:08	16:15	16:39	16:59	17.25
	Barometer		(in.Hg)	38,03	50,03	30,02	30.00	30,00	29.99
	Dry Bulb		(F)	74	76	77	77	77	76
	Wet Bulb		(F)	(0B	66	66	66	66	66
>	Lambda Sensor	(mV)	EGO 1	782	782	782	801	801	801
>	Lambua Sensor	(1114)	EGO 3	712	740	740	712	679	745
	Rated HP			650	650	650	650	650	650
	Actual HP		-	597	597	597	598	598	598
	% of Rated Load			91,9	9119	91,9	92.0	92.0	92.0
	RPM Rated/Actu	al		300/301	300/302	300/301	300/30	300/302	300/300
				y	,	/	/	<u>, , , , , , , , , , , , , , , , , , , </u>	<b>1</b>
2	Manifold-Depress	s. Recure		8.9	8.9	9,1	1911	9,0	9.0
	Timing		(BTDC)	18.6	18,9	18.9	18.9	18.9	18.9
	Stack Temp	(F)	Up stream	917	906	909	910	910	910
	L	(, )	Down stream	976	944	950	951	954	950 49.5
	Oil Pressure		(psig)	51.0	49.6	49,4	149,5	49.5	49.5
	Suct/Dischar	ME				942/1,673			928/1672
	Engine'Hours		(hr)	36,348	33,126	33,127	33,128	33129	33129
	Catalyst Hours		(hr)		<u> </u>		-		
	Fuel Flow		(scfh)	6,012	5,904		5,410	5519	5408
	Fuel Man. Press.	Monte	("WC)	5.ブ	5,7	5,B	5.8	5.8	5. P
		MIACO)	I In street	01010	1003 8	2222.5	2252 2	2312.9	2/09 2
	NOx	(ppm)	Up stream Down stream	2136.3	1,923,5		2252.2	45.2	2109.2
	, , , , , , , , , , , , , , , , , , , ,			36.6	105,6	69.1	62.2 3464.3	2915.0	78.0
	co	(ppm)	Up stream		6,238.8	3796.0		1089.7	4636.8
	Total LIC		Down stream	1,262.2	105.6	2435.1	2041.6	- 1001.7	3667.3
	Total HC	(ppm)	Down stream	,, 4	11 6	12.0	12.0	/2.0	11.9
	CO <sub>2</sub>	(%)	Up stream  Down stream	11,7	11,5	12.0		12.0	11.9
			Up stream	11.8	74.3	12.0	12.0	12.0	
	$O_2$	(%)	Down stream	0,0	6.0	0.0	0.0	0.0	0.0
Ĺ			Comi sucami	USC	0.0	1	0.0	0.0	ORDINATE SERVICE AND ASSESSMENT OF A SHIP AS
٢	NO <sub>x</sub> @ 15% O <sub>2</sub>	(nnm)	D	16:0	190	10 -	17 (	12.8	22.0
-		(p <b>pm)</b>	Down stream	10.3	29.8	19.5	17.6	<del></del>	
	CO @ 15% O <sub>2</sub>	(ppm)	Down stream	35607	1,555,5	687.9	576.6	307.8	1035.8
ſ	110 0 4501 0	/			-	1			

TEST CONDUCTED BY

(ppm)

HC @ 15% O<sub>2</sub>

Record measured units (psig, "Hg, "wc)

Precheck after tuning with same setpoints

3 EG03 set to 679 (MIN) 4. MAX 745

Down stream

# ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

LOCATION Goleta EQUIPMENT TESTED

			<del>, ,</del>	<u></u>	·	·	
Engine Unit			Unit # 3	5 Unit # 5	Unit # 5	Unit # 5	
Run#			As Fou	nel Optu		MIN	ASTOUN
Date			8/13/1				
Time		Start	///	11:20	12:40	13:22	14:29
111110		Finish	10:33	3 121.29	12:56	13:38	14:51
			T				
Barometer		(in.Hg)	30.0	430,00		30.03	
Dry Bulb		(F)	170	74/	75	75	75
Wet Bulb	· · · · · · · · · · · · · · · · · · ·	(F)	65	66	67	67	167
			1 671		1 4 -	1 8	1045
Lambda Sensor	· (mV)	EGO 1	801	810	810	810	792
L	(,,,,,	EGO 3	600	731	764	698	703
	Rated HP			603	650	650	660
Actual HP			650	650	603	603	621
% of Rated Load			92.3	92,3	92.3	92.3	94.1
RPM Rated/Acti			130n/30	M309 130		300/298	
Suction/DI				9 929/1685		930/168	6938468
Manifold Depres	s. Vacu		8.5	8,1	8'.1	8.1	7.6
Timing		(BTDC)	195	19,5	19.5	19.5	18,6
Stack Temp	(F)	Up stream	911	19/2	911	912	1059
	· · · /	Down stream		95R	956	960	1104
Oil Pressure		(psig)	52,3	152.0	52.1	-52.1	52
			T. 24.22		1 1 1	T := 2 = 2	T 1 43
Engine Hours		(hr)	17,355	17,357	17358	17358	55,035
Catalyst Hours		(hr)	7-	1 -			
Fuel Flow	. <u> </u>	(scfh)	5,950		6020	6020	5,913
Fuel Man. Press	.*	(PSIG)	5,8	58	58	5.8	5.8
		I II alaa aa	- W 3	1 1000	1 100	1 10 52 6	1070 0
NO <sub>X</sub>	(ppm)	Up stream	2111.7	1986.6	1860.5	1973.5	1970.8
		Down stream	19.6	19.8	25,0	26.2	21.6
co	(ppm)	Up stream	2098.3	2810.8	377519	2273,7	3710.2
T-1-1110	(	Down stream	278,4	1456.2	2756,1	526,3	1046-1
Total HC	(ppm)	Down stream	11 0	11.0	11.50	1 /2/	7/ 0
CO <sub>2</sub>	(%)	Up stream	11.9	11.9	11.82	11.86	11.6
		Down stream	11.6	11.5	11.5	11-6	11.6
O <sub>2</sub>	(%)	Up stream	0.0	0.0	<b>6</b> 6/	001	0 0
L	l	Down stream	~	10.0	0,01	0,01	0.0
NO 845% C	/===\ T		1- 1-	] <u>                                     </u>	21		C 1
NO <sub>x</sub> @ 15% O <sub>2</sub>	(ppm)	Down stream	5.5	5.5	7:13	7,4	6.1
CO @ 15% O <sub>2</sub>	(ppm)	Down stream	78.7	411.4	778,4	148.6	295.5
HC @ 15% O <sub>2</sub>	(ppm)	Down stream				-1	

TEST CONDUCTED BY

(1) EGO 3 @ (731)

<sup>\*</sup> Record measured units (psig, "Hg, "wc)

# ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

LOCATION GOLETA EQUIPMENT TESTED AS NOTEAN

Engine Unit			Unit#7	Unit # B	Unit # 8 *	Unit # &	Unit # 8	Unit # 8
Run#			As found	As Found	1 Optimum	1 Optimum	2 MAX	MIN
Date			8/13/14	8/14/14		18/14/14	8/14/14	8/14/14
T:		Start	15:32	9:24	//:35	12:34	13:30	13:57
Time		Finish	15:56	9:46	11:57	12:55	13:47	14:42
Daramatas	(in Ua)	T 30 00	130.04	2- 0/-	1 20.05	130,04	30.04	
Barometer (in.Hg)			30.02		30.05	30.05	75	
Dry Bulb		(F)	75	78		74		77.
Wet Bulb	)	(F)	67	64	67	67	67	67
		EGO 1	764	801	745	740	740	740
Lambda Sensor	(mV)	EGO 3	721	740	698	689	721	656
Rated HP	<del>_</del>	1 1000	660	660	660	660	660	660
Actual HP		622	628.	628	630	627	623	
% of Rated Load			94.3	95.2	95.2	95.5	95.D	623
RPM Rated/Actua	1		300/328	330/330	330/329	330/329	330/329	330/329
Engine Suction		P96.	939/1686	914/1.688	9/0/1688	906/1689	910/1.682	
Manifold Depress. Vacuum (in.Hg)			7.8	7.30	7.0	7.1	7.2	7.2
Timing	1	(BTDC)	19.5	19-8	19.8	19.8	19,8	19.8
Stack Temp	(F)	Up stream	1026	1,026	1022	1009	1001	1002
		Down stream	1057	1,068	1073	1062	1:051	1061
Oil Pressure		(psig)	50.3	55	55	-56	56	56
Engine Hours		(hr)	46268	45,652	45655	45656	UE (E6)	45657
Catalyst Hours		(hr)	76200	142'62Y	43633	75056	45,656	-
Fuel Flow	<del>-</del>	(scfh)	5736	5,965	59 <b>9</b> 6	6055	6016	FRAT
Fuel Man. Press.*		(PSIG)	5:18	5.7	5.7	5.7	5,7	5927 5.7
ruei Mail. Fless.		(FS14)	0.0	DIY	J.1	J. [	1 200	5./
NO <sub>X</sub>	(ppm)	Up stream	157713	1840.4	1912.2	415.1	一米	
	\ρρ,	Down stream	30,2	112.5	57.5	39.2	131.4	203
co	(ppm)	Up stream	4076.4		4763.7	4115,1	<u> </u>	2330.2
		Down stream	2542.5	5870.9	3443.1	2513.5	5207.8	1119.4
Total HC	(ppm)	Down stream	~					
CO <sub>2</sub>	(%)	Up stream	11.6	11.7	11.7	11.7	11.7	0.03
<u></u>		Down stream	11.5	11 4	11.5	11.6	11.3	9.0
O <sub>2</sub>	(%)	Up stream						
		Down stream	$O \cdot D$	0.0	0.0	0.0	0.0	0.05
NO <sub>x</sub> @ 15% O <sub>2</sub>	(ppm)	Down stream	8.5	31.8	16.2	11.1	37.1	6,0
CO @ 15% O <sub>2</sub>	, , ,	Down stream	718.1	1658.8	972.4	769,9	1-0	387,3
IC @ 15% O <sub>2</sub>	(ppm)		-		<del></del>	<del></del>	<del></del>	

#### TEST CONDUCTED BY

\* EGO 3 - set point change 698 MAX @ .721, \* Analyzer defective CAI GOD

<sup>\*</sup> Record measured units (psig, "Hg, "wc)

## ENGINES WITH NSCR NOX REDUCTION CATALYST SYSTEMS

LOCATION GOLETA EQUIPMENT TESTED AS NOTED

Engine Heit			Unit # 7	Unit # 4	Unit #	Unit#	Unit #
Engine Unit Run #			Optimen	Oht + M		JUINL#	Unit #
			(5/11/11/0)	Optimum			<del></del>
Date		Start	15:15	8/14/14	<b> </b>		
Time	Time				<del> </del>	<del></del>	<del></del>
		Finish	15:27	16:15	<u> </u>		
Barometer		(in.Hg)	30.02	30.02	T	<del></del>	<del></del>
Dry Bulb		(F)	77	75			
Wet Bulb		(F)	67	66	<del> </del>		
Wet Daib			1 6 7	1 (0 (6)	<u> </u>	<u> </u>	<del>.                                    </del>
		EGO 1	764	801		<del></del>	T
Lambda Sensor	(mV)	EGO 3	721	740			
Rated HP				650		-	
Actual HP			620	605			
% of Rated Load			94.0	93,1		1	
RPM Rated/Actu			300/329	300/299			
Engine Suc		scherge	936/1684	939/1691	<del></del>	<del></del>	
Mahifold Depress. Vacuum (in.Hg)			7.7	8.7			
Timing		(BTDC)	19.5	189			
Stack Temp	/E)	Up stream	1030	940			
Stack remp	(F)	Down stream	1059	1691			
Oil Pressure		(psig)	50.2	49.5		-	
Engine Hours		(hr)	46287	33,176			
Catalyst Hours		(hr)					
Fuel Flow	<del></del>	(scfh)	5826	5,905			<u> </u>
Fuel Man. Press.	<u>*</u>	(PSIG)	5.7	5,8		<u> </u>	
		l la stroom	· · · · · · · · · · · · · · · · · · ·	<del></del>	<del> </del>	Υ	
NO <sub>X</sub>	(ppm)	Up stream Down stream	48.3	62.0		<del> </del>	
		Up stream	5038.6	3897.6		<del> </del>	<del> </del>
CO	(ppm)	Down stream	37/16				<del> </del>
Total HC	(ppm)	Down stream	3761.6	2521.0		-	
		Up stream	11.58	11.66		<del> </del>	<del>                                     </del>
CO <sub>2</sub>	(%)	Down stream	11.50	11.6			<del>  </del>
	(01)	Up stream	- 11. 50				<del> </del>
$O_2$	(%)	Down stream	0.01	0.01			
······································			<del></del>	:		<u> </u>	<del></del>
NO <sub>x</sub> @ 15% O <sub>2</sub>	(ppm)	Down stream	13.6	17.5			
CO @ 15% O <sub>2</sub>	<del></del>				<del></del>		
<del></del>	(ppm)	Down stream	1062.4	7/2./	· · · · · · · · · · · · · · · · · · ·		
HC @ 15% O₂	(ppm)	Down stream	-	1			

TEST CONDUCTED BY

<sup>\*</sup> Record measured units (psig, "Hg, "wc)

#### **ENGINES WITH PC NOX REDUCTION SYSTEMS**

Location: <u>GOLETA</u> E		Equipment:	CB GMVC-10C	·
			•	
	•	J. 11117 # 0		1111-11
		UNIT#9		UNIT#
Run #		AST		
Date		18/13/14		<del></del>
Time				
E	· .	7 8 57	<del></del>	
Barometer	(in Hg)	30.03		<del></del>
Dry Bulb	(°F)	10		<del></del>
Wet Bulb	(°F)	65		
		<u> </u>		
<u> </u>				
Rated HP or Rated KW		1500		
Actual HP or Actual KW		1044		·
% of Rated Load	· <del></del>			
RPM (rated/actual)		300/ 300		
Engine Run Time	(Hrs)	64.25	6,7	
An Manyold Bu	988 PS11-	1 17,47	<del></del>	
AIR MANIFOLD PRESS	(in Hg)	11.1		
Air Manifold Temp	(°F)	126		
Fuel Manifold Pressure 4	40 (psig)-	11.5		
Timing	(°BTDC)	G/0 5		
SUCTION/DISCHAVA	R.	934/1,67	まず	
Fuel Flow SCFH	(aefh)	90.6R		•
Fuel Temperature	(°F)	5719		
Fuel Pressure	(psig)	24.8	*	
Fuel Flow	(scfh)	9068	,	
		7 32 94 (52		
			· · · · · · · · · · · · · · · · · · ·	
			1	1
NOX	(ppm)	13,1	۶	
СО	(ppm)	297.8	,	
Total HC	(ppm)		, ,	
CO2	(%)	3/1		
O2	(%)	15.2		
L		13174	,	
NOX corrected @ 15% O2	(ppm)	1304		
CO corrected @ 15% O2	(ppm)	3/16:0		
HC corrected @ 15% O2	(ppm)	20010		
30,,30,00 (3) 10,70 32	(PP111)			

Test Conducted By:

<sup>\*</sup> Record measured units,: psig, in. Hg, or in. WC, ppm, etc...

#### INSPECTION AND MAINTENANCE LOG

Company Name

Southern California Gas Company

Stationary Source Name

La Goleta

Stationary Source Address

1171 More Ranch Road, Goleta

Engine Serial/ID Number

8AL129/MU#3

Part 70/SBAPCD Permit 9584-R4

PASSED AS FOUND

Date - 10 21/14

Inspector Name - CHKIS Thewn J. LOZANO

	Parameter Compliance		Corrective Action	Folle	ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	10.4			
CO corrected to 15% O2	≤ 1700 PPMV	376.4			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test				
02	≤.6%	010			
Ignition Timing	12° - 20° BTDC	19			
Fuel Pressure	3." - 9." WC	7.8			
Manifold Vacuum	2" - 10" HG	8,4			

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	8AL128/MU#4	Part 70/SBAPCD Permit 9584-R4
D 1		

YASSED AS FOUND

Date - 10/21/14 Inspector Name - CHES HARWIN J. LOZANO

	Parameter Compliance		Corrective Action Follow-Up In		ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	12,4			
CO corrected to 15% O2	≤ 1700 PPMV	634,0			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test				
02	≤.6%	0.0			
Ignition Timing	12° - 20° BTDC	18			
Fuel Pressure	3." - 9." WC	2.8			
Manifold Vacuum	2" - 10" HG	8.4			

#### INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company
Stationary Source Name	La Goleta
Stationary Source Address	1171 More Ranch Road, Goleta

Engine Serial/ID Number

8AL127/MU#5

Part 70/SBAPCD Permit 9584-R4

Date - 10 Refr Inspector Name - CHRIS HARWY J. LOZANO

	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	10.7			
CO corrected to 15% O2	≤ 1700 PPMV	640,2			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test				
02	≤.6%	0.0		_	
Ignition Timing	12° - 20° BTDC	19			
Fuel Pressure	3." - 9." WC	5.7			
Manifold Vacuum	2" - 10" HG	7.8			

#### INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company
Stationary Source Name	La Goleta
Stationary Source Address	1171 More Ranch Road, Goleta

Engine Serial/ID Number

6EL265/MU#6

Part 70/SBAPCD Permit 9584-R4

PASSED AS FOUND

Date - 10/21/14 Inspector Name - CHRIS HARWIN J. LOZANO

	Parameter Compliance		Corrective Action	Foll	ow-Up Inspection
ĺ	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	6.7			
CO corrected to 15% O2	≤ 1700 PPMV	337.3			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test				
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	19			
Fuel Pressure	3." - 9." WC	5.8			
Manifold Vacuum	2" - 10" HG	7.6			

#### INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company
Stationary Source Name	La Goleta
Stationary Source Address	1171 More Ranch Road. Goleta

Engine Serial/ID Number

6EL266/MU#7

Part 70/SBAPCD Permit 9584-R4

PASSED AS FOUND

Date - 10 | 22 14 Inspector Name - CHRIS HARWIN J. LOZANO

	Parameter Compliance		Corrective Action	Follo	w-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	9.6			
CO corrected to 15% O2	≤ 1700 PPMV	864.3			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test				
02	≤.6%	0,0			
Ignition Timing	12° - 20° BTDC	19			
Fuel Pressure	3." - 9." WC	5,8			
Manifold Vacuum	2" - 10" HG	7.4			

#### INSPECTION AND MAINTENANCE LOG

Southern California Gas Company
La Goleta
1171 More Ranch Road, Goleta

Engine Serial/ID Number

6EL267/MU#8

Part 70/SBAPCD Permit 9584-R4

PASSED AS FOUND

Date - 161/22/14 Inspector Name - CURIS HARWIN/J. LOZANO

	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	90% reduction or ≤ 50 PPMV	5,1			
CO corrected to 15% O2	≤ 1700 PPMV	26.1			
ROC (HC) corrected to 15% O2	Not Required except in Annual Source Test				
02	≤.6%	0,0		·	
Ignition Timing	12° - 20° BTDC	19			
Fuel Pressure	3." - 9." WC	5.7			
Manifold Vacuum	2" - 10" HG	7-1			

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company		
Stationary Source Name	La Goleta		
Stationary Source Address	1171 More Ranch Road, Goleta		
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4	
PASSED AS 1	FOUND		
Date - 10/26/14	Inspector Name - CHRIS H	RWIN J, LOZANO	

	Parameter Complia	Corrective Action	Follo	ow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	≤ 125 PPMV	41,4			
CO corrected to 15% O2	≤ 4500 PPMV	146,7			
02	≥ 13.5%	14.3			
Ignition Timing	0-10°	6.6			
Engine Speed	≤ 305 RPM	300			

# PARKER INDUSTRIAL TO BOILER

#### PARKER BOILER CO.

5930 Bandini Boulevard Los Angeles, CA 90040 Tel (323) 727-9800 Fax (323) 722-2848

DATE INVOICED	INADICE NO	
DATE STIPPED	SALES ORDER NO	174037

CUSTOMER'S ORDER NO DATE ORDERED	Isolog av	711		
SOLD TO	SCHOOL TO	· · · · · · · · · · · · · · · · · · ·		
SOLD TO	,j *	Camana	٠	
	•	Compan	*	
	1171 M	ore Ranc	.h Ra	d
	Goleta	CA		
SHIP VIA BOILER MODEL & SERIAL NU	JMBER TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TO	TERMS		
50 966168 G2304RL 60	7369-6044	7   7	.O.c. ☐ NET 30 DAY:	
PARTS & SERVICE PART NO. AND DESCRIPTION			PRICE	AMOUNT
GIT. FART NO. AND DESCRIPTION				<del></del>
* tune UD				
* tune Up				
* check Safeties & lim	1			
* Check sate Ties a 11m	17.)			
* 5/N 60369= H-2018/5	N/ DIME ILE	Λ ΙΛ		
4 210 002001= H-GOTB \SI	N 60944 = +10	AUI A		
( '				
/ 6	~ \ \ \		1 1	
* Customer Needs Last	r (onbustin	27		
2000-				
				,
* Boiler 60369 gauge a	+ oilot do	005		
not work				
ABOVE GOODS AND SERVICES SATISFACTORILY RECEIVED UNDER CASH RECEIVED				
ABOVE GOODS AND SERVICES SATISFACTORILY RECEIVED UNDER TERMS SHOWN SUBJECT TO CONDITIONS ON BACK OF CUSTOMER'S COPY		TOTAL MATER	IAL	
PRINT PRINT PRINTERS		RESALE SALES	%	
CASH RECEIVED E	Υ	LABOR HRS RATE		
() "Strutey		HRS RATE		
ACKNOWLEDGMENT		HRS RATE		
THIS IS AN EXACT COPY OF YOUR ORDER IF IT IS NOT IN ACCORDANCE WITH YOUR UNDERSTANDING PLEASE NOTIFY US AT ONCE	CE WHEN COMMUNICATING WITH	OTHER		-
US BE SURE TO REFER TO OUR SALES ORDER NUMBER SHOWN ABOVE ABOVE PRIC TION ON ANY SET UP MATERIALS THE ACCEPTANCE OF THE ORDER SHALL BE UPO AS SPECIFIED AND AS COVERED BY THE "STANDARD CONDITIONS OF SALE" ON 'I	N THE TERMS AND CONDITIONS	ТОТА	L	
INSTRUCTIONS ARE FURNISHED WITH EACH BOILER  THANK YO		<del></del>		L_

11> SIV 60449

HF

HZ55 GAS 4.6 MAN # 1.6

Draft 0-windy Incoming gas 10

MICO 201 A

BACHARACH, INC. PCA 3 SN: UQ1003

Time: 10:10:49 AM Date: 04/23/14

> Fuel NGAS

	5.5 %
022	1 ppm
CO	
Eff	80.1 %
CO <sub>2</sub>	8.7 %
	457 °F
T-Stk	85.4 °F
T-Air	
EA	31.7 %
CO (3)	1 ppm
	22 ppm
NO	0 ppm
NO <sub>2</sub>	
NOx	22 ppm
	*** ppm
SO <sub>2</sub>	25 ppm
NO (3)	nqq O
NO <sub>2</sub> (3)	,
NOx (3)	25 ppm
	**** ppi
$SO_{2}(0)$	• , • •

201A

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#### BACHARACH

BACHARACH, INC. PCA 3 SN: UQ1003

Time: 10:16:16 AM Date: 04/23/14

Fuel NGAS

$0_{22}$	5.1 %
CO	1 ppm
Eff	85.5 %
$CO_2$	8.9 %
T-Stk	274 °F
T-Air	82.9 °F.
EA	29.0 %
CO(3)	1 ppm
NO	23 ppm
NO <sub>2</sub>	0 ppm
NOx	23 ppm
$SO_2$	**** ppm
NO (3)	26 ppm
$NO_{2}(3)$	O ppm
NOx (3)	27 ppm
$SO_{2}(0)$	mag ***

Comments:

HZ 20 6AS · 8 MAN U Draft p windy Incoming gas 13 wci SIN 60369 HF HZ 55 GAS 4 MAN 1.4 Draft - 01

theoming gas 10 wer

201B

BACHARACH, INC. PCA 3 SN: UQ1003

Time: 09:26:51 AM Date: 04/23/14

> Fuel NGAS

$0_{22}$	
CO.	5.6 %
Eff	0 pp
	82.1 %
$CO_2$	8.6 %
T-Stk	
T-Air	376 °F
EA	73.0 °F
CO(3)	32.7 <b>%</b> -
	O ppm
NO	21
NO <sub>2</sub>	21 ppm
NOx	0 ppm
SO <sub>2</sub>	21 ppm
	PPm ***
(0 (3)	24 ppm
$0_{2}(3)$	7 ppu
0x (3)	0 ppm
$0_{2}(0)$	25 ррш
- 10/	***** PPM

Comments: L/F
H2 20
GAS.6
MAV.2

Draft -03

incoming gas 13 wei

BACHARACH, INC. PCA 3 SN: UQ1003

Time: 09:30:55 AM Date: 04/23/14

Fuel NGAS

022	5.2 %
CO	O ppm
Eff	85.9 %
CO <sub>2</sub>	8.9 %
T-Stk	250 °F
T-Air	74.7 °F
EA	29.4 %
CO(3)	1 ppm
NO (3)	23 ppm
•	1 ppm
$NO_2$	
NOx	24 ppm
$SO_2$	**** ppm
NO (3)	27 ppm
$NO_2(3)$	1 ppm
NOx (3)	27 ppm
SO <sub>2</sub> (0)	**** ppm

Comments: 201 B

#### **OXYGEN SENSOR MILLIVOLT COMPLIANCE LIMITS**

# SETPOINTS 3rd QUARTER 2014 GECO Air Fuel Ratio Controller

<u>UNIT</u>	MINIMUM MV SETPOINT FOR COMPLIANCE	OPTIMUM MV SETPOINT	MAXIMUM MV SETPOINT FOR COMPLIANCE	DATE OF MOST RECENT OPTIMUM SETTING
MU #2 Ingersoll Rand LVG-82	646	665	698	11/15/2011
MU #3 Ingersoll Rand LVG-82	679	712	745	6/5/2012
MU #4 Ingersoll Rand LVG-82	679	712	745	8/12/2014
MU #5 Ingersoll Rand LVG-82	698	731	764	8/13/2014
MU #6 Ingersoll Rand KVG-62	670	703	738	7/15/2010
( MU #7 Ingersoll Rand KVG-62	689	721	754	7/18/2012
MU #8 Ingersoll Rand KVG-62	656	689	721	8/14/2014

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
13014	GOLETA STORAGE MAIN UNITS	5415372	PM	1/1/14	MAIN UNITS 2 THROUGH 9, SPARK PLUG CHANGE OUT - ANNUAL		ALL CHANGED AND ORDERED REPLACEMENTS	
13014	GOLETA STORAGE MAIN UNITS	5415582	PM	1/1/14	MAIN UNIT - ANNUAL AIR FILTER REPLACEMENT		ALL FILTERS REPLACED AND IN GOOD SHAPE	
13014	GOLETA STORAGE MAIN UNITS	5415358	PM	1/2/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5414936	PM	1/9/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5415659	РМ	1/29/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		No run time.	
13014	GOLETA STORAGE MAIN UNITS	5415365	PM	2/4/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5414946	PM	2/6/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	MU 2 is OOS and powered down - No Thermocouple Reads
13014	GOLETA STORAGE MAIN UNITS	5415667	PM	2/28/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		no fail	Completed mu#6 and #8 No run time on other units
13014	GOLETA STORAGE MAIN UNITS	5441598	PM	3/3/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5440811	PM	3/13/14	ANNUAL - UG8 GOVERNOR INSPECTIONS		Completed, except	MU#2, #7, which are out -of -service at this time.
13014	GOLETA STORAGE MAIN UNITS	5441358	PM	3/13/14	GOLETA ALL MAIN UNITS - QRTLY ENGINE OIL ANALYSIS		no fail	MU-7 and MU-2 O.O.S.
13014	GOLETA STORAGE MAIN UNITS	5441367	PM	3/24/14	M. U. EXHAUST TEMP.		INSPECTION COMPLETE, NO	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					THERMOCOUPLE INSPECTIONS- MONTHLY		SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467501	PM	4/3/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467779	PM	4/3/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5142287	PM	4/8/14	VALVE PM - MAIN UNIT #2,3,4 AUX. & PIT - ANNUAL		FREQUENCY OVERLAP COMPLETED ON 5414759	
13014	GOLETA STORAGE MAIN UNITS	5229737	РМ	4/8/14	GOLETA VALVE PM - MU9 jacketwater		FREQUENCY OVERLAP COMPLETED ON 5467126	
13014	GOLETA STORAGE MAIN UNITS	5229778	PM	4/8/14	GOLETA VALVE PM - (MU9) CREW 3		FREQUENCY OVERLAP COMPLETED ON 5467167	
13014	GOLETA STORAGE MAIN UNITS	5255592	PM	4/13/14	VALVE PM - MAIN UNITS #2,3,4 - LUBE OIL, PIPE TRENCH - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467957	PM	4/29/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5441766	PM	5/3/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5492970	PM	5/5/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5493156	PM	5/5/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467126	PM	5/26/14	GOLETA VALVE PM - MU9 Jacket		INSPECTION COMPLETE, NO	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					Water		SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5493368	PM	5/30/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		NO FAILURES	NO FAILURES
13014	GOLETA STORAGE MAIN UNITS	5515373	PM	6/2/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5515109	PM	6/4/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5515542	PM	6/26/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562501	PM	7/1/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562658	PM	7/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		no fail	MU-6 cyl #6 has been high, just broke 1300 degrees, no issues
13014	GOLETA STORAGE MAIN UNITS	5562147	PM	7/3/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562508	PM	8/4/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562157	PM	8/6/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	MU 2 is O.O.S. for engine rebuild.
13014	GOLETA STORAGE MAIN UNITS	5562666	PM	8/28/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5613128	PM	9/1/14	M.U.#2 - #8 OVERHEAD CHECKS -		INSPECTION COMPLETE, NO SUBSTANDARD	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					MONTHLY		CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612921	PM	9/2/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612569	PM	9/8/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5613136	PM	10/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612928	PM	10/7/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612579	PM	10/9/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5635860	PM	11/10/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5635696	PM	11/18/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5635994	PM	11/26/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5659885	PM	12/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5660829	PM	12/1/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5660732	PM	12/8/14	M. U. EXHAUST TEMP. THERMOCOUPLE		INSPECTION COMPLETE, NO SUBSTANDARD	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					INSPECTIONS- MONTHLY		CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5415700	PM	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
13065	GAS COMPRESSOR (MU#8)	5440881	PM	2/3/14	M.U.#8 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
13065	GAS COMPRESSOR (MU#8)	5415047	PM	3/5/14	M.U. #8 MAINTENANCE- QRTLY EMISSION TESTING		Passed.	
13065	GAS COMPRESSOR (MU#8)	5441708	PM	3/18/14	ANNUAL - M.U. #8 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5467688	PM	4/16/14	TOTALFLOW CALIBRATION - M.U.#8 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260 MU-8 HRS 44883
13065	GAS COMPRESSOR (MU#8)	5586957	СМ	6/17/14	Main Unit 8 - Follow-up items from June 4 analyst by John Lustig	1. Compressor cylinder #1 leaking suction valve. 2. Ignition system set for multi-strike. John reset system to single strike 3. Power cylinder #3 worst performing cylinder on the engine. Maybe a problem with the valve seat in the power head. Monitor closely. 4. Compressor #2 has an increase in	no fail	Changed Inboard suction valve on comp. 1

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
						baseline vibration at the compressor piston and rod travel reversals at both head end and crank end reversals. Continue to monitor.		
13065	GAS COMPRESSOR (MU#8)	5467583	PM	6/18/14	M.U. #8 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5605681	PM+	8/12/14	M.U. #8 MAINTENANCE- ANNUAL FORMALDEHYDE EMISSION TESTING (OLD# 6132)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Inspection Completed on March 26, 2014 (see summary of results attaced to hard copy)
13065	GAS COMPRESSOR (MU#8)	5562267	PM	8/14/14	M.U. #8 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5658119	СМ	9/15/14	M.U. #8 MAINTENANCE- ANNUAL 3RD PARTY APCD EMISSION TESTING	PERFORM ANNUAL COMPLIANCE BASED INSPECTION WITH STATE CONTRACTOR	no fail	inspection complete no substandard conditions
13065	GAS COMPRESSOR (MU#8)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5612761	PM	9/29/14	M.U. #8 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5613743	РМ	10/8/14	TOTALFLOW CALIBRATION - M.U.#8 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR (MU#8)	5613673	PM	10/22/14	M.U. #8 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13065	GAS COMPRESSOR	5681584	PM+	12/1/14	GOLETA MAIN		mu-2 o.o.s.	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	(MU#8)				UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)			
13065U	M.U. #8 - UPPER END	5657457	СМ	9/9/14	Main Unit 8: Investigate high exhaust temp power cylinder 6 and poor combustion power cyl 3		CHANGED CYL 3 & 6	CHANGED CYL 3 & 6 POWER HEADS. FOUND EXHAUST VALVE STICKING AND SUCTION VALVES BYPASSING
14220	INSTRUMENTATION	5590617	СМ	6/26/14	MU #6 TotalFlow Replace TF Board		Replace Board	Replaced TF Board Calibrate TF for accuracy
14223	DIGI (MAIN #2)	5415456	PM	2/28/14	M.U.#2 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Issue W.O 5496683 to complete Annual Calibrations after rebuild is complete
14225	DIGI (MAIN #3)	5415135	PM	2/28/14	M.U.#3 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14226	DIGI (MAIN #4)	5415408	PM	2/28/14	M.U.#4 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14227	DIGI (MAIN #5)	5415145	PM	2/28/14	M.U.#5 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14228	DIGI (MAIN #6)	5440828	PM	2/28/14	M.U.#6 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14229	DIGI (MAIN #7)	5440838	PM	2/28/14	M.U.#7 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14230	MAIN #9 ALLEN BRADLEY PLC	5441485	PM	3/18/14	M.U.#9 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14230	MAIN #9 ALLEN BRADLEY PLC	5078185	СМ	11/24/14	M.U.#9 INSTRUMENT			

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					CALIBRATON INSPECTIONS- ANNUAL			
14478	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#2 (PIT-2007)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14478	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#2 (PIT-2007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14478	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#2 (PIT-2007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14478	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#2 (PIT-2007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14533	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#3 (PIT-3007)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14533	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#3 (PIT-3007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14533	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#3 (PIT-3007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14533	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#3 (PIT-3007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
14539	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#4 (PIT-4007)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14539	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#4 (PIT-4007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14539	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#4 (PIT-4007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14539	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#4 (PIT-4007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14540	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#5 (PIT-5007)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14540	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#5 (PIT-5007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14540	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#5 (PIT-5007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14540	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#5 (PIT-5007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14541	COMPRESSOR DISCHARGE PRESSURE	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND		INSPECTION COMPLETE, NO SUBSTANDARD	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	TRANSMITTER MU#6 (PIT-6007)				DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		CONDITIONS	
14541	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#6 (PIT-6007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14541	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#6 (PIT-6007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14541	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#6 (PIT-6007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14542	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#7 (PIT-7007)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14542	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#7 (PIT-7007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14542	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#7 (PIT-7007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14542	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#7 (PIT-7007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS -		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					QUARTERLY			
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14545	DIGI (MAIN #8)	5440848	PM	2/28/14	M.U.#8 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14546	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#8 (PIT-8007)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14546	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#8 (PIT-8007)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14546	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#8 (PIT-8007)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14546	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#8 (PIT-8007)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14547	COMPRESSOR SUCTION PRESSURE TRANSMITTER	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	MU#8 (PIT-8006)				TRANSMITTER INSPECTIONS - QUARTERLY			
14547	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#8 (PIT-8006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14547	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#8 (PIT-8006)	5562679	РМ	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14547	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#8 (PIT-8006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14548	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#2 (PIT-2006)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14548	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#2 (PIT-2006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14548	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#2 (PIT-2006)	5562679	PM	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14548	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#2 (PIT-2006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14550	COMPRESSOR	5403215	PM+	1/28/14	GOLETA MAIN		INSPECTION	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	SUCTION PRESSURE TRANSMITTER MU#3 (PIT 3006)				UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		COMPLETE, NO SUBSTANDARD CONDITIONS	
14550	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#3 (PIT 3006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14550	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#3 (PIT 3006)	5562679	PM	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14550	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#3 (PIT 3006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14551	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#4 (PIT-4006)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14551	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#4 (PIT-4006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14551	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#4 (PIT-4006)	5568687	СМ	5/29/14	MU#4 PIT-4006 Repair or Replace Transmitter		Replaced Transmitter	
14551	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#4 (PIT-4006)	5562679	РМ	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
14551	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#4 (PIT-4006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14552	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#5 (PIT-5006)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14552	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#5 (PIT-5006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14552	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#5 (PIT-5006)	5562679	РМ	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14552	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#5 (PIT-5006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14554	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#6 (PIT-6006)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14554	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#6 (PIT-6006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14554	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#6 (PIT-6006)	5562679	PM	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON-		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					COMPLIANCE (QUARTERLY)			
14554	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#6 (PIT-6006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14555	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#7 (PIT-7006)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14555	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#7 (PIT-7006)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14555	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#7 (PIT-7006)	5562679	PM	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14555	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#7 (PIT-7006)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION	5562679	PM	7/14/14	GOLETA MAIN UNIT SUCTION		INSPECTION COMPLETE, NO	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	PRESSURE TRANSMITTER MU#9 (63TS)				TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792001	M.U. #6 - FUEL METER	5402902	PM+	1/23/14	SEMI-ANNUAL - M.U.#6 FUEL METER INSPECTION (OLD PM # GOLE544)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792001	M.U. #6 - FUEL METER	5554548	PM+	7/14/14	SEMI-ANNUAL - M.U.#6 FUEL METER INSPECTION (OLD PM # GOLE544)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792001	M.U. #6 - FUEL METER	5563185	PM	8/26/14	ANNUAL- FUEL METER PROVING-M.U. #6		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792008	M.U. #4 - FUEL METER	5402890	PM+	1/23/14	SEMI-ANNUAL - M.U.#4 FUEL METER INSPECTION ((OLD PM # GOLE542)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792008	M.U. #4 - FUEL METER	5554448	PM+	7/14/14	SEMI-ANNUAL - M.U.#4 FUEL METER INSPECTION ((OLD PM # GOLE542)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792008	M.U. #4 - FUEL METER	5563179	РМ	8/26/14	ANNUAL- FUEL METER PROVING-M.U. #4		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792010	M.U. #7 - FUEL METER	5402908	PM+	1/23/14	SEMI-ANNUAL - M.U.#7 FUEL METER INSPECTION (OLD PM # GOLE545)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
2792010	M.U. #7 - FUEL METER	5555310	PM+	7/14/14	SEMI-ANNUAL - M.U.#7 FUEL METER		INSPECTION COMPLETE, NO SUBSTANDARD	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					INSPECTION (OLD PM # GOLE545)		CONDITIONS	
2792010	M.U. #7 - FUEL METER	5563188	PM	8/27/14	ANNUAL- FUEL METER PROVING-M.U. #7		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
35643	OXYGEN SENSOR - EGO#1	5570594	СМ	5/30/14	Main Unit 3: 2000 hour Oxygen Sensor Change out	change out o2 sensors EGO1 and EGO3 with new and log the engine hours	35722 hrs.=1681 hrs.	Run time. Replaced early, due to increased S/D Pending alarms.
4024936	M.U. #8 - FUEL METER	5402914	PM+	1/23/14	SEMI-ANNUAL - M.U.#8 FUEL METER INSPECTION (OLD PM # GOLE546)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4024936	M.U. #8 - FUEL METER	5554796	PM+	7/15/14	SEMI-ANNUAL - M.U.#8 FUEL METER INSPECTION (OLD PM # GOLE546)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4024936	M.U. #8 - FUEL METER	5563167	PM	8/27/14	ANNUAL- FUEL METER PROVING-M.U. #8		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4024974	M.U. #5 - FUEL METER	5402896	PM+	1/23/14	SEMI-ANNUAL - M.U.#5 FUEL METER INSPECTION (OLD PM # GOLE543)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4024974	M.U. #5 - FUEL METER	5554233	PM+	7/14/14	SEMI-ANNUAL - M.U.#5 FUEL METER INSPECTION (OLD PM # GOLE543)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4024974	M.U. #5 - FUEL METER	5563182	PM	8/26/14	ANNUAL- FUEL METER PROVING-M.U. #5		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4484350	M.U. #9 - FUEL METER	5402920	PM+	1/23/14	SEMI-ANNUAL - M.U.#9 FUEL METER INSPECTION (OLD PM # GOLE547)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4484350	M.U. #9 - FUEL	5554671	PM+	7/15/14	SEMI-ANNUAL -		INSPECTION	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	METER				M.U.#9 FUEL METER INSPECTION (OLD PM # GOLE547)		COMPLETE, NO SUBSTANDARD CONDITIONS	
4484350	M.U. #9 - FUEL METER	5563170	PM	8/27/14	ANNUAL- FUEL METER PROVING-M.U. #9		Meter proving for this unit is not due this year	
45643	OXYGEN SENSOR - EGO#1	5616024	СМ	7/17/14	Main Unit 4 2000 hour o2 sensor change out	Change out o2 sensors EGO 1 and EGO3 with new and log hours	Engine Hrs: 32795	
55643	OXYGEN SENSOR - EGO#1	5606900	СМ	7/9/14	Main Unit #5: 2000 Hour o2 sensor change out	Change out o2 sensors EGO1 and EGO3 with new and log engine hours.	Changed EG01&3	
5825486	M.U. #2 - FUEL METER	5402878	PM+	1/27/14	SEMI-ANNUAL - M.U.#2 FUEL METER INSPECTION (OLD PM # GOLE540)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
5825486	M.U. #2 - FUEL METER	5554542	PM+	7/14/14	SEMI-ANNUAL - M.U.#2 FUEL METER INSPECTION (OLD PM # GOLE540)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
5825486	M.U. #2 - FUEL METER	5639733	СМ	8/28/14	Main Unit #2 Replace Fuel Meter	Fuel Meter did not pass meter proving test see wo#5563173	Replaced Fuel Meter	Removed Meter #5825486 Installed Meter #10382439
5825486	M.U. #2 - FUEL METER	5563173	PM	9/2/14	ANNUAL- FUEL METER PROVING-M.U. #2		Found meter to be stuck, wont turn, corroded.	Meter would not flow when tested. Replaced meter Old meter # 5825486 New meter # 10382439. Refer to WO# 5639733.
65643	OXYGEN SENSOR - EGO#1	5606901	CM	7/9/14	Main Unit 6: 2000 hour o2 sensor change out	Change out o2 sensors EGO1 and EGO3 with new and log engine hours.	Changed EG01&3	
7549	GAS COMPRESSOR (MU #2)	5415700	PM	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7549	GAS COMPRESSOR (MU #2)	5440869	PM	2/21/14	M.U.#2 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
7549	GAS COMPRESSOR (MU #2)	5415027	PM	3/5/14	M.U. #2 MAINTENANCE- QRTLY EMISSION TESTING		No test. Unit being	rebuilt. O.S.S.
7549	GAS COMPRESSOR (MU #2)	5441696	РМ	3/14/14	ANNUAL - M.U. #2 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	M.U.#2 out of service for Rebuild: Issued W.O. 5496683 to Complete Safety ShutDown Inspection after rebuild is complete
7549	GAS COMPRESSOR (MU #2)	5467652	PM	4/16/14	TOTALFLOW CALIBRATION - M.U.#2 - SEMI- ANNUAL		Unit OOS for rebuild	
7549	GAS COMPRESSOR (MU #2)	5467537	PM	6/10/14	M.U. #2 MAINTENANCE- QRTLY EMISSION TESTING		Out-of-service, rebuild.	
7549	GAS COMPRESSOR (MU #2)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260 MU-8 HRS 44883
7549	GAS COMPRESSOR (MU #2)	5562238	PM	8/14/14	M.U. #2 MAINTENANCE- QRTLY EMISSION TESTING		unit o.o.s.	
7549	GAS COMPRESSOR (MU #2)	5612689	PM	9/1/14	M.U. #2 - FOUNDATION INSPECTION - ANNUAL		no fail	Unit regrouted and torqued as part of rebuild
7549	GAS COMPRESSOR (MU #2)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7549	GAS COMPRESSOR (MU #2)	5613707	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#2 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Calibrated SP and Temp - OK
7549	GAS COMPRESSOR	5613623	PM	10/20/14	M.U. #2		unit is O.O.S.	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	(MU #2)				MAINTENANCE- QRTLY EMISSION TESTING			
7549	GAS COMPRESSOR (MU #2)	5496683	СМ	11/14/14	M.U.#2 Instrument Calabration inspections	Perform Annual Instrument Calabrations on MU#2 and Perform Annual Safety Shutdown Inspection on MU#2 after rebuild is completed	Complete	
7549	GAS COMPRESSOR (MU #2)	5681584	PM+	12/1/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		mu-2 o.o.s.	
7549U	M.U. #2 - UPPER END	5287175	СМ	3/12/14	Mu#2 Suction valve Comp. #1, repaired.		Failed Copper gasket.	Gasket off-center on install. Heat finally broke gasket. No damages assessed. Back on-line.
7550	GAS COMPRESSOR (MU #3)	5415700	РМ	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7550	GAS COMPRESSOR (MU #3)	5440871	PM	2/3/14	M.U.#3 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
7550	GAS COMPRESSOR (MU #3)	5415030	PM	3/4/14	M.U. #3 MAINTENANCE- QRTLY EMISSION TESTING		Passed.	
7550	GAS COMPRESSOR (MU #3)	5441698	РМ	3/14/14	ANNUAL - M.U. #3 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR (MU #3)	5467658	РМ	4/16/14	TOTALFLOW CALIBRATION - M.U.#3 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR (MU #3)	5467540	PM	6/10/14	M.U. #3 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

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APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7550	GAS COMPRESSOR (MU #3)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260 MU-8 HRS 44883
7550	GAS COMPRESSOR (MU #3)	5605904	PM+	8/12/14	M.U. #3 MAINTENANCE- ANNUAL FORMALDEHYDE EMISSION TESTING (OLD# 6122)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Inspection completed March 24, 2014 (see summary of results attached to hard copy)
7550	GAS COMPRESSOR (MU #3)	5562241	PM	8/14/14	M.U. #3 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR (MU #3)	5634572	СМ	8/18/14	Main Unit 3: Follow-up items from John Lustigs 8/12/2014 analysis	Power cylinders: Intake manifold leaks on power cylinders 2 and 5. Exhaust gasket leak on transistion manifold between cylinders 3 & 4. Cylinder 6 clogged kiene valve.	no fail	Replaced exhaust gasket, tightened intake flange on cyl 2, replaced o-ring on cyl 5, replaced kiene valve
7550	GAS COMPRESSOR (MU #3)	5658077	СМ	9/18/14	M.U. #3 MAINTENANCE- ANNUAL 3RD PARTY APCD EMISSION TESTING		no fail	inspection complete no substandard conditions
7550	GAS COMPRESSOR (MU #3)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR (MU #3)	5612697	PM	9/29/14	M.U. #3 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR (MU #3)	5613713	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#3 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR	5613626	PM	10/21/14	M.U. #3		INSPECTION	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	(MU #3)				MAINTENANCE- QRTLY EMISSION TESTING		COMPLETE, NO SUBSTANDARD CONDITIONS	
7550	GAS COMPRESSOR (MU #3)	5681584	PM+	12/1/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		mu-2 o.o.s.	
7551	GAS COMPRESSOR (MU #4)	5415700	РМ	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7551	GAS COMPRESSOR (MU #4)	5440873	PM	2/3/14	M.U.#4 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
7551	GAS COMPRESSOR (MU #4)	5415033	PM	3/4/14	M.U. #4 MAINTENANCE- QRTLY EMISSION TESTING		Passed.	
7551	GAS COMPRESSOR (MU #4)	5441700	PM	3/14/14	ANNUAL - M.U. #4 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5467664	PM	4/16/14	TOTALFLOW CALIBRATION - M.U.#4 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260 MU-8 HRS 44883
7551	GAS COMPRESSOR (MU #4)	5467543	PM	6/18/14	M.U. #4 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5605677	PM+	8/12/14	M.U. #4 MAINTENANCE- ANNUAL FORMALDEHYDE EMISSION TESTING (OLD# 6124)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Inspection Completed on March 24, 2014 (see summery of results attached to hard copy)
7551	GAS COMPRESSOR (MU #4)	5562244	PM	8/14/14	M.U. #4 MAINTENANCE- QRTLY		INSPECTION COMPLETE, NO SUBSTANDARD	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					EMISSION TESTING		CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5658081	СМ	9/15/14	M.U. #4 MAINTENANCE- ANNUAL 3RD PARTY APCD EMISSION TESTING		no fail	inspection complete no substandard conditions
7551	GAS COMPRESSOR (MU #4)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5612705	PM	9/29/14	M.U. #4 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5613719	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#4 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5613629	PM	10/21/14	M.U. #4 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7551	GAS COMPRESSOR (MU #4)	5681584	PM+	12/1/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		mu-2 o.o.s.	
7551U	M.U. #4 - UPPER END	5586960	СМ	6/17/14	Main Unit 4 - Follw-up from June 4 engine analyst by John Lustig	1. Power cylinder #4 has vacuum leak at intake manifold location. 2. Visible movement at vibram chock locations at both flywheel and oil pump end of the unit. Displacement measurements were taken and compared to previous analyst. Measurements did not indicate an increase in displacement levels.	FIXED VACUUM LEAK	FIXED VACUUM LEAK ON CYL #4. FLANGES ON INTAKE MANIFOLD ON BACLWARDS. AT SOME POINT HEAD WILL NEED TO BE TAKEN OFF TO FIX ORIENTATION OF FLANGES. USED TWO SEPARATE O- RINGS TO SEEL VACUUM LEAK

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
						Continue to monitor.		
7552	GAS COMPRESSOR (MU #5)	5415700	РМ	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7552	GAS COMPRESSOR (MU #5)	5440875	PM	2/3/14	M.U.#5 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
7552	GAS COMPRESSOR (MU #5)	5415036	PM	3/4/14	M.U. #5 MAINTENANCE - QUARTERLY EMISSION TESTING		Passed.	
7552	GAS COMPRESSOR (MU #5)	5441702	PM	3/14/14	ANNUAL - M.U. #5 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5467670	PM	4/16/14	TOTALFLOW CALIBRATION - M.U.#5 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260 MU-8 HRS 44883
7552	GAS COMPRESSOR (MU #5)	5467546	PM	6/18/14	M.U. #5 MAINTENANCE - QUARTERLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5605846	PM+	8/12/14	M.U. #5 MAINTENANCE- ANNUAL FORMALDEHYDE EMISSION TESTING (OLD# 6126)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Inspection Completed March 25, 2014 (see summary of results attached to hard copy)
7552	GAS COMPRESSOR (MU #5)	5562247	PM	8/14/14	M.U. #5 MAINTENANCE - QUARTERLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5658085	СМ	9/15/14	M.U. #5 MAINTENANCE- ANNUAL 3RD PARTY APCD EMISSION		no fail	inspection complete no substandard conditions

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					TESTING			
7552	GAS COMPRESSOR (MU #5)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5612713	PM	9/29/14	M.U. #5 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5613725	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#5 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5613632	PM	10/22/14	M.U. #5 MAINTENANCE - QUARTERLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7552	GAS COMPRESSOR (MU #5)	5681584	PM+	12/1/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		mu-2 o.o.s.	
7553	GAS COMPRESSOR (MU #6)	5415700	PM	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7553	GAS COMPRESSOR (MU #6)	5440877	PM	2/3/14	M.U.#6 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
7553	GAS COMPRESSOR (MU #6)	5415041	PM	3/5/14	M.U. #6 MAINTENANCE- QRTLY EMISSION TESTING		Passed.	
7553	GAS COMPRESSOR (MU #6)	5441704	PM	3/18/14	ANNUAL - M.U. #6 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5467676	PM	4/17/14	TOTALFLOW CALIBRATION - M.U.#6 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7553	GAS COMPRESSOR (MU #6)	5467577	PM	6/18/14	M.U. #6 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	MU-8 HRS 44883
7553	GAS COMPRESSOR (MU #6)	5605820	PM+	8/12/14	M.U. #6 MAINTENANCE- ANNUAL FORMALDEHYDE EMISSION TESTING (OLD# 6128)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Inspection Completed on March 26, 2014 (see summary of results attaced to hard copy)
7553	GAS COMPRESSOR (MU #6)	5562261	PM	8/14/14	M.U. #6 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5634536	СМ	8/18/14	Main Unit #6 - Follow up task from 8/15/14 Engine analysis by John Lustig	Power Cylinders: Power cylinder 3 has excessively high amplitude vibration at intake valve closure.Note: Head has been removed due to sticky intake valve. Power cylinder 6: monitor pressure raise during exhaust stroke at 290 degrees after cylinder TDC. Compressors: Compressor #1 inspect crosshead pin and bushing and master rod bearing for clearance and wear.	check bearing	changed cyl #3, removed comp 1 xhead pin had re chromed, pulled comp 1 master rod insp, re installed master rod changed bearings, added head end unloader gasket
7553	GAS COMPRESSOR (MU #6)	5658089	СМ	9/15/14	M.U. #6 MAINTENANCE- ANNUAL 3RD PARTY APCD EMISSION TESTING		no fail	inspection complete no substandard conditions

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7553	GAS COMPRESSOR (MU #6)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5612745	PM	9/29/14	M.U. #6 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5613731	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#6 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5613667	PM	10/21/14	M.U. #6 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7553	GAS COMPRESSOR (MU #6)	5681584	PM+	12/1/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		mu-2 o.o.s.	
7553A	M.U. #6 - AUXILIARY SYSTEM	5634080	СМ	8/19/14	Main Unit #6: Investigate gear noise at governor gear drive area		read long description	Replaced bearings, shaft and added washers to idler gear assy. Slight position adj on bushings for mag and trabon gear drive to keep gears from rubbing on align plate
7554	GAS COMPRESSOR (MU #7)	5415700	PM	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7554	GAS COMPRESSOR (MU #7)	5440879	PM	2/3/14	M.U.#7 - OVERHEAD FILTER REPLACEMENT - ANNUAL		FILTER CHANGED, ALL CHECKS GOOD	
7554	GAS COMPRESSOR (MU #7)	5415044	PM	3/5/14	M.U. #7 MAINTENANCE- QRTLY EMISSION TESTING		O.O.S. due to Comp. #2	work. Unit not tested.
7554	GAS COMPRESSOR (MU #7)	5441706	PM	3/26/14	ANNUAL - M.U. #7 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR	5467682	PM	4/16/14	TOTALFLOW		INSPECTION	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	(MU #7)				CALIBRATION - M.U.#7 - SEMI- ANNUAL		COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR (MU #7)	5542159	PM+	6/16/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-3 HRS 35968 MU-4 HRS 32402 MU-5 HRS 16464 MU-6 HRS 54047 MU-7 HRS 45260 MU-8 HRS 44883
7554	GAS COMPRESSOR (MU #7)	5586962	СМ	6/17/14	Main Unit 7 - Follow-up from June 4 engine analyst by John Lustig	1. Power cylinder #2 is performing the lowest on the engine. Continue to monitor performance. 2. Compressor #2 investigate head end suction valve for leakage. Investigate frame head gasket for leakage.	no fail	Changed Suction valves on Comp #2 Fixed trabon fitting leakes going into comp #2 packer
7554	GAS COMPRESSOR (MU #7)	5467580	PM	6/18/14	M.U. #7 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR (MU #7)	5606522	PM+	8/12/14	M.U. #7 MAINTENANCE- ANNUAL FORMALDEHYDE EMISSION TESTING (OLD #6130)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Inspection Completed on March 26, 2014 (see summary of results attaced to hard copy)
7554	GAS COMPRESSOR (MU #7)	5562264	PM	8/14/14	M.U. #7 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR (MU #7)	5658093	СМ	9/15/14	M.U. #7 MAINTENANCE- ANNUAL 3RD PARTY APCD EMISSION TESTING		no fail	inspection complate no substandard conditions
7554	GAS COMPRESSOR (MU #7)	5606431	PM+	9/18/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7554	GAS COMPRESSOR (MU #7)	5612753	PM	9/29/14	M.U. #7 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR (MU #7)	5613737	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#7 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR (MU #7)	5411979	СМ	10/20/14	TOTALFLOW CALIBRATION - M.U.#7 - SEMI- ANNUAL			
7554	GAS COMPRESSOR (MU #7)	5613670	PM	10/22/14	M.U. #7 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7554	GAS COMPRESSOR (MU #7)	5681584	PM+	12/1/14	GOLETA MAIN UNITS 2-8 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		mu-2 o.o.s.	
7554U	M.U. #7 - UPPER END	5258196	СМ	3/11/14	Main Unit # 7 - Power cylinder # 6	Power cylinder # 6 has a compression leak at the vertical kiene port nipple where it threads into the elbow.	Dan Perez changed out the Kiene Cock on 4/30/2013	It was not closed out in Maximo
7555	GAS COMPRESSOR (MU #9)	5415700	PM	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7555	GAS COMPRESSOR (MU #9)	5396608	PM	1/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5416171	PM	1/7/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5416180	РМ	1/14/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5416189	PM	1/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7555	GAS COMPRESSOR (MU #9)	5416198	PM	1/28/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time. Schedule	to do an Inspection no time alotted. Complete work order now.
7555	GAS COMPRESSOR (MU #9)	5440935	PM	3/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No run time on unit
7555	GAS COMPRESSOR (MU #9)	5440953	PM	3/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No run time on unit
7555	GAS COMPRESSOR (MU #9)	5440944	РМ	3/5/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No run time on unit
7555	GAS COMPRESSOR (MU #9)	5207851	PM	3/11/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Work order was completed by Mike Bagley 3/27/13	It was not completed in Maximo
7555	GAS COMPRESSOR (MU #9)	5466625	РМ	3/11/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5440962	PM	3/12/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Emission testing, no	Kistler balancing.
7555	GAS COMPRESSOR (MU #9)	5466616	PM	3/13/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No adjustments needed
7555	GAS COMPRESSOR (MU #9)	5466634	РМ	3/18/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5441722	PM	3/19/14	ANNUAL - M.U. #9 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5466643	РМ	3/25/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	3-27-14 start lo- inventory S/I, start.
7555	GAS COMPRESSOR (MU #9)	5466652	РМ	4/1/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5466661	PM	4/8/14	WEEKLY - M.U.#9 ENG. BALANCE		No checks.	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					INSPECTION			
7555	GAS COMPRESSOR (MU #9)	5492832	PM	4/15/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Trouble shooting, use	of Kistler. Completed.
7555	GAS COMPRESSOR (MU #9)	5467694	PM	4/16/14	TOTALFLOW CALIBRATION - M.U.#9 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5492841	PM	4/28/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No usage.	
7555	GAS COMPRESSOR (MU #9)	5492850	PM	5/5/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5441463	PM	5/6/14	M.U. #9 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	M.U. #9 Passed Emission Test on 3/3/2014
7555	GAS COMPRESSOR (MU #9)	5492859	РМ	5/9/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Kistler training.	
7555	GAS COMPRESSOR (MU #9)	5514649	PM	5/13/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5514658	PM	5/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Inspection of Kistler unit	No adjustments.Unit @ 938H.P.
7555	GAS COMPRESSOR (MU #9)	5514667	PM	6/2/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Not enough horsepower	
7555	GAS COMPRESSOR (MU #9)	5514676	PM	6/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No kistler operation,	This week.
7555	GAS COMPRESSOR (MU #9)	5537952	РМ	6/16/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Made 2 rounds, Monday,	and Tuesday. No adjustments, just training.
7555	GAS COMPRESSOR (MU #9)	5542168	PM+	6/16/14	GOLETA MAIN UNIT 9 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-9 HRS 63530

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7555	GAS COMPRESSOR (MU #9)	5537961	PM	6/17/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		1 pass at 1100 Hp.	No adjustments.
7555	GAS COMPRESSOR (MU #9)	5515216	PM	6/18/14	M.U. #9 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5537970	РМ	6/25/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	Made small adjustments, see log for info
7555	GAS COMPRESSOR (MU #9)	5537979	PM	7/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		unit wasnt needed	
7555	GAS COMPRESSOR (MU #9)	5562698	PM	7/8/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No adjustments needed	
7555	GAS COMPRESSOR (MU #9)	5562707	PM	7/18/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time	
7555	GAS COMPRESSOR (MU #9)	5562716	PM	7/28/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5562725	PM	7/31/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5562734	PM	8/7/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5612252	PM	8/14/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5612742	PM	8/14/14	M.U. #9 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5612261	РМ	8/19/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	no adjustments
7555	GAS COMPRESSOR	5612270	PM	8/27/14	WEEKLY -		no fail	Adjusted Cyl #1&9

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	(MU #9)				M.U.#9 ENG. BALANCE INSPECTION			down to bring up Cyl #2. Changed spark plug on Cyl #2
7555	GAS COMPRESSOR (MU #9)	5612279	PM	9/4/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5612297	PM	9/16/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5658607	СМ	9/18/14	I nstall two "machine starting automatically" signs for MU#9	See WO# 5515536 FOR MORE DETAILS.	NONE	deficiencies corrected
7555	GAS COMPRESSOR (MU #9)	5612288	PM	9/18/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	no adjustments made
7555	GAS COMPRESSOR (MU #9)	5606440	PM+	9/18/14	GOLETA MAIN UNIT 9 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5612306	PM	9/29/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	no balance this week
7555	GAS COMPRESSOR (MU #9)	5612315	PM	9/30/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5613755	PM	10/1/14	M.U. #9 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5613749	PM	10/8/14	TOTALFLOW CALIBRATION - M.U.#9 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5635293	PM	10/13/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5635302	PM	10/20/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR	5659866	PM	10/20/14	M.U. #9		INSPECTION	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	(MU #9)				MAINTENANCE- QRTLY EMISSION TESTING		COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5635311	PM	10/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5635320	PM	10/31/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5659792	PM	11/21/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659801	PM	11/21/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659810	PM	11/21/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659819	PM	11/26/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5681593	PM+	12/1/14	GOLETA MAIN UNIT 9 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5659828	PM	12/2/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659837	PM	12/9/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659846	PM	12/16/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5661293	PM	12/23/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5661302	PM	12/30/14	WEEKLY - M.U.#9 ENG.		insufficeint run time	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					BALANCE INSPECTION			
7555U	M.U. #9 - UPPER END	5497052	СМ	3/4/14	REPLACE FUEL INJECTOR MU#9 CYL#3		REPLACE FUEL INJECTOR	ON CYL#3
75643	OXYGEN SENSOR - EGO#1	5558080	СМ	5/13/14	Main Unit 7 - 2000 Hour Oxygen Sensor Change Out	Change out oxygen sensors EGO 1 and EGO 3 with new and log engine hours.	Total1894 hours,	44618-42724=1894. Repaired exhaust pip mount brackets.
75643	OXYGEN SENSOR - EGO#1	5634534	СМ	8/13/14	Main Unit #7 - 2000 hour O2 sensor change out	Change out O2 sensors EGO1 and EGO 3 with new and log the engine hours.	O2 Sensors Changed Out	O2 sensors changed out due to run time. Hours on unit - 46262
7580	DIESEL ENGINE (AUX #12A)	5632508	PM+	9/11/14	UNIT 12A - ANNUAL ENGINE INSPECTION (OLD# GOL-8340)		no fail	changed oil and filter, changed cooling water filter, changed fuel and sediment filter, inspected all hoses, wires, and fitting
7581	FIRE WATER PUMP (AUX #12A)	5583067	PM+	11/25/14	Fire Pump 12A Flow Test - Annual		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7582	DIESEL ENGINE (AUX #13A)	5632518	PM+	9/15/14	UNIT 13A - ANNUAL ENGINE INSPECTION (OLD# GOL-8341)		no fail	changed oil &filter, changed coolant filter, changed fuel and sediment filter HRS:0303.2
7583	FIRE WATER PUMP (AUX #13A)	5583074	PM+	11/25/14	Fire Pump 13A Flow Test - Annual		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7651	MU #9 JACKET WATER PUMP	5415562	PM	3/11/14	JACKET WATER PUMP INSPECTION - M.U.#9 - ANNUAL		In good service.	
7800656	M.U. #3 - FUEL METER	5402884	PM+	1/23/14	SEMI-ANNUAL - M.U.#3 FUEL METER INSPECTION (OLD PM # GOLE541)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7800656	M.U. #3 - FUEL METER	5554227	PM+	7/14/14	SEMI-ANNUAL - M.U.#3 FUEL METER		INSPECTION COMPLETE, NO SUBSTANDARD	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					INSPECTION (OLD PM # GOLE541)		CONDITIONS	
7800656	M.U. #3 - FUEL METER	5563176	PM	8/27/14	ANNUAL- FUEL METER PROVING-M.U. #3		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
85643	OXYGEN SENSOR - EGO#1	5586984	СМ	6/19/14	Main Unit #8 - 2000 Hour O2 Sensor Changeout	Change out O2 sensors EGO 1&3 and replace with new and log the engine hours.	no fail	1907 hrs on unit changed ego1 and ego3 sensors
85686	THERMOCOUPLE - TEMP OUT	5585677	CM	6/13/14	M.U.#8 Replace TC-8028 Exh.Cat Out		Replaced TC 8028	
GT-FW- FS-011	AUXILIARY 13A - RELIEF VALVE	5513283	СРМ	5/8/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA UTILITY SYSTEMS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	No Failure - Test & Inspection Only
GT-FW- FS-015	AUXILIARY 12A - RELIEF VALVE	5513283	СРМ	5/8/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA UTILITY SYSTEMS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	No Failure - Test & Inspection Only
IG- NG-169	COMPLIANCE R.V., MAIN UNIT #6 ,COMP. DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-170	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-171	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG-	COMPRESSOR	5615595	СРМ	11/12/14	COMPLIANCE		INSPECTION	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
NG-181	DISCHARGE				RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-194	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-205	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-206	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-207	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-208	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-209	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-210	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM-		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

APCD-12A, APCD-13A, APCD-2, APCD-2FM, APCD-3, APCD-3FM, APCD-4, APCD-4FM,

ASSET # VALUES: APCD-5, APCD-5FM, APCD-6, APCD-6FM, APCD-7, APCD-7FM, APCD-8, APCD-8FM, APCD-9,

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					ANNUAL			

Table 2-1
Summary of Results
Southern California Gas Company
Goleta Storage Facility
Main Unit #3
September 15, 2014

Run		1		2		3		Average	Permit Limit
Oxygen, %		0.00		0.03		0.00		0.01	
Carbon Dioxide, %		12.13		12.15		12.12		12.13	
Flow Rate, dscfin		1,102		1,119		1,101		1,107	
O. 'I CAT'								,	
Oxides of Nitrogen,		01.0		17.0					
ppm		21.2		17.9		22,7		20.6	
ppm @ 15% O <sub>2</sub>		5.99		5.07		6.40		5.82	50
lb/hr		0.170		0.146		0.182		0.166	2,37
g/bHp-hr		0.128		0.110		0.137		0.125	
lbs/MMscf		22.2		18.8		.23.8		21.6	
Carbon Monoxide,									
ppm		678		602		810		697	
ppm @ 15% O <sub>2</sub>		192		170		229		197	1700
lb/hr		3.31		2.98		3.95		3.41	27.92
g/bHp-hr		2.50		2.25		2.98		2.58	27.52
lbs/MMscf		433		384		517		445	
Total Non-Methane/Non-Ethane	Hydr	ocarbons,							
ppm	<	0.35	<	0.35	<	0.35	<	0.35	
ppm @ 15% O <sub>2</sub>	<	0.10	<	0.10	<	0.10	<	0.10	250
lb/hr	<	0.0010	<	0.0010	<	0.0010	<	0.0010	2.34
g/bHp-hr	<	0.00074	<	0.0007	<	0.00074	<	0.00074	
lbs/MMscf	<	0.13	<	0.13	<	0.13	<	0.13	
Operating Parameters,									
Load, %		93		93		92		93	
Fuel Flow, scfli		7,649		7,755		7,640		7,682	
Heat Rate, MMbtu/hr		7.79		7.89		7.78		7,802	
Horsepower, bHp		602		602		601		602	
RPM		300		301		300		300	
Catalyst Temp. In, °F		919		921		921		920	
Catalyst Temp. Out, °F		968		970		970		969	
Target, V		0.712		0.712		0.712		0.712	
Lambda Sensor, V		0.712		0.712		0.712		0.712	
Timing, °BTDC									
Tuting, DIDC		18.6		18.6		18.6		18.6	

Table 2-2
Summary of Results
Southern California Gas Company
Goleta Storage Facility
Main Unit #4
September 15, 2014

Run Oxygen, %		1 0.00		2 0.02		3 0.00		Average 0.01	Permit Limit
Carbon Dioxide, %		12.10		11.99		12.10		12.06	
Flow Rate, dscfm		1,121		1,115		1,116		1,118	
Oxides of Nitrogen,									
ppm		28.0		25.7		24.3		26.0	
ppm @ 15% O <sub>2</sub>		7.89		7.25		6.85		7.33	50
lb/hr		0.228.		0.208		0.197		0.211	2.37
g/bHp-hr	•	0.172		0.157		0.149		0.159	
lbs/MMscf		29.3		26.9		25.4		27.2	
Carbon Monoxide,									
ppm		1,417		1,457		1,890		1,588	
ppm @ 15% O <sub>2</sub>		400		412		533		448	1700
lb/hr		7.03		7.19		9.34		7.85	27.92
g/bHp-hr		5.31		5.43		7.06		5.94	
lbs/MMscf		904		930		1,205		1,013	
Total Non-Methane/Non-Ethane	Hydro	ocarbons,	•						
ppm	<	0.35	<	0.35	<	0.35	<	0.35	
ррт @ 15% O <sub>2</sub>	<	0.10	<	0.10	<	0.10	<	0.10	250
lb/hr	<	0.0010	<	0.0010	<	0.0010	<	0.0010	2.34
g/bHp-hr	<	0.0007	<	0.0007	<	0.0007	<	0.0007	
lbs/MMscf	<	0.13	<	0.13	<	0.13	<	0.13	
Operating Parameters,									
Load, %		92		92		92		92	
Fuel Flow, scfh		7,781		7,731		7,745		7,752	
Heat Rate, MMbtu/hr		7.92		7.87		7.88		7.89	
Horsepower, bHp		601		601		600		601	
RPM		298		298		298		298	
Catalyst Temp. In, °F		915		915		914		915	
Catalyst Temp. Out, °F		959		960		960		960	
Target, V		0.712		0.712		0.712		0.712	
Lambda Sensor, V		0.713		0.713		0.711		0.712	
Timing, ⁰BTDC									

Table 2-3
Summary of Results
Southern California Gas Company
Goleta Storage Facility
Main Unit 5
September 16, 2014

Run		1		2		3		Average	Permit Limit
Oxygen, %		0.00		0.00		0.00		0.00	
Carbon Dioxide, %		11.86		11.95		11.85		11.89	
Flow Rate, dscfm		1,178		1,157		1,150		1,162	
Oxides of Nitrogen,									
ppm		39.0		37.5		37.1		37.9	
ppm @ 15% O <sub>2</sub>		11.0		10.6		10.5		10.7	50
lb/hr		0.334		0.315		0.310		0.320	2.37
g/bHp-hr		0.254		0.239		0.235		0.243	
lbs/MMscf		40.9		39.2		38.9		39.7	
Carbon Monoxide,									
ppm		2173		2550		2672		2465	
ppm @ 15% O <sub>2</sub>		613		720		754		696	1700
lb/hr		11.3		13.1		13.6		12.7	27.92
g/bHp-hr		8.61		9.9		10.3		9.60	
lbs/MMscf		1385		1626		1703		1571	
Total Non-Methane/Non-Etha	ne H	ydrocarbo	ons,						
ppm	<	0.35	<	0.35	<	0.35	<	0.35	
ppm @ 15% O <sub>2</sub>	<	0.10	<	0.10	<	0.10	<	0.10	250
lb/hr	<	0.0010	<	0.0010	<	0.0010	<	0.0010	2.34
g/bHp-hr	<	0.00079	<	0.00078	<	0.00077	<	0.00078	
lbs/MMscf	<	0.13	<	0.13	<	0.13	<	0.13	
Operating Parameters,									
Load, %		92		92		92		92	
Fuel Flow, scfh		8,179		8,035		7,988		8,067	
Heat Rate, MMbtu/hr		8.32		8.17		8.13		8.21	
Horsepower, bHp		597		600		600		599	
RPM		301		301		301		301	
Catalyst Temp. In, °F		904		909		911		908	
Catalyst Temp. Out, °F		953		957		960		957	
Target V		0.731		0.731		0.731		0.731	
Lambda Sensor V		0.713		0.720		0.721		0.718	
Timing, °BTDC		19.5		19.5		19.5		19.5	

Table 2-4

## Summary of Results Southern California Gas Company

Goleta Storage Facility Main Unit 6

September 16, 2014

Run		1		2		3		Average	Permit Limit
Oxygen, %		0.00		0.00		0.00		0.00	
Carbon Dioxide, %		11.80		12.31		12.32		12.14	
Flow Rate, dscfm		1,118		1,116		1,115		1,117	
Oxides of Nitrogen,									
ppm		10.4		9.45		8.45		9.45	
ppm @ $15\% O_2$		2.95		2.67		2.38		2.67	50
lb/hr		0.085		0.077		0.069		0.077	2.37
g/bHp-hr		0.064		0.058		0.052		0.058	
lbs/MMscf		10.9		9.9		8.8		9.9	
Carbon Monoxide,									
ppm		944		798		864		869	
ppm @ 15% O <sub>2</sub>		266		225		244		245	1700
lb/hr		4.67		3.94		4.27		4.29	27.92
g/bHp-hr		3,53		2.99		3.24		3.25	
lbs/MMscf		601		509		551		554	
Total Non-Methane/Non-Ethan	ne H	ydrocarbo	ons,						
ppm	<	0.35	<	0.35	<	0.35	<	0.35	
ppm @ 15% O <sub>2</sub>	<	0.10	<	0.10	<	0.10	<	0.10	250
lb/hr	<	0,0010	<	0.0010	<	0.0010	<	0.0010	2.34
g/bHp-hr	<	0.00075	<		<		<	0,00075	
lbs/MMscf	<	0.13	<	0.13	<	0.13	<	0.13	
Operating Parameters,									
Load, %		92		92		92		92	
Fuel Flow, scfh		7,767		7,750		7,747		7,755	
Heat Rate, MMbtu/hr		7.90		7.88		7.88		7.89	
Horsepower, bHp		600		599		598		599	
RPM		330		331		330		330	
Catalyst Temp. In, °F		1,040		1,039		1,038		1,039	
Catalyst Temp. Out, °F		1,093		1,093		1,088		1,091	
Target V		0.703		0.703		0.703		0.703	
Lambda Sensor V		0.703		0.710		0.721		0.711	
Timing, °BTDC		18.6		18.6		18.6		18.6	

Table 2-5
Summary of Results
Southern California Gas Company
Goleta Storage Facility
Main Unit 7
September 17, 2014

Run		1		2		3		Average	Permit Limit
Oxygen, %		0.00		0.00		0.00		0.00	
Carbon Dioxide, %		12.12		11.87		12.16		12.05	
Flow Rate, dscfm		1,122		1,111		1,101		1,111	
Oxides of Nitrogen,									
ppm		17.7		16.7		16.8		17.1	
ppm @ 15% O <sub>2</sub>		5.00		4.71		4.74		4.82	50
lb/hr		0.144		0.135		0.134		0.138	2.37
g/bHp-hr		0.109		0.102		0.101		0.104	
lbs/MMscf		18.5		17.5		17.5		17.8	
Carbon Monoxide,									
ppm		2618		2595		2145		2452	
ppm @ 15% O <sub>2</sub>		739.0		732.4		605.5		692.3	1700
lb/hr		13.00		12.76		10.45		12.07	27.92
g/bHp-hr		9.80		9.61		7.88		9.10	
lbs/MMscf		1666.25		1651.58		1365.36		1561.06	
Total Non-Methane/Non-Ethan	пе Ну	drocarbo	ns,						
ppm	<	0.35	<	0.35	<	0.35	<	0.35	
ppm @ $15\% O_2$	<	0.10	<	0.10	<	0.10	<	0.10	250
lb/hr	<	0.0010	<	0.0010	<	0.0010	<	0.0010	2.34
g/bHp-hr	<	0.00075	<	0.00074	<	0.00074	<	0.00074	
lbs/MMscf	<	0.13	<	0.13	<	0.13	<	0.13	
Operating Parameters,									
Load, %		93		93		93		93	
Fuel Flow, scfh		7,799		7,727		7,656		7,727	
Heat Rate, MMbtu/hr		7.92		7.85		7.78		7.85	
Horsepower, bHp		602		603	٠	602		602	
RPM		331		331		331		331	
Catalyst Temp. In, °F		1,025		1,027		1,030		1,027	
Catalyst Temp. Out, °F		1,060		1,061		1,063		1,061	
Target mV		0,72		0.72		0.72		0.72	
Lambda Sensor, V		0.718		0.718		0.716		0.717	
Timing, °BTDC		19.5		19.5		19.5		19.5	

Table 2-6
Summary of Results
Southern California Gas Company
Goleta Storage Facility
Main Unit 8
September 17, 2014

Run		1		2		3		Average	Permit Limit
Oxygen, %		0.00		0.00		0.00		0.00	
Carbon Dioxide, %		12.34		12.02		12.28		12.21	
Flow Rate, dscfm		1,097		1,081		1,075		1,084	
Oxides of Nitrogen,									
ppm		12.8		15.7		14.1		14.2	
ppm @ $15\% O_2$		3.62		4.42		3.99		4.01	50
lb/hr		0.102		0.123		0.110		0.112	2,37
g/bHp-hr		0.077		0.092		0.083		0.084	
lbs/MMscf		13.4		16.4		14.8		14.9	
Carbon Monoxide,				•					
ppm		962		1164		1193		1107	
ppm @ 15% O <sub>2</sub>		272		329		337		312	1700
lb/hr		4.67		5.57		5.68		5.31	27.92
g/bHp-hr		3.51		4.19		4.27		3.99	
lbs/MMscf		613		741		760		704	
Total Non-Methane/Non-Ethan	ne Hyd	irocarbo	ons.						
ppm .	< .	0.35	<	0.35	<	0.35	<	0.35	
ppm @ 15% O <sub>2</sub>	<	0:10	<	0.10	<	0.10	<	0.10	250
lb/hr	< 0	.00097	<	0.00096	<	0.00095	<		2.34
g/bHp-hr		.00073	<		<		<		
lbs/MMscf	<	0.13	<	0.13	<	0.13	<	0.13	
Operating Parameters,									
Load, %		93		93		93		93	
Fuel Flow, scfh		7,628		7,515		7,473		7,538	
Heat Rate, MMbtu/hr		7.75		7.63		7.59		7.66	
Horsepower, bHp		604		604		603		604	
RPM		330		329		329		329	
Catalyst Temp. In, °F		1,025		1,028		1,027		1,027	
Catalyst Temp. Out, °F		1,077		1,076		1,079		1,077	
Target V		0.689		0.689		0.689		0.689	
Lambda Sensor V		0.690		0.694		0.696		0.693	
Timing, °BTDC		19.8		19.8		19.8		19.8	

### Annual Operating Hours and Fuel Usage Report

						Compressor 4A					Office
	Unit(s):	H-201A	H-201B	Compressor 4A	Compressor 5A	plus 5A	MU9	MU9	Fire Pump 12A	Fire Pump 13A	Generator
	District ID:	113985	113987	1221	1222	-	1206	1206	8666	8668	8665)
		Operating Fuel	Operating Fuel	Operating	Operating	Operating Fuel	Operating	Operating Fuel	Operating	Operating	Operating
Month		(MSCF)	(MSCF)	Hours	Hours	(MSCF)	Hours	(MSCF)	Hours	Hours	Hours
Jan		99	102	1	3.0	0.9	0	0	1.1	0.8	4.2
Feb		92	70	2	0.0	0.5	27	211	0.6	0.2	0.1
Mar		126	15	5	0.0	0.9	215	1884	0.5	0.5	0.2
Apr		100	112	15	0.0	4.7	218	1765	0.3	0.3	0.2
May		92	60	118	8.8	38.6	419	3325	0.4	0.4	7.9
Jun		55	55	54	0.0	12.7	385	3436	0.3	0.4	39.3
Jul		15	17	44	0.0	9.9	421	3703	0.5	0.5	0.0
Aug		56	54	4	0.0	1.4	512	4555	0.5	0.4	0.1
Sep		16	13	29	1.3	6.6	280	2755	0.5	0.5	0.2
Oct		0	0	17	0.0	5.2	290	2544	0.6	0.6	0.1
Nov		0	0	29	0.0	5.6	144	1226	0.6	0.7	13.9
Dec		18	20	11	0.0	2.4	187	1655	0.2	0.2	0.2
Total		669	519	328	13.0	89.4	3097	27057	6.1	5.5	66.4

Total Fuel (MSCF)

28,334

Total Hours

3,516



## Interoffice Memo

TO: Dennis Lowrey EAC PROJECT#: TS2014-C013 FROM: Vincent Arias EAC ACCOUNT#: 824.502 GP

DATE: February 19, 2014

SUBJECT: Hydrocarbon Analysis for Goleta Storage Field – February 2014

#### THIS REPORT IS YOUR RECORD. THE EAC WILL DISCARD THIS REPORT ON 02/19/2019.

#### **OBJECTIVE**

Assist Goleta Underground Storage personnel by analyzing hydrocarbon composition and High Heating Values (HHV), to ensure compliance required by the Santa Barbara County Air Pollution Control District.

#### **RESULTS**

Please see the attached list of the hydrocarbons present in the sample to determine the Reactive Organic Carbon (ROC) content. The HHV are listed below:

LOCATION	HHV (BTU/real cubic foot)
Reservoir Quality Gas Miller 8	1055.2
Pipeline Quality Gas L-247	1053.9
Goleta Plant Fuel OM 3464	1053.7
Micro Turbine Fuel Gas	1052.4
Dehy Flare Inlet	1183.0
Tank Farm Flare	1123.4

#### **SAMPLE COLLECTION & ANALYSIS**

On 02/07/14, Engineering Analysis Center (EAC) personnel received six gas samples collected by Goleta Underground Storage personnel. These gas samples were collected on 02/05/14, from Reservoir Quality Gas Miller 8, Pipeline Quality Gas L-247, Goleta Plant Fuel OM 3464, Micro Turbine Fuel Gas, Dehy Flare Inlet, and Tank Farm Flare in Tedlar Bags and sent to the EAC by inter office mail.

On 02/07/14, the EAC analyzed the gas samples according to ASTM Method D1945-03, (Method for Analysis of Natural Gas by Gas Chromatography), and calculated the High BTU values using ASTM Method D3588-98 (Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion). The EAC was able to complete the test in accordance to the above stated ASTM methods and calculated the High BTU values for Reservoir Quality Gas Miller 8, Pipeline Quality Gas L-247, Goleta Plant Fuel OM 3464, Micro Turbine Fuel Gas, Dehy Flare Inlet, and Tank Farm Flare.

VA/Goleta HHV 02-05-14/Job:2379

cc: Shahid Razzak (w/o attachments)

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

 PROJECT NO:
 TS2014-C013

 REPORTED BY:
 Vincent Arias

 REPORT DATE:
 2/11/14

 TEST LOCATION:
 MTG STD 1

 TEST DATE:
 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV		Xi*SG
Component	Xi	HHV	LHV	\$G	Mol, Wt	Wt %	Btu/SCF	Btu/SCF	
METHANE	88.2563	1012.3	911.5	0.5539	14.1585	77.1257	893.5	804.5	0.4889
ETHANE	5.0283	1773.8	1622.8	1.0382	1.5120	8.2361	89.2	81.6	0.0522
PROPANE	0.9875	2521.9	2320.4	1.5225	0.4354	2.3720	24.9	22,9	0.0150
iso-BUTANE	0.2988	3259.4	3006.9	2.0068	0.1737	0.9460	9.7	9.0	0.0060
n-BUTANE	0.2956	3269.8	3017.4	2.0068	0.1718	0.9359	9.7	8.9	0.0059
neo-PENTANE	0.0000	4010.2	3691.4	2.4911	0.0000	0.0000	0.0	0.0	0.0000
iso-PENTANE	0.0991	4010.2	3707.6	2.4911	0.0715	0.3895	4.0	3.7	0.0025
n-PENTANE	0.0999	4018.0	3715.6	2.4911	0.0721	0.3926	4.0	3.7	0.0025
C6 plus	0.0685	5194.5	4812.8	3.2521	0.0645	0.3515	3.6	3.3	0.0022
CARBON DIOXIDE	2.0075	0.0	0	0.9672	0.8835	4.8126	0.0	0.0	0.0194
OXYGEN	0.3506	0.0	0	1.5195	0.1122	0.6111	0.0	0.0	0.0053
NITROGEN	2.5079	0.0	0	1.1048	0.7025	3.8270	0.0	0.0	0.0277
Totals>	100.000				18.4	100.0	1038.5	937.6	0.6277

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons	4.9
A = (Total SG)(0.0101)	0.00634
	0.00034
B = (Total Non-HC)(.0070)	
Z = 1.00369 - A + B	0.99769

Total	Mol	Wt.	ROC C3	to $C6+=$	0.5536	lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 3.02%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F	, Gross, Dry, real volume basis)
HHV	1040.9 BTU/real cubic foot
LHV	939.7 BTU/real cubic foot
Specific Gravity	0.6291

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0015$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

MTG STD 2

TEST DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	8G	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	88.2564	1012.3	911.5	0.5539	14.1585	77.1212	893.5	804.5	0.4889
ETHANE	5.0300	1773.8	1622.8	1.0382	1.5125	8.2384	89.2	81.6	0.0522
PROPANE	0.9900	2521.9	2320.4	1.5225	0.4365	2.3779	25.0	23.0	0.0151
iso-BUTANE	0.2990	3259.4	3006.9	2.0068	0.1738	0.9466	9.7	9.0	0.0060
n-BUTANE	0.2960	3269.8	3017.4	2.0068	0.1720	0.9371	9.7	8.9	0.0059
neo-PENTANE	0.0000	4010.2	3691.4	2.4911	0.0000	0.0000	0.0	0.0	0.0000
iso-PENTANE	0.0990	4010.2	3707.6	2.4911	0.0714	0.3891	4.0	3.7	0.0025
n-PENTANE	0.1000	4018.0	3715.6	2.4911	0.0721	0.3930	4.0	3.7	0.0025
C6 plus	0.0686	5194.5	4812.8	3.2521	0.0646	0.3520	3.6	3.3	0.0022
CARBON DIOXIDE	2.0100	0.0	0	0.9672	0.8846	4.8183	0.0	0.0	0.0194
OXYGEN	0.3510	0.0	0	1.5195	0.1123	0.6118	0.0	0.0	0.0053
NITROGEN	2.5000	0.0	0	1.1048	0.7003	3.8147	0.0	0.0	0.0276
Totals>	100.000				18.4	100.0	1038.6	937.7	0.6277

(4) Compressibility Factor (Z) for mixed gases

(1) Compression (1) 101 111	8
Total Non-Hydrocarbons	4.9
A = (Total SG)(0.0101)	0.00634
B = (Total Non-HC)(.0070)	0.00034
Z = 1.00369 - A + B	0.99769

Total Mol Wt. ROC C3 to C6+= 0.5540 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 3.02%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

(3) Tidjusted Tutues (1773 poin, 001	, Gross, Dry, rour volume ousis,
HHV	1041.0 BTU/real cubic foot
LHV	939.8 BTU/real cubic foot
Specific Gravity	0.6291

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0015$  ib/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

Reservoir Quality Gas Miller 8

SAMPLE DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	93.0310	1012.3	911.5	0.5539	14.8943	85.2816	941.8	848.0	0.5153
ETHANE	3.5672	1773.8	1622.8	1.0382	1.0727	6.1418	63.3	57.9	0.0370
PROPANE	1.216	2521.9	2320.4	1.5225	0.5361	3.0698	30.7	28.2	0.0185
iso-BUTANE	0.1305	3259.4	3006.9	2.0068	0.0758	0.4343	4.3	3.9	0.0026
n-BUTANE	0.2284	3269.8	3017.4	2.0068	0.1327	0.7601	7.5	6.9	0.0046
iso-PENTANE	0.0421	4010.2	3707.6	2.4911	0.0304	0.1739	1.7	1.6	0.0010
n-PENTANE	0.0322	4018.0	3715.6	2.4911	0.0232	0.1330	1.3	1.2	0.0008
C6 plus	0.0445	5194.5	4812.8	3.2521	0.0419	0.2400	2.3	2.1	0.0014
CARBON DIOXIDE	1.1007	0.0	0	1.5195	0.4843	2.7731	0.0	0.0	0.0167
OXYGEN	0.0807	0.0	0	1.1048	0.0258	0.1479	0.0	0.0	0.0009
NITROGEN	0.5268	0.0	0	0.9672	0.1475	0.8446	0.0	0.0	0.0051
Totals>	100.000				17.5	100.0	1052.7	949.8	0.6041

(4) Compressibility Factor (Z) for mixed gases

(1) Compressions, 1 actor (2) for	minto a Basec
Total Non-Hydrocarbons	1.7
A = (Total SG)(0.0101)	0.00610
B = (Total Non-HC)(.0070)	0.00012
Z = 1.00369 - A + B	0.99771

Total Mol Wt. ROC C3 to C6+ = 0.8402 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 4.81%

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0022$  lb/cf

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

(3) Majustea Values (14.73 psia, 00	1, Gross, Dry, real volume busis,
HHV	1055.2 BTU/real cubic foot
LHV	952.0 BTU/real cubic foot
Specific Gravity	0.6054

### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14

TEST LOCATION: Pipeline Quality Gas L-247

SAMPLE DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*8G
Component	Xi	HHV	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	93.2489	1012.3	911.5	0.5539	14.9291	85.7098	944.0	850.0	0.5165
ETHANE	3.4541	1773.8	1622.8	1.0382	1.0386	5.9630	61.3	56.1	0.0359
PROPANE	1.1746	2521.9	2320.4	1.5225	0.5179	2.9732	29.6	27.3	0.0179
iso-BUTANE	0.1260	3259.4	3006.9	2.0068	0.0732	0.4204	4.1	3.8	0.0025
n-BUTANE	0.2191	3269.8	3017.4	2.0068	0.1273	0.7311	7.2	6.6	0.0044
iso-PENTANE	0.0405	4010.2	3707.6	2.4911	0.0292	0.1678	1.6	1.5	0.0010
n-PENTANE	0.0311	4018.0	3715.6	2.4911	0.0224	0.1288	1.2	1.2	0.0008
C6 plus	0.0470	5194.5	4812.8	3.2521	0.0443	0.2541	2.4	2.3	0.0015
CARBON DIOXIDE	1.0520	0.0	0	1.5195	0.4629	2.6574	0.0	0.0	0.0160
OXYGEN	0.0829	0.0	0	1.1048	0.0265	0.1523	0.0	0.0	0.0009
NITROGEN	0.5238	0.0	0	0.9672	0.1467	0.8420	0.0	0.0	0.0051
Totals>	100.000				17.4	100.0	1051.5	948.6	0.6025

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons	1.7
A = (Total SG)(0.0101)	0.00608
B = (Total Non-HC)(.0070)	0.00012
Z = 1.00369 - A + B	0.99772

Total Mol Wt. ROC C3 to C6+ = 0.8144 lb/lb-mol

Mol Wt. % ROC C3 to C6+=4.68%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1053.9 BTU/real cubic foot
LHV	950.8 BTU/real cubic foot
Specific Gravity	0.6038

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0022$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14
TEST LOCATION: Goleta plant fuel OM 3464

SAMPLE DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	93.2314	1012.3	911.5	0.5539	14.9263	85.6779	943.8	849.8	0.5164
ETHANE	3.4601	1773.8	1622.8	1.0382	1.0405	5.9722	61.4	56.1	0.0359
PROPANE	1.1674	2521.9	2320.4	1.5225	0.5147	2.9544	29.4	27.1	0.0178
iso-BUTANE	0.1260	3259.4	3006.9	2.0068	0.0732	0.4204	4.1	3.8	0.0025
n-BUTANE	0.2195	3269.8	3017.4	2.0068	0.1276	0.7323	7.2	6.6	0.0044
iso-PENTANE	0.0406	4010.2	3707.6	2.4911	0.0293	0.1681	1.6	1.5	0.0010
n-PENTANE	0.0312	4018.0	3715.6	2.4911	0.0225	0.1292	1.3	1.2	0.0008
C6 plus	0.0475	5194.5	4812.8	3.2521	0.0447	0.2568	2.5	2.3	0.0015
CARBON DIOXIDE	1.0616	0.0	0	1.5195	0.4671	2.6812	0.0	0.0	0.0161
OXYGEN	0.0850	0.0	0	1.1048	0.0272	0.1561	0.0	0.0	0.0009
NITROGEN	0.5297	0.0	0	0.9672	0.1483	0.8513	0.0	0.0	0.0051
Totals>	100.000				17.4	100.0	1051.3	948.4	0.6026

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons	1.7
A = (Total SG)(0.0101)	0.00609
B = (Total Non-HC)(.0070)	0.00012
Z = 1.00369 - A + B	0.99772

Total Mol Wt. ROC C3 to C6+ = 0.8121 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 4.66%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1053.7 BTU/real cubic foot
LHV	950.6 BTU/real cubic foot
Specific Gravity	0.6039

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0021$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

Micro Turbine Fuel Gas

SAMPLE DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	HHV	LHV	SG	Mol. Wt	Wt %	Btu/SCF	Btu/SCF	
METHANE	93.1154	1012.3	911.5	0.5539	14.9078	85.5040	942.6	848.7	0.5158
ETHANE	3.4524	1773.8	1622.8	1.0382	1.0381	5.9543	61.2	56.0	0.0358
PROPANE	1.1714	2521.9	2320.4	1.5225	0.5165	2.9622	29.5	27.2	0.0178
iso-BUTANE	0.1259	3259.4	3006.9	2.0068	0.0732	0.4197	4.1	3.8	0.0025
n-BUTANE	0.2192	3269.8	3017.4	2.0068	0.1274	0.7307	7.2	6.6	0.0044
iso-PENTANE	0.0407	4010.2	3707.6	2.4911	0.0294	0.1684	1.6	1.5	0.0010
n-PENTANE	0.0314	4018.0	3715.6	2.4911	0.0227	0.1299	1.3	1.2	0.0008
C6 plus	0.0459	5194.5	4812.8	3.2521	0.0432	0.2479	2.4	2.2	0.0015
CARBON DIOXIDE	1.0560	0.0	0	1.5195	0.4646	2.6650	0.0	0.0	0.0160
OXYGEN	0.1153	0.0	0	1.1048	0.0369	0.2116	0.0	0.0	0.0013
NITROGEN	0.6266	0.0	0	0.9672	0.1754	1.0063	0.0	0.0	0.0061
Totals>	100.000	•			17.4	100.0	1050.0	947.2	0.6030

(4) Compressibilty Factor (Z) for mixed gases

(1) compression and (2) for make a Busto						
Total Non-Hydrocarbons	1.8					
A = (Total SG)(0.0101)	0.00609					
B = (Total Non-HC)(.0070)	0.00013					
Z = 1.00369 - A + B	0.99773					

Total Mol Wt. ROC C3 to C6+ = 0.8123 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 4.66%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

(b) Hajastea Taraes (1 1115 pora, 501	, Orodo, Dij, itali ( olalik olalic)
HHV	1052.4 BTU/real cubic foot
LHV	949.4 BTU/real cubic foot
Specific Gravity	0.6044

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0021$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14

TEST LOCATION: Dehy Flare Inlet

SAMPLE DATE: 2/7/14

Mole % \* ROC XI2HHVI XI2HV Xi\*SG Mole % (1) (2) (3) нну Btu/SCF Component Χi LHV SG Mol. Wt Wt % Btu/SCF **METHANE** 66.9557 1012.3 911.5 0.5539 10.7196 42.1258 677.8 610.3 0.3709 **ETHANE** 1773.8 0.0894 8.6067 1622.8 1.0382 2.5880 10.1704 152.7 139.7 PROPANE 2521.9 2320.4 2,4366 9.5753 139.4 128.2 0.0841 5.5264 1.5225 3259.4 iso-BUTANE 0.8079 3006.9 2.0068 0.4696 1.8452 26.3 24.3 0.0162 n-BUTANE 2.0264 3269.8 3017.4 2.0068 1.1777 4.6283 66.3 61.1 0.0407 iso-PENTANE 0.5030 4010.2 3707.6 2.4911 0.3629 1.4262 20.2 18.6 0.0125 n-PENTANE 0.4486 1.2719 0.0112 4018.0 3715.6 2.4911 0.3237 18.0 16.7 C6 plus 1.4882 5194.5 4812.8 3.2521 1.4016 5.5081 77.3 71.6 0.0484 CARBON DIOXIDE 0.2038 13.4107 0.0 1.5195 5.9007 23.1885 0.0 0.0 OXYGEN 0.0 1.1048 0.0228 0.0894 0.0 0.0 0.0008 0.0711 NITROGEN 0.1553 0.0 0.9672 0.0435 0.1709 0.0 0.0 0.0015

(4) Compressiblity Factor (Z) for mixed gases

(1)	THE BUDGE
Total Non-Hydrocarbons	13.6
A = (Total SG)(0.0101)	0.00888
$\mathbf{B} = (\text{Total Non-HC})(.0070)$	0.00095
Z = 1.00369 - A + B	0.99576

Total Mol Wt. ROC C3 to C6+= 6.1721 lb/lb-mol

1177.9

1070.6

0.8794

Mol Wt. % ROC C3 to C6+ = 24.25%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

100.0

25.4

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

100.000

HHV	1183.0 BTU/real cubic foot
LHV	1075.1 BTU/real cubic foot
Specific Gravity	0.8831

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0163$  lb/cf

#### **FOOTNOTES**

Totals ---->

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

Tank Farm Flare

SAMPLE DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	HHV	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	72.7804	1012.3	911.5	0.5539	11.6521	51.9036	736.8	663.4	0.4031
ETHANE	6.9004	1773.8	1622.8	1.0382	2.0750	9.2427	122.4	112.0	0.0716
PROPANE	5,2386	2521.9	2320.4	1.5225	2.3097	10.2884	132.1	121.6	0.0798
iso-BUTANE	0.7406	3259.4	3006.9	2.0068	0.4304	1.9173	24.1	22.3	0.0149
n-BUTANE	1.4706	3269.8	3017.4	2.0068	0.8547	3.8073	48.1	44.4	0.0295
iso-PENTANE	0.2896	4010.2	3707.6	2.4911	0.2089	0.9307	11.6	10.7	0.0072
n-PENTANE	0.2349	4018.0	3715.6	2.4911	0.1695	0.7549	9.4	8.7	0.0059
C6 plus	0.6763	5194.5	4812.8	3.2521	0.6370	2.8373	35.1	32.5	0.0220
CARBON DIOXIDE	4.9151	0.0	0	1.5195	2.1626	9.6333	0.0	0.0	0.0747
OXYGEN	1.4653	0.0	0	1.1048	0.4689	2.0887	0.0	0.0	0.0162
NITROGEN	5.2883	0.0	0	0.9672	1.4807	6.5958	0.0	0.0	0.0511
Totals>	100.000	·	<u> </u>		22.4	100.0	1119.7	1015.6	0.7760

(1) 00111-121-121-121-121-121-121-121-121-12	( <u></u> ) 101 111111 Buoti
Total Non-Hydrocarbons	11.7
A = (Total SG)(0.0101)	0.00784
B = (Total Non-HC)(.007)	0.00082
Z = 1.00369 - A + B	0.99667

Total Mol Wt. ROC C3 to C6+=4.6102 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 20.54%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis) Total lbs of ROC C3 to C6+ per ft<sup>3</sup> = 0.0122 lb/cf

HHV	1123.4 BTU/real cubic foot
LHV	1019.0 BTU/real cubic foot
Specific Gravity	0.7786

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

MTG STD FINAL

TEST DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	88.2343	1012.3	911.5	0.5539	14.1550	77.0818	893.2	804.3	0.4887
ETHANE	5.0374	1773.8	1622.8	1.0382	1.5147	8.2484	89.4	81.7	0.0523
PROPANE	0.9857	2521.9	2320.4	1.5225	0.4347	2.3669	24.9	22.9	0.0150
iso-BUTANE	0.2989	3259.4	3006.9	2.0068	0.1737	0.9460	9.7	9.0	0.0060
n-BUTANE	0.2957	3269.8	3017.4	2.0068	0.1719	0.9359	9.7	8.9	0.0059
neo-PENTANE	0.0000	3993.9	3691.4	2.4911	0.0000	0.0000	0.0	0.0	0.0000
iso-PENTANE	0.0989	4010.2	3707.6	2.4911	0.0714	0.3886	4.0	3.7	0.0025
n-PENTANE	0.1000	4018.0	3715.6	2.4911	0.0721	0.3929	4.0	3.7	0.0025
C6 plus	0.0688	5194.5	4812.8	3.2521	0.0648	0.3529	3.6	3.3	0.0022
CARBON DIOXIDE	2.0261	0.0	0	1.5195	0.8917	4.8557	0.0	0.0	0.0308
OXYGEN	0.3543	0.0	0	1.1048	0.1134	0.6174	0.0	0.0	0.0039
NITROGEN	2.4999	0.0	0	0.9672	0.7003	3.8136	0.0	0.0	0.0242
Totals>	100.000		·		18.4	100.0	1038.4	937.5	0.6340

(4) Compressiblity Factor (Z) for mixed gases

(+) Compressionly I deter (2) for it	naou guses
Total Non-Hydrocarbons	4.9
A = (Total SG)(0.0101)	0.00640
B = (Total Non-HC)(.0070)	0.00034
$Z = 1.00369 \cdot A + B$	0.99763

Total Mol Wt. ROC C3 to C6+= 0.5539 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 3.02%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV 1040.9 BTU/real cubic foot LHV 939.7 BTU/real cubic foot Specific Gravity 0.6355

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0015$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

### SOUTHERN CALIFORNIA GAS COMPANY

### CHAIN OF CUSTODY RECORD

Special Instructions:

Lab\_\_\_

please furnish

1. signed analysis report

2. QA/QC report
3. chain of custody

Project No: TS2014-C015 Requestor: Dennis Lowrey

Sampling Site: La Goleta Storage

Sample ID & Location	Date	Time	Collected by	Container type	Sample type	Preservative	Analysis Required
Reservoir Quality Gas Miller 8	2/5/2014	9:55AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Pipeline Quality Gas L-247	2/5/2014	`9:35AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Goleta plant fuel OM 3464	2/5/2014	8:17AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Micro-Turbine Fuel Gas	2/5/2014	8:41AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Dehy Flare Inlet	2/5/2014	8:05AM	Dennis Lowron	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Tank Farm Flare	2/5/2014	9:05AM	Dennis Lowred	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98

Relinquished by	Company & Department	Date	Time	Received by	Company &	& Department	
(signature)	7	2/1	1	(signature)			
V		2/1/1 <del>2/5/20</del>	(1,30)	1 / 1/	1.	1, +	A / n
	SoCalGas/Goleta Storage	<del>2/5/20</del>	<del>14</del>	John VIII	lugo EAC	Johnila	Verdugo
				U	<u> </u>		O



Dennis Lowrey
Southern California Gas Company
PO BOX 818
Goleta, CA 93116

12 February 2014

RE: La Goleta Storage Work Order: 1400558

Dear Client:

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on 05-Feb-14 15:30 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Meredith Sprister

Meredith Spides

Project Manager

TEL: (805) 922-4772

www.oecusa.com FAX: (805) 925-3376



### Oilfield Environmental and Compliance, INC.

Southern California Gas Company
Project: La Goleta Storage

PO BOX 818
Project Number: TS2014-C015
Reported:
Goleta CA, 93116
Project Manager: Dennis Lowrey
12-Feb-14 15:54

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Reservoir Quality Gas Miller #8	1400558-01	Air	05-Feb-14 09:51	05-Feb-14 15:30
Pipeline Quality Gas Line 247	1400558-02	Air	05-Feb-14 09:44	05-Feb-14 15:30
Goleta Plant Fuel OM 3464	1400558-03	Air	05-Feb-14 08:19	05-Feb-14 15:30
Tank Farm Flare Inlet	1400558-04	Air	05-Feb-14 09:15	05-Feb-14 15:30
Microturbine Fuel Gas	1400558-05	Air	05-Feb-14 08:47	05-Feb-14 15:30

TEL: (805) 922-4772

FAX: (805) 925-3376



### Oilfield Environmental and Compliance, INC.

Southern California Gas Company	Project: La Goleta Storage
PO BOX 818	Project Number: TS2014-C015
Goleta CA 93116	Project Manager: Dennis Lowrey

### Reservoir Quality Gas Miller #8 1400558-01 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Oilfield Environmental and Compliance											
Sulfur Compounds											
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16			

Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16
Carbonyl Sulfide	ND	0.050	"	"	"	"	"	"
Carbon disulfide	ND	0.050	"	"	"	"	"	"
Sulfur dioxide	ND	0.050	"	"	"	"	"	"
Methyl Mercaptan	ND	0.050	"	"	"	"	"	"
Ethyl Mercaptan	ND	0.050	"	"	"	"	"	"
Dimethyl Sulfide	ND	0.050	"	"	"	"	"	"
Total Unknown Sulfur Compounds as H2S	ND	0.050	"	"	"	"	"	"
Total Reduced Sulfur as S	ND	0.050	"	"	"	"	"	"

### Pipeline Quality Gas Line 247 1400558-02 (Air)

Analyte Result Reporting Units Dilution Batch Prepared Analyzed Method Notes  Limit	Analyte	Result	Τ, ρ	Units	Dilution	Batch		Analyzed	Method	Notes
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### **Oilfield Environmental and Compliance**

Sulfur Compounds								
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16
Carbonyl Sulfide	ND	0.050	"	"	"	"	"	"
Carbon disulfide	ND	0.050	"	"	"	"	"	"
Sulfur dioxide	ND	0.050	"	"	"	"	"	"
Methyl Mercaptan	ND	0.050	"	"	"	"	"	"
Ethyl Mercaptan	ND	0.050	"	"	"	"	"	"
Dimethyl Sulfide	ND	0.050	"	"	"	"	"	"
Total Unknown Sulfur Compounds as H2S	ND	0.050	"	"	"	"	"	"
Total Reduced Sulfur as S	ND	0.050	"	"	"	"	"	"

Oilfield Environmental and Compliance

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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**Reported:** 12-Feb-14 15:54



### Oilfield Environmental and Compliance, INC.

Southern California Gas Company	Project: La Goleta Storage	
PO BOX 818	Project Number: TS2014-C015	Reported:
Goleta CA, 93116	Project Manager: Dennis Lowrey	12-Feb-14 15:54

### **Goleta Plant Fuel OM 3464** 1400558-03 (Air)

1400330-03 (All)										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Oilfield E	Environm	ental a	and Co	mplian	се				
Sulfur Compounds										
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16		
Carbonyl Sulfide	ND	0.050	"	"	"	"	"	"		
Carbon disulfide	ND	0.050	"	"	"	"	"	"		
Sulfur dioxide	ND	0.050	"	"	"	"	"	"		
Methyl Mercaptan	ND	0.050	"	"	"	"	"	"		
Ethyl Mercaptan	ND	0.050	"	"	"	"	"	"		
Dimethyl Sulfide	ND	0.050	"	"	"	"	"	"		
Total Unknown Sulfur Compounds as H2S	ND	0.050	"	"	"	"	"	"		
Total Reduced Sulfur as S	ND	0.050	"	"	"	"	"	"		
		Tank Far 14005	rm Flar 558-04 ( <i>A</i>							
Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
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## **Oilfield Environmental and Compliance**

Sulfur Compounds								
Hydrogen Sulfide (H2S)	0.77	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16
Carbonyl Sulfide	0.20	0.050	"	"	"	"	"	"
Carbon disulfide	0.21	0.050	"	"	"	"	"	"
Sulfur dioxide	ND	0.050	"	"	"	"	"	m .
Methyl Mercaptan	4.4	0.050	"	"	"	"	"	"
Ethyl Mercaptan	2.3	0.050	"	"	"	"	"	"
Dimethyl Sulfide	3.3	0.050	"	"	"	"	"	"
Total Unknown Sulfur Compounds as	ND	0.050	"	"	"	"	"	"
H2S								
Total Reduced Sulfur as S	11	0.050	"	"	"	"	"	"

Oilfield Environmental and Compliance

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H2S

Total Reduced Sulfur as S

#### Oilfield Environmental and Compliance, INC.

Southern California Gas Company Project: La Goleta Storage

PO BOX 818 Project Number: TS2014-C015 Reported:
Goleta CA, 93116 Project Manager: Dennis Lowrey 12-Feb-14 15:54

#### Microturbine Fuel Gas 1400558-05 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Oilfield Environmental and Compliance											
Sulfur Compounds											
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16			
Carbonyl Sulfide	ND	0.050	"	"	"	"	"	"			
Carbon disulfide	ND	0.050	"	"	"	"	"	"			
Sulfur dioxide	ND	0.050	"	"	"	"	"	"			
Methyl Mercaptan	ND	0.050	"	"	"	"	"	"			
Ethyl Mercaptan	ND	0.050	"	"	"	"	"	"			
Dimethyl Sulfide	ND	0.050	"	"	"	"	"	"			
Total Unknown Sulfur Compounds as	ND	0.050	"	"	"	"	"	"			

0.050

ND

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#### Oilfield Environmental and Compliance, INC.

Southern California Gas Company
Project: La Goleta Storage

PO BOX 818
Project Number: TS2014-C015
Reported:
Goleta CA, 93116
Project Manager: Dennis Lowrey
12-Feb-14 15:54

#### **Sulfur Compounds - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A402100 - None-gases										
Blank (A402100-BLK1) Prepared & Analyzed: 05-Feb-14										
Hydrogen Sulfide (H2S)	ND	0.050	ppmv							
Carbonyl Sulfide	ND	0.050	"							
Carbon disulfide	ND	0.050	"							
Sulfur dioxide	ND	0.050	"							
Methyl Mercaptan	ND	0.050	"							
Ethyl Mercaptan	ND	0.050	"							
Dimethyl Sulfide	ND	0.050	"							
Total Unknown Sulfur Compounds as H2S	ND	0.050	"							
Total Reduced Sulfur as S	ND	0.050	"							
LCS (A402100-BS1)				Prepared	& Analyze	ed: 05-Feb	-14			
Hydrogen Sulfide (H2S)	10	0.050	ppmv	9.98		101	70-130			
Carbonyl Sulfide	10	0.050	"	10.0		100	70-130			
Carbon disulfide	10	0.050	"	10.4		99.2	70-130			
Methyl Mercaptan	9.9	0.050	"	10.0		98.3	70-130			
Ethyl Mercaptan	10	0.050	"	10.2		98.6	70-130			
Dimethyl Sulfide	10	0.050	"	10.2		99.0	70-130			

Oilfield Environmental and Compliance

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#### Oilfield Environmental and Compliance, INC.

Southern California Gas Company
Project: La Goleta Storage

PO BOX 818
Project Number: TS2014-C015
Reported:

Goleta CA, 93116
Project Manager: Dennis Lowrey
12-Feb-14 15:54

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

TEL: (805) 922-4772

FAX: (805) 925-3376

#### SOUTHERN CALIFORNIA GAS COMPANY CHAIN OF CUSTODY RECORD

Project No: TS2014-C015 Requestor: Dennis Lowrey

Sampling Site: La Goleta Storage

**Special Instructions:** 

Lab

please furnish

- 1. signed analysis report
- 2. QA/QC report
- 3. Chain of custody

Sampling Site: La Goleti	a Storage		-					
Sample ID & Location	Date	Time	Collected	Container	Sample type	Preservative	Analysis Required	1
,			by	type				
Reservoir Quality Gas	2/5/2014	9:51AM	D. Løwrey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A	
Miller # 8			LV	-			and 16A 1400558	- 10
Pipeline Quality Gas	2/5/2014	9:44AM	D. Lowfey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A	1.
Line 247			199				and 16A	2
Goleta Plant Fuel OM	2/5/2014	8:19AM	D. Lowey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A	
3464			M				and 16A	34
Tank Farm Flare Inlet	2/5/2014	9:15AM	D. Lowrey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A	П
			1 XV			·	and 16A	40
Microturbine Fuel Gas	2/5/2014	8:47AM	D. Lowrey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A	
							and 16A	54
•				-				1
					Santiage and a second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s			-
Refinquished by C	ompany & E	epartment	Date	Time R	eceived by	Comp	any & Department	

(signature)
SoCalGas/Goleta Storage 2/5/201

2/5/2014 1344

the B

DEC

OEC

2/5/14/1530

MAS

OEC- RECEIVING

e-mail results to <u>dalowrey@semprautilities.com</u> Dennis Lowrey 805.681.8072

© EC	SAMPLE	RECEIPT

CLIENT: So. CAL GAS OEC ID #: 400558 Temp: \_\_\_\_ °C

Acceptable Range: 0°C to 6°C

COC RECEIVED

RECEIPT LOGIN

DATE/TIME:	2-5-14 @ 1530	DATE/TIME: _	2-5-14	2 155	5	REF	RIGERATOR(s):
OEC Cou Delivery( Samples F Samples F	Other than OEC Courier) Received on Ice Received Outside Temp. Range* Direct from field (Outside Temp) Irs Outside Drop-off [Brought Insi	COC document(s) received Correct containers for and Container(s) intact and in Container label(s) consist OEC preservative added	ed with samples alysis requested a good condition tent with COC (**note std ID) ample label(s) eadspace		No N/A  * □  * □  * □  * □  * □  * □  * □  *	Custody Seal  Method of S  (**) OEC Pro	SLEM CHAIN FORM NEEDED  Is (circle): Present / Absent Samples / Coolers Intact / Broken*  hipment & Tracking #(1f applicable):  eservative ID: etals Filtration: (Date/Init/Preserve ID)
CONTAIN	ERS, COC CHANGES AN	ND/OR CORRECTIONS	_	CHAN	GES AUT	THORIZED BY	<b>/:</b>
OEC ID	CU ID Address	C	ontainer Description Preservative				
OECID	Client ID ***If blank, refer to CoC	Container Description	Preservative	ResCl /pH	Matrix	Date/Time Sampled ***	Comments / Remarks / Condition Notes, Etc.
1-5A	CHERT ID *** If blank, refer to CoC	1-TEOLAR EA	Preservative	1	Matrix A	I .	
	Cheft ID *** If blank, refer to CoC	-	Preservative	1		I .	
	Chent ID *** If blank, refer to CoC	-	Preservative	1		I .	
	Chent ID *** If blank, refer to CoC	-	Preservative	1		I .	
	CHERT ID *** If blank, refer to CoC	-	Preservative	1		I .	
	CHERT ID *** If blank, refer to CoC	-	Preservative	1		I .	
	CHERT ID ***If blank, refer to CoC	-	Preservative	1		I .	

RECEIPT LOGIN BY:	EH
ECERT ECCHABI.	

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Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
13014	GOLETA STORAGE MAIN UNITS	5415372	PM	1/1/14	MAIN UNITS 2 THROUGH 9, SPARK PLUG CHANGE OUT - ANNUAL		ALL CHANGED AND ORDERED REPLACEMENTS	
13014	GOLETA STORAGE MAIN UNITS	5415582	PM	1/1/14	MAIN UNIT - ANNUAL AIR FILTER REPLACEMENT		ALL FILTERS REPLACED AND IN GOOD SHAPE	
13014	GOLETA STORAGE MAIN UNITS	5415358	PM	1/2/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5414936	PM	1/9/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5415659	PM	1/29/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		No run time.	
13014	GOLETA STORAGE MAIN UNITS	5415365	PM	2/4/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5414946	PM	2/6/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	MU 2 is OOS and powered down - No Thermocouple Reads
13014	GOLETA STORAGE MAIN UNITS	5415667	PM	2/28/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		no fail	Completed mu#6 and #8 No run time on other units
13014	GOLETA STORAGE MAIN UNITS	5441598	PM	3/3/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5440811	PM	3/13/14	ANNUAL - UG8 GOVERNOR INSPECTIONS		Completed, except	MU#2, #7, which are out - of -service at this time.
13014	GOLETA STORAGE MAIN UNITS	5441358	РМ	3/13/14	GOLETA ALL MAIN UNITS - QRTLY ENGINE OIL ANALYSIS		no fail	MU-7 and MU-2 O.O.S.
13014	GOLETA STORAGE MAIN UNITS	5441367	PM	3/24/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
13014	GOLETA STORAGE MAIN UNITS	5467501	PM	4/3/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467779	PM	4/3/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5142287	PM	4/8/14	VALVE PM - MAIN UNIT #2,3,4 AUX. & PIT - ANNUAL		FREQUENCY OVERLAP COMPLETED ON 5414759	
13014	GOLETA STORAGE MAIN UNITS	5229737	PM	4/8/14	GOLETA VALVE PM - MU9 jacketwater		FREQUENCY OVERLAP COMPLETED ON 5467126	
13014	GOLETA STORAGE MAIN UNITS	5229778	PM	4/8/14	GOLETA VALVE PM - (MU9) CREW 3		FREQUENCY OVERLAP COMPLETED ON 5467167	
13014	GOLETA STORAGE MAIN UNITS	5255592	PM	4/13/14	VALVE PM - MAIN UNITS #2,3,4 - LUBE OIL, PIPE TRENCH - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467957	PM	4/29/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5441766	PM	5/3/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5492970	PM	5/5/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5493156	PM	5/5/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5467126	РМ	5/26/14	GOLETA VALVE PM - MU9 Jacket Water		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5493368	PM	5/30/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		NO FAILURES	NO FAILURES

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
13014	GOLETA STORAGE MAIN UNITS	5515373	PM	6/2/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5515109	PM	6/4/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5515542	PM	6/26/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562501	PM	7/1/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562658	PM	7/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		no fail	MU-6 cyl #6 has been high, just broke 1300 degrees, no issues
13014	GOLETA STORAGE MAIN UNITS	5562147	PM	7/3/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562508	PM	8/4/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5562157	PM	8/6/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	MU 2 is O.O.S. for engine rebuild.
13014	GOLETA STORAGE MAIN UNITS	5562666	РМ	8/28/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5613128	РМ	9/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612921	PM	9/2/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612569	PM	9/8/14	M. U. EXHAUST TEMP. THERMOCOUPLE		INSPECTION COMPLETE, NO SUBSTANDARD	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					INSPECTIONS- MONTHLY		CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5613136	PM	10/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612928	PM	10/7/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5612579	PM	10/9/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5635860	PM	11/10/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5635696	PM	11/18/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5635994	PM	11/26/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5659885	PM	12/1/14	M.U.#2 - #8 OVERHEAD CHECKS - MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5660829	PM	12/1/14	MONTHLY - M.U. TOTALFLOW DATA DOWNLOAD		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
13014	GOLETA STORAGE MAIN UNITS	5660732	PM	12/8/14	M. U. EXHAUST TEMP. THERMOCOUPLE INSPECTIONS- MONTHLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14230	MAIN #9 ALLEN BRADLEY PLC	5441485	PM	3/18/14	M.U.#9 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14230	MAIN #9 ALLEN BRADLEY PLC	5078185	СМ	11/24/14	M.U.#9 INSTRUMENT CALIBRATON INSPECTIONS- ANNUAL			

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5485621	PM+	4/15/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5554375	PM+	7/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14543	COMPRESSOR DISCHARGE PRESSURE TRANSMITTER MU#9 (63TD)	5632793	PM+	10/14/14	GOLETA MAIN UNITS DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5403215	PM+	1/28/14	GOLETA MAIN UNITS SUCTION AND DISCHARGE TRANSMITTER INSPECTIONS - QUARTERLY		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5472601	PM	4/15/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5562679	PM	7/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
14885	COMPRESSOR SUCTION PRESSURE TRANSMITTER MU#9 (63TS)	5613173	PM	10/14/14	GOLETA MAIN UNIT SUCTION TRANSMITTER INSPECTION - NON- COMPLIANCE (QUARTERLY)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
18323	AIR COMPRESSOR, AUX. UNIT 4A	5441466	PM	3/4/14	4A AIR COMPRESSOR INSPECTION		Took unit out- of-	service, for crankcase oil leak.

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
18323	AIR COMPRESSOR, AUX. UNIT 4A	5542101	PM+	6/17/14	4A AIR COMPRESSOR INSPECTION (OLD# 6164)		Lp Comp. cyl. worn006	Over. re-assembled unit. Ordering replacement parts.
18323	AIR COMPRESSOR, AUX. UNIT 4A	5605850	PM+	9/1/14	4A AIR COMPRESSOR INSPECTION (OLD# 6164)		no fail	spark plugs, oil, valve lash, head torque all within spec no changes necessary. carb and air cleaner ok
18323	AIR COMPRESSOR, AUX. UNIT 4A	5681152	PM+	12/5/14	4A AIR COMPRESSOR INSPECTION (OLD# 6164)		performed per instuction	Changed spark plugs, replaced comp drive belt
18324	AIR COMPRESSOR, AUX. UNIT 5A	5415050	PM	1/29/14	5A AIR COMPRESSOR INSPECTION		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
18324	AIR COMPRESSOR, AUX. UNIT 5A	5467616	PM	4/10/14	5A AIR COMPRESSOR INSPECTION		Found foreign material	in compressor valves and clylinders. Air filters had rat marks on sealing surfaces, allowing dirt to pass filter cannisters.
18324	AIR COMPRESSOR, AUX. UNIT 5A	5554686	PM+	7/8/14	5A AIR COMPRESSOR INSPECTION (OLD# 6169)		Inspection	Adjusted valve lash, new air cleaner
18324	AIR COMPRESSOR, AUX. UNIT 5A	5633145	PM+	10/13/14	5A AIR COMPRESSOR INSPECTION (OLD# 6169)		hrs:76016	checked head torque, new spark plugs gapped .025, valve lash .030,air cleaners and oil in good condition, checked carb, compression 1.215 2.210 3.210 4.215
4484350	M.U. #9 - FUEL METER	5402920	PM+	1/23/14	SEMI-ANNUAL - M.U.#9 FUEL METER INSPECTION (OLD PM # GOLE547)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4484350	M.U. #9 - FUEL METER	5554671	PM+	7/15/14	SEMI-ANNUAL - M.U.#9 FUEL METER INSPECTION (OLD PM # GOLE547)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
4484350	M.U. #9 - FUEL METER	5563170	PM	8/27/14	ANNUAL- FUEL METER PROVING-M.U. #9		Meter proving for this unit is not due this year	
7555	GAS COMPRESSOR (MU #9)	5415700	PM	1/1/14	GOLETA MAIN UNIT TRABON INSPECTIONS – ANNUAL		ALL WORK LOGGED IN ENGINE BOOKS	
7555	GAS COMPRESSOR (MU #9)	5396608	PM	1/3/14	WEEKLY - M.U.#9 ENG. BALANCE		No run time.	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					INSPECTION			
7555	GAS COMPRESSOR (MU #9)	5416171	PM	1/7/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5416180	PM	1/14/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5416189	PM	1/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5416198	PM	1/28/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time. Schedule	to do an Inspection no time alotted. Complete work order now.
7555	GAS COMPRESSOR (MU #9)	5440935	PM	3/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No run time on unit
7555	GAS COMPRESSOR (MU #9)	5440953	PM	3/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No run time on unit
7555	GAS COMPRESSOR (MU #9)	5440944	PM	3/5/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No run time on unit
7555	GAS COMPRESSOR (MU #9)	5207851	PM	3/11/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Work order was completed by Mike Bagley 3/27/13	It was not completed in Maximo
7555	GAS COMPRESSOR (MU #9)	5466625	PM	3/11/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5440962	PM	3/12/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Emission testing, no	Kistler balancing.
7555	GAS COMPRESSOR (MU #9)	5466616	РМ	3/13/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	No adjustments needed
7555	GAS COMPRESSOR (MU #9)	5466634	РМ	3/18/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5441722	РМ	3/19/14	ANNUAL - M.U. #9 - SAFETY SHUTDOWN INSPECTIONS		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7555	GAS COMPRESSOR (MU #9)	5466643	PM	3/25/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	3-27-14 start lo-inventory S/I, start.
7555	GAS COMPRESSOR (MU #9)	5466652	PM	4/1/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5466661	PM	4/8/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No checks.	
7555	GAS COMPRESSOR (MU #9)	5492832	PM	4/15/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Trouble shooting, use	of Kistler. Completed.
7555	GAS COMPRESSOR (MU #9)	5467694	PM	4/16/14	TOTALFLOW CALIBRATION - M.U.#9 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5492841	PM	4/28/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No usage.	
7555	GAS COMPRESSOR (MU #9)	5492850	PM	5/5/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5441463	PM	5/6/14	M.U. #9 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	M.U. #9 Passed Emission Test on 3/3/2014
7555	GAS COMPRESSOR (MU #9)	5492859	PM	5/9/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Kistler training.	
7555	GAS COMPRESSOR (MU #9)	5514649	PM	5/13/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time.	
7555	GAS COMPRESSOR (MU #9)	5514658	PM	5/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Inspection of Kistler unit	No adjustments.Unit @ 938H.P.
7555	GAS COMPRESSOR (MU #9)	5514667	PM	6/2/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Not enough horsepower	
7555	GAS COMPRESSOR (MU #9)	5514676	PM	6/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No kistler operation,	This week.

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7555	GAS COMPRESSOR (MU #9)	5537952	PM	6/16/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		Made 2 rounds, Monday,	and Tuesday. No adjustments, just training.
7555	GAS COMPRESSOR (MU #9)	5542168	PM+	6/16/14	GOLETA MAIN UNIT 9 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		no fail	MU-9 HRS 63530
7555	GAS COMPRESSOR (MU #9)	5537961	PM	6/17/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		1 pass at 1100 Hp.	No adjustments.
7555	GAS COMPRESSOR (MU #9)	5515216	PM	6/18/14	M.U. #9 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5537970	PM	6/25/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	Made small adjustments, see log for info
7555	GAS COMPRESSOR (MU #9)	5537979	PM	7/3/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		unit wasnt needed	
7555	GAS COMPRESSOR (MU #9)	5562698	PM	7/8/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No adjustments needed	
7555	GAS COMPRESSOR (MU #9)	5562707	PM	7/18/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		No run time	
7555	GAS COMPRESSOR (MU #9)	5562716	PM	7/28/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5562725	PM	7/31/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5562734	PM	8/7/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5612252	РМ	8/14/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5612742	PM	8/14/14	M.U. #9 MAINTENANCE- QRTLY		INSPECTION COMPLETE, NO SUBSTANDARD	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
					EMISSION TESTING		CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5612261	PM	8/19/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	no adjustments
7555	GAS COMPRESSOR (MU #9)	5612270	PM	8/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	Adjusted Cyl #1&9 down to bring up Cyl #2. Changed spark plug on Cyl #2
7555	GAS COMPRESSOR (MU #9)	5612279	PM	9/4/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5612297	PM	9/16/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5658607	СМ	9/18/14	I nstall two "machine starting automatically" signs for MU#9	See WO# 5515536 FOR MORE DETAILS.	NONE	deficiencies corrected
7555	GAS COMPRESSOR (MU #9)	5612288	PM	9/18/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	no adjustments made
7555	GAS COMPRESSOR (MU #9)	5606440	PM+	9/18/14	GOLETA MAIN UNIT 9 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5612306	PM	9/29/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no fail	no balance this week
7555	GAS COMPRESSOR (MU #9)	5612315	PM	9/30/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5613755	PM	10/1/14	M.U. #9 - FOUNDATION INSPECTION - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5613749	РМ	10/8/14	TOTALFLOW CALIBRATION - M.U.#9 - SEMI- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5635293	PM	10/13/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS	5635302	PM	10/20/14	WEEKLY -		no balance this	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
	COMPRESSOR (MU #9)				M.U.#9 ENG. BALANCE INSPECTION		week	
7555	GAS COMPRESSOR (MU #9)	5659866	PM	10/20/14	M.U. #9 MAINTENANCE- QRTLY EMISSION TESTING		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5635311	PM	10/27/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5635320	PM	10/31/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no balance this week	
7555	GAS COMPRESSOR (MU #9)	5659792	PM	11/21/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659801	PM	11/21/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659810	PM	11/21/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659819	PM	11/26/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5681593	PM+	12/1/14	GOLETA MAIN UNIT 9 - QRTLY ENGINE OIL ANALYSIS (OLD# 1644)		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7555	GAS COMPRESSOR (MU #9)	5659828	PM	12/2/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659837	PM	12/9/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5659846	РМ	12/16/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	
7555	GAS COMPRESSOR (MU #9)	5661293	PM	12/23/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		no run time	

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
7555	GAS COMPRESSOR (MU #9)	5661302	PM	12/30/14	WEEKLY - M.U.#9 ENG. BALANCE INSPECTION		insufficeint run time	
7555U	M.U. #9 - UPPER END	5497052	СМ	3/4/14	REPLACE FUEL INJECTOR MU#9 CYL#3		REPLACE FUEL INJECTOR	ON CYL#3
7564	GAS ENGINE (AUX #4A)	5391780	СМ	4/3/14	4-A Air compressor. Rear crank seal leak.	The Exhaust pipe just above roof line, has a 4" hole, on South side. Needs replacement.	Leaking past engine to	floor. Replaced clutch assembly, drive belts, oil/filter, adjusted governor,replaced exhaust muffler, and heat shield. Crankshaft seals replaced. Adjusted valve train, and re-torqued head. Replaced roof flashing.
7580	DIESEL ENGINE (AUX #12A)	5632508	PM+	9/11/14	UNIT 12A - ANNUAL ENGINE INSPECTION (OLD# GOL-8340)		no fail	changed oil and filter, changed cooling water filter, changed fuel and sediment filter, inspected all hoses, wires, and fitting
7581	FIRE WATER PUMP (AUX #12A)	5583067	PM+	11/25/14	Fire Pump 12A Flow Test - Annual		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7582	DIESEL ENGINE (AUX #13A)	5632518	PM+	9/15/14	UNIT 13A - ANNUAL ENGINE INSPECTION (OLD# GOL-8341)		no fail	changed oil &filter, changed coolant filter, changed fuel and sediment filter HRS:0303.2
7583	FIRE WATER PUMP (AUX #13A)	5583074	PM+	11/25/14	Fire Pump 13A Flow Test - Annual		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
7651	MU #9 JACKET WATER PUMP	5415562	PM	3/11/14	JACKET WATER PUMP INSPECTION - M.U.#9 - ANNUAL		In good service.	
GT-FW- FS-011	AUXILIARY 13A - RELIEF VALVE	5513283	СРМ	5/8/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA UTILITY SYSTEMS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	No Failure - Test & Inspection Only
GT-FW- FS-015	AUXILIARY 12A - RELIEF VALVE	5513283	СРМ	5/8/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA UTILITY SYSTEMS- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	No Failure - Test & Inspection Only

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
IG- AR-081	NON- COMPLIANCE 5YR. RV,AIR COMPRESSOR 5A, DISCHARGE	5545120	PM+	9/29/14	NON- COMPLIANCE AIR RELIEF VALVE INSPEC., 5YR		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Installed new 270# RVs on Air Comp #1 and #2 Disch. manifold (one each)
IG- AR-085	NON- COMPLIANCE 5YR. RV,AIR COMPRESSOR 5A, INTERSTAGE	5545120	PM+	9/29/14	NON- COMPLIANCE AIR RELIEF VALVE INSPEC., 5YR		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	Installed new 270# RVs on Air Comp #1 and #2 Disch. manifold (one each)
IG- AR-355	NON- COMPLIANCE RV,AIR COMPRESSOR 4A (1 YEAR)	5543019	PM+	8/20/14	NON- COMPLIANCE AIR RELIEF VALVE INSPEC - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- AR-366	NON- COMPLIANCE RELIEF VALVE- AIR COMP. 4A, INTERSTAGE PIPING (1 YEAR)	5543019	PM+	8/20/14	NON- COMPLIANCE AIR RELIEF VALVE INSPEC - ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
IG- NG-194	COMPRESSOR DISCHARGE	5615595	СРМ	11/12/14	COMPLIANCE RELIEF VALVE INSPECTION, GOLETA INJECTION SYSTEM- ANNUAL		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

## INTERNAL COMBUSTION ENGINE

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company		
Stationary Source Name	La Goleta		
Stationary Source Address	1171 More Ranch Road, Goleta		
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4	
		PASSED AS FOUND	
Date - 6/9/14	Inspector Name - William 4	LOZANO	

Date - 6/9/14 Inspecto	or Name -	GRICHART / 4 MAR
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1	Parameter Compl:	Corrective Action	Follow-Up Inspection		
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% 02	≤ 125 PPMV	11.0			
CO corrected to 15% O2	≤ 4500 PPMV	256.8			
02	≥ 13.5%	15.2			
Ignition Timing	0-10°	60			
Engine Speed	≤ 305 RPM	300			

# INTERNAL COMBUSTION ENGINE INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company			
Stationary Source Name	La Goleta			
Stationary Source Address	1171 More Ranch Road, Goleta			
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4		
Passed) Ast	Found			
Date - 3.3-14	Inspector Name - Gue Hunor	Segrifica .		

· .	Parameter Compliance		Corrective Action	Follow-Up Inspection	
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	≤ 125 PPMV	27.3			
CO corrected to 15% O2	≤ 4500 PPMV	152.6			
02	≥ 13.5%	14.6			
Ignition Timing	0-10°	70			
Engine Speed	≤ 305 RPM	302			

## INTERNAL COMBUSTION ENGINE

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company		
Stationary Source Name	La Goleta		
Stationary Source Address	1171 More Ranch Road, Goleta		
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4	I
Passed As Fou	ndo	····	, , , , , , , , , , , , , , , , , , ,
Date - 8/12/14	Inspector Name - CHUS )	spewins/C, Radriquez, G. 7	Racu

	Parameter Compliance		Corrective Action Follow-Up In		ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	≤ 125 PPMV	13.4			
CO corrected to 15% O2	≤ 4500 PPMV	306.0			
02	≥ 13.5%	15,2			
Ignition Timing	0-10°	6.6			
Engine Speed	≤ 305 RPM	300			

# INTERNAL COMBUSTION ENGINE

# INSPECTION AND MAINTENANCE LOG

Company Name	Southern California Gas Company	
Stationary Source Name	La Goleta	
Stationary Source Address	1171 More Ranch Road, Goleta	
Engine Serial/ID Number	41549/MU#9	Part 70/SBAPCD Permit 9584-R4
PASSED AS A	FOUND	
Date - 10/26/14	Inspector Name - CHRIS A	ARWIN J, LOZANO

	Parameter Compliance		Corrective Action Follow-Up Ins		ow-Up Inspection
	Value		(Date and Description)		Parameter
Parameter	Allowed	Measured		Date	Value
NOx corrected to 15% O2	≤ 125 PPMV	41,4			
CO corrected to 15% O2	≤ 4500 PPMV	146,7			
02	≥ 13.5%	14,3			
Ignition Timing	0-10°	6.6			
Engine Speed	≤ 305 RPM	300			

# Goleta 2014 Equivalent Routine I.C. Engine Replacement

There were no engine replacements from January 1, 2014 through December 31, 2014.

# Source Test Summary

Main Unit #9 is not scheduled for Source Testing until September 2015.



#### Interoffice Memo

To:

Dennis Lowrey

From:

Marianne Mansour

EAC PROJECT NO.: TS2014-C013

Date:

January 15, 2014

ACCOUNT NO .: FG8245052200-2200-0289

Subject:

Goleta-RVP for Tank 3

THIS REPORT IS YOUR RECORD. THE EAC WILL DISCARD THIS REPORT ON 01/15/2019.

#### **OBJECTIVE**

Assist Underground Storage collect an oily water sample from Tank 3 at Goleta to determine Reid Vapor Pressure (RVP) and API Gravity.

#### RESULTS

Inspectorate Certificate of Analysis is attached.

Table 1. RVP Results

Sample ID	RVP (psi)	API Gravity @ 60F	Temperature (°F)
Tank 3	3.00	9.4	55.5
Tank 3 (Duplicate)	3.10	9.6	55.5
Tap Water	0.10		

#### **SAMPLE COLLECTION & ANALYSIS**

On January 8, 2014, Engineering Analysis Center (EAC) personnel collected liquid samples directly from a tap from the Condensate-Tank 3 at Goleta for RVP testing. The tank was filled with 4704 gallons and has a capacity is 7000gal. Liquid level was 10' 3". As required by the ASTM method D-5191 sampling protocol, the sample was collected in one quart glass jar (approximately 70% to 80% filled), labeled, and placed in an ice chest to keep the sample at approximately 4°C. Prior to sampling, the condensate had been circulating.

Inspectorate laboratory analyzed the samples for RVP (ASTM D323 Proc. A) and API Gravity (ASTM D4052). Analytical reports are attached. The analytical cost will be charged to the account number listed above.

MM/RVP Goleta TK3 Condensate 01-08-14.docx/Attachment: Inspectorate Report # 2013-081-02136

Cc: Shahid Razzak (via email w/ attachment) Bob Hilty (via email w/ attachment)

Inspectorate

22934 Lockness Avenue

Torrance, California 90501 USA

T: 310-326-4429

F: 310-326-4470

# **Certificate of Analysis**



Vessel / Shore Tank:

Southern California Gas Company

Sample Submitted By: Southern California Gas Com

Product:

Analysis Performed By: IAC Los Angeles

Client Reference:

Project# TS2014-C013

Date Sampled: 08-Jan-2014 Date Reported:

Terminal / Port / Office:

Goleta Station

10-Jan-2014

Job ID:

2013-081-02136

Submission ID:

2013-081-02136

Comments:

	CLEAN WATER / 1-8-14 @ 0825			
	2013-081-02136-001 Submitted			
Method	Test	Result		
	Reid Vapor Pressure , psi / kPa	0.10 / 0.68		

	Tank 3 / 1-8-	Tank 3 / 1-8-14 @ 0830			
	2013-081-02136-002	2013-081-02136-002 Submitted			
Method	Test	Result			
M(a) ASTM D323 Proc. A	Reid Vapor Pressure, psí / kPa	3.00 / 20.55			
ASTM D4052	API Gravity @ 60 °F	9.4			

	Tank 3 (Dup) /	Tank 3 (Dup) / 1-8-14 @ 0835			
	2013-081-02136-003	2013-081-02136-003 Submitted			
Method	Test	Result			
M(a) ASTM D323 Proc. A	Reid Vapor Pressure, psi / kPa	3.10 / 21.23			
ASTM D4052	API Gravity @ 60°F	9.6			

 $_{\text{M(a)}}$  Modification (a) - Analysis to be performed on product not specified by the method.

For Inspectorate:

Anthony Riccardi, Assistant Laboratory Manager

## http://www.arb.ca.gov/drdb/sb/curhtml/r325.pdf

RVP from analysis	3.1	psi
Temp (°F)	67.2	
Convert °F to °R	°F + 460	
irTemp	0.001897929	
iTemp	0.001786703	
C <sub>o</sub>	-6212.1	Table C3
C <sub>o</sub> (irTemp-itemp)	-0.690947068	
exp	0.501101267	
TVP	1.553413928	psi
Corrected TVP	Calculated TVP+C <sub>F</sub>	
$C_{F}$	0.224	
	1.777413928	psi

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# **GOLETA PRODUCT MOVEMENT THROUGH STOREROOM**

2014

PTO 9584-R4, 9.C.15(j)

## (Gel-Away in gallons)

				END OF	
}	BEGINNING	IN	QUANTITY	MONTH	QUANTITY
PRODUCT	OF MONTH	INVENTORY	RECEIVED	INVENTORY	USED
Gel-Away	JAN	8	0	8	0
	FEB	8	0	8	0
	MAR	8	0	8	0
	APR	8	0	8	0
	MAY	8	0	8	0
	JUN	8	0	8	0
	JUL	8	0	8	0
	AUG	8	0	8	0
	SEP	8	0	8	0
	OCT	8	0	8	0
	NOV	8	0	8	0
	DEC	8	0	8	0

Total 0

PTO 9584-R4, 9.C.15(j)

## Goleta Solvent information 2014

#### **Gel-Away FO**

Density: 6.27 lb/gal

VOC Content: 752 gm/l or 6.27 lb/gal

Amount Reclaimed: None Photochemically reactive: No

#### Emissions (VOC/ROC):

Jan. 2014 - (0 gallons):

Feb.2014 - (0 gallons):

Mar. 2014 - (0 gallons):

April 2014- (0 gallons):

May 2014 - (0 gallons):

June 2014 - (0 gallons):

July 2014 - (0 gallons):

Aug. 2014 – (0 gallons):

rug. 2014 (0 gailoils).

Sept. 2014 - (0 gallons):

Oct. 2014 - (0 gallons):

Nov. 2014 - (0 gallon):

Dec. 2014 - (0 gallons):

#### Total VOC/Yr = 0 lbs, VOC/Mo=0, VOC/day = 0 lbs

Other Solvent Usage

Carboline Thinner #2 VOCs 850 gr/ltr 7.08 lbs/gal Photochemically Reactive: Yes Rule 317 - Organic Solvents: This rule sets specific prohibitions against the discharge of emissions of both photochemically and non-photochemically reactive organic solvents (40 lb/day and 3,000 lb/yr respectively).

#### Carboline Carboguard 890 VOC (thinned)

PTO 9584-R4, 9.C.15(j)

Density: 12.51 lb/gal

VOC Content: 1.7 lb/gal or 214 g/l

VOC Content after thinning ≤ 2.08 lb/gal or 248.7 g/l.

Emissions (VOC/ROC):

Jan. – Dec 2014 (5.43 gallons): .45 lb/month or  $\sim$  .01 lb/day

#### Carboline Carbothane 133 MC (thinned)

Density: 13 lb/gal

VOC Content: .81 lb/gal or 97 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#### Carboline Carbothane 134 MC (thinned)

Density: 13 lb/gal

VOC Content: .45 lb/gal or 54 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (39.63 gallons): 3.3 lb/month or  $\sim .11$  lb/day

#### Carboline Carbothane 134 VOC (thinned)

Each gallon thinned with Carboline Thinner # 215

VOC Content after thinning  $\leq 2.06$  lb/gal or 247 g/l.

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#### Ellis Maximus W/B ENAMEL Suntan Beige Paint

Density: 9.12 lb/gal

VOC Content: 0.81 lb/gal or 97 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons):  $.0 \text{ lb/month or } \sim .0 \text{ lb/day}$ 

#### Ellis W/B DTM GLOSS Eucalyptus Green Paint

Density: 9.22 lb/gal

VOC Content: 2.02 lb/gal or 242 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#### Carboline Carbocrylic 3358 Primer Paint

Density: <11.0 lb/gal

VOC Content: 1.28 lb/gal or 153 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

Ellis Maximus Water Green Paint

Density: 9.12 lb/gal

VOC Content: 0.83 lb/gal or <100 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0/lb month or 0 lb/day

**Break-Through Clear Gloss Base (unthinned)** 

Weight: 11.294 lb/gal

VOC Content: .59 lb/gal or 71 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

**Break-Through Satin Wroght Iron Black (unthinned)** 

Weight: 11.655 lb/gal

VOC Content: .59 lb/gal or 70 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

**Break-Through Satin Ind. Clear Base (unthinned)** 

Weight: 11.612 lb/gal

VOC Content: .60 lb/gal or 71 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

Break-Through Deep Base Yellow (unthinned)

Weight: 11.494 lb/gal

VOC Content: .59 lb/gal or 70 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#1180 White Striping Paint (unthinned)

Weight: .918 lb/gal

VOC Content: .918 lb/gal or 110 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#1186 Yellow Striping Paint (unthinned)

Weight: 10 lb/gal

VOC Content: .918 lb/gal or 110 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

**#1182 Blue Striping Paint (unthinned)** 

Weight: 10 lb/gal

VOC Content: .918 lb/gal or 110 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#### MC-Miozinc 100 Paint (unthinned)

Weight: 19.5 lb/gal

VOC Content: .8 lb/gal or 100 g/l

Emissions (VOC/ROC):

Jan. - Dec 2014 (0 gallons): 0 lb/month or ~ 0 lb/day

#### MC-CR 100 Paint (unthinned)

Weight: 19.5 lb/gal

VOC Content: .8 lb/gal or 100 g/l

Emissions (VOC/ROC):

Jan. - Dec 2014 (0 gallons): lb/month or ~ lb/day

#### **DEVTHANE 379H Paint (thinned w/#800)**

Weight: 16 lb/gal

VOC Content: .83 lb/gal or 100 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): lb/month or ~ lb/day

#### DEVTHANE 379H Paint (thinned w/#T9 or T17)

Weight: 16 lb/gal

VOC Content: 2.08 lb/gal or 250 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): lb/month or ~ lb/day

#### **BAR-RUSTTM 235H Paint (un-thinned)**

Weight: 13.2 lb/gal

VOC Content: 1.95 lb/gal or 234 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): lb/month or  $\sim$  lb/day

#### Thermalox High Temp (un-thinned)

Weight: 11.1 lb/gal

VOC Content: 2.8 lb/gal or 336 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or  $\sim$  0 lb/day

#### 3M Scotchkote

Weight: 13 lb/gal

VOC Content: .02 lb/gal or 12 g/l

Emissions (VOC/ROC):

Jan. – Dec 2014 (0 gallons): 0 lb/month or ~ 0 lb/day

# Thermaline 4700

VOC Content: 2.6 lb/gal or 312 g/L

Emissions (VOC/ROC):

Jan. – Dec. 2014 (.75 gallons): .06 lb/month  $\sim 0$  lb/day

#### Carbomastic 15

VOC Content: .733 lb/gal or 88 g/L

Emissions (VOC/ROC)

Jan. – Dec 2014 (22.75 gallons): 1.89 lb/month ~0.06 lb/day

#### Thermaline 4100

VOC Content: 3.39 lb/gal or 407 g/L

Jan. - Dec 2014 (0.5 gallons): 0.041 lb/month ~0 lb/day

# Paint ordered into Goleta Storeroom 2014

# <u>Jan. – June 2014</u>

part number	gallon cans of paint	
N308302	Eucalyptus Green	0 gallons
N308596	Primer	0 gallons
N308323	Suntan (old part # N308313 replaced)	0 gallons
N308314	Water Green	0 gallons
56-90	Breakthrough Satin Black	0 gallons
56-1	Breakthrough Satin White	0 gallons
56-450	Breakthrough Clear Gloss Base (used for brown, orange, green, blue, yellow, & safety yellow)	0 gallons

# <u>July – Dec. 2014</u>

part number	gallon cans of paint	
N308302	Eucalyptus Green	0 gallons
N308596	Primer	0 gallons
N308323	Suntan	0 gallons
N308314	Water Green	0 gallons
56-90	Breakthrough Satin Black	0 gallons
56-1	Breakthrough Satin White	0 gallons
56-450	Breakthrough Clear Gloss Base (used for brown, orange, green, blue, yellow, & safety yellow)	0 gallons

# GOLETA GAS VENTED TO ATMOSPHERE (mcf)

Gas Vented is limited to 10 MMscf/Year

2014

	Before Dehy					
	Plants	ROC CONTENT	ROC TOTAL	Pipeline	ROC CONTENT	ROC TOTAL
	(Reservoir)	%	lb.	Quality	%	lb.
JAN	82.65	4.81	181.83	0.00	4.68	0.00
FEB	0.76	4.81	1.67	0.77	4.68	1.69
MAR	0.00	4.81	0.00	1.45	4.68	3.19
APR	1.60	4.81	3.53	88.69	4.68	195.12
MAY	0.46	4.81	1.01	1.32	4.68	2.91`
JUN	65.37	4.81	143.82	1.33	4.68	2.92
JUL	0.59	4.81	1.29	28.25	4.68	62.14
AUG	3.34	4.81	7.34	2.15	4.68	4.73
SEP	0.96	4.81	2.12	4.07	4.68	8.95
OCT	0.99	4.81	2.18	16.10	4.68	35.42
NOV	1.45	4.81	3.18	35.73	4.68	78.60
DEC	0.95	4.81	2.09	0.86	4.68	1.89
TOTAL	159.12		350.06	180.71		397.56

Goleta 2014 TRS Content of Gas Vented to Atmosphere

	Reservoir Gas (mcf)	TRS Content (ppm)	Total Sulfur (lb as H2S)	Pipeline Gas (mcf)	TRS Content (ppm)	Total Sulfur (lb as H2S)
Jan	82.651	0	0.0000	0.000	0	0.0000
Feb	0.761	0	0.0000	0.766	0	0.0000
Mar	0.000	0	0.0000	1.450	0	0.0000
Apr	1.603	0	0.0000	88.690	0	0.0000
May	0.459	0	0.0000	1.324	0	0.0000
Jun	65.372	0	0.0000	1.329	0	0.0000
Jul	0.587	0	0.0000	28.245	0	0.0000
Aug	3.338	0	0.0000	2.148	0	0.0000
Sep	0.963	0	0.0000	4.069	0	0.0000
Oct	0.990	0	0.0000	16.100	0	0.0000
Nov	1.447	0	0.0000	35.727	0	0.0000
Dec	0.948	0	0.0000	0.860	0	0.0000
TOTAL	159.119	0	0.0000	180.708	0	0.0000

Dehydration Plant Processed Gas Limit is 680 MMscfDay

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of January, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

# Gas Volume Withdrawal in MMSCFD

DATE	VOLUME
DATE	
1	136.7
3	131.6
	37.4
4	38.3
5	104.4
6	173.6
7	242.9
8	169.3
9	166.8
10	143.0
11	124.7
12	184.2
13	158.2
14	197.9
15	166.2
16	154.9
17	102.9
18	135.6
19	151.4
20	194.4
21	215.7
22	184.7
23	193.5
24	164.0
25	182.0
26	213.1
27	215.5
28	195.1
29	189.7
30	144.1
31	156.7
0 1	100.7

Gas Volume Dehydrated in MMSCFD

	Lydialed III
DATE	VOLUME
1	121.8
2	31.1
3	35.7
4	98.9
5	164.6
6	240.8
7	169.7
8	162.2
9	144.0
10	123.6
11	180.8
12	157.7
13	194.5
14	162.7
15	152.9
16	88.5
17	121.8
18	141.8
19	182.3
20	209.8
21	184.5
22	194.5
23	163.7
24	180.2
25	206.2
26	210.1
27	190.0
28	186.9
29	141.5
30	152.5
31	166.2

4968.780

4861.732

Average daily W/D this month per W/D flow day =

160.3 M2SCFD

Average daily dehydration this month per W/D

flow day =

156.8 M2SCFD

\* <u>total W/D for month</u> 31.0 # of W/D flow days

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of February, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

# Gas Volume Withdrawal in MMSCFD

DATE	VOLUME
1	175.7
2	236.9
3	233.5
<u>4</u> 5	214.1
	224.8
<u>6</u> 7	246.0
	187.0
8	195.6
9	190.8
10	232.4
11	263.1
12	248.9
13	246.8
14	221.4
15	69.3
16	0.0
17	0.0
18	0.0
19	6.8
20	54.1
21	116.7
22	98.2
23	107.7
24	112.3
25	107.2
26	132.4
27	58.4
28	33.2
29	
30	
31	

Gas Volume Dehydrated in MMSCFD

DATE	VOLUME
DATE	VOLUME
1	163.0
2	235.0
3	227.0
4	215.0
5	231.0
6	244.0
7	182.0
8	194.0
9	189.0
10	231.0
11	263.0
12	245.0
13	244.0
14 15	218.0
15	66.0
16	0.0
17	0.0
18	0.0
19	7.0
20	54.0
21	116.0
22	98.0
23	104.0
24	106.0
25	99.0
26	130.0
27	57.0
28	33.0
29	
30	
31	

4013.424

3951.000

Average daily W/D this month per W/D flow day =

154.4 M2SCFD

Average daily dehydration this month per W/D

flow day =

158.0 M2SCFD

\* <u>total W/D for month</u>26.0 # of W/D flow days

25

Ŷ

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of March, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

### Gas Volume Withdrawal in MMSCFD

Gas volume vviinu	
DATE	VOLUME
1	106.7
2	102.0
3	19.9
4	13.8
5	48.1
6	189.8
7	7.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16 17	0.0
17	0.0
18	0.0
19	0.1
20	0.0
21	0.0
22	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	

Gas Volume Dehydrated in MMSCFD

DATE	VOLUME
1	
	104.0
2	99.0
2 3 4 5	18.0
4	13.0
5	46.0
6	185.0
7	6.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15 16	0.0
16	0.0
17	0.0
18	0.0
19 20	0.0
20	0.0
21	0.0
21 22 23	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	

487.446

471.000

Average daily W/D this month per W/D flow day =

60.9 M2SCFD

Average daily dehydration this month per W/D

flow day =

67.3 M2SCFD

\* total W/D for month 8.0 # of W/D flow days

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of April, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

### Gas Volume Withdrawal in MMSCFD

Gas volume witho	
DATE	VOLUME
1	0.0
2 3	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	16.6
8	15.8
9	0.0
10	5.6
11	0.0
12	0.0
13	0.0
14	17.0
15	0.0
16	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	14.7
23	9.9
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	15.7
30	14.3
31	

Gas Volume Dehydrated in MMSCFD

1       0.0         2       0.0         3       0.0         4       0.0         5       0.0         6       0.0         7       16.0         8       15.0         9       0.0         10       5.0         11       0.0         12       0.0         13       0.0         14       16.0         15       0.0         16       0.0         17       0.0         18       0.0         19       0.0         20       0.0         21       0.0         22       14.0         23       9.0         24       7.0         25       0.0         26       0.0         27       0.0         28       0.0         29       16.0         30       14.0	DATE	VOLUME
4     0.0       5     0.0       6     0.0       7     16.0       8     15.0       9     0.0       10     5.0       11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	1	
4     0.0       5     0.0       6     0.0       7     16.0       8     15.0       9     0.0       10     5.0       11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	2	
5         0.0           6         0.0           7         16.0           8         15.0           9         0.0           10         5.0           11         0.0           12         0.0           13         0.0           14         16.0           15         0.0           16         0.0           17         0.0           18         0.0           20         0.0           21         0.0           22         14.0           23         9.0           24         7.0           25         0.0           26         0.0           27         0.0           28         0.0           29         16.0           30         14.0	3	
6     0.0       7     16.0       8     15.0       9     0.0       10     5.0       11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	4	
6     0.0       7     16.0       8     15.0       9     0.0       10     5.0       11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	5_	0.0
8     15.0       9     0.0       10     5.0       11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	6	0.0
9 0.0 10 5.0 11 0.0 12 0.0 13 0.0 14 16.0 15 0.0 16 0.0 17 0.0 18 0.0 19 0.0 20 0.0 21 0.0 21 0.0 22 14.0 23 9.0 24 7.0 25 0.0 26 0.0 27 0.0 28 0.0 29 16.0 30 14.0		
10     5.0       11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	8	
11     0.0       12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0		
12     0.0       13     0.0       14     16.0       15     0.0       16     0.0       17     0.0       18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0		
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	11	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	12	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	13	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	14	16.0
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	15	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	16	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     14.0       23     9.0       24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	17	0.0
20 0.0 21 0.0 21 0.0 22 14.0 23 9.0 24 7.0 25 0.0 26 0.0 27 0.0 28 0.0 29 16.0 30 14.0	18	0.0
22 14.0 23 9.0 24 7.0 25 0.0 26 0.0 27 0.0 28 0.0 29 16.0 30 14.0	19	0.0
22 14.0 23 9.0 24 7.0 25 0.0 26 0.0 27 0.0 28 0.0 29 16.0 30 14.0	20	0.0
22 14.0 23 9.0 24 7.0 25 0.0 26 0.0 27 0.0 28 0.0 29 16.0 30 14.0	21	0.0
24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	22	14.0
24     7.0       25     0.0       26     0.0       27     0.0       28     0.0       29     16.0       30     14.0	23	9.0
25 0.0 26 0.0 27 0.0 28 0.0 29 16.0 30 14.0	24	7.0
27 0.0 28 0.0 29 16.0 30 14.0	25	0.0
28 0.0 29 16.0 30 14.0	26	
29 16.0 30 14.0		
30 14.0		0.0
31		14.0
	31	

109.659

112.000

Average daily W/D this month per W/D flow day =

13.7 M2SCFD

Average daily dehydration this month per W/D

flow day =

12.4 M2SCFD

\* total W/D for month 8.0 # of W/D flow days

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of May, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

$\sim$		VARIL II		MANAGOED
Gas	volume	Withdrawal	ın	MINISCED

DATE	VOLUME
1	0.0
2 3 4	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12 13	0.0
13	0.0
14	0.0
15	0.0
16 17	0.2
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	0.0

Gas Volume	Dehydrated in	MMSCED

DATE	VOLUME
1	
	0.0
2 3	0.0
3	0.0
5	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13 14	0.0
14	0.0
15 16	0.0
16	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	0.0

0.249

0.000

Average daily W/D this month per W/D flow day =

0.2 M2SCFD

Average daily dehydration this month per W/D

flow day =

#DIV/0! M2SCFD

#DIV/0! total W/D for month 1.0 # of W/D flow days

0

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of June, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

### Gas Volume Withdrawal in MMSCFD

Gas volume vylina	
DATE	VOLUME
1	0.0
2	0.0
2 3 4	0.0
4	0.0
5 6 7	0.0
6	0.0
	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	0.0

Gas Volume Dehydrated in MMSCFD

DATE	VOLUME
1	0.0
2 3 4	0.0
3	0.0
	0.0
5	0.0
6 7	0.0
	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
11 12 13 14 15 16 17	0.0 0.0 0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	0.0

0.000

0.000

Average daily W/D this month per W/D flow day =

#DIV/0!

M2SCFD

dehydration this month per W/D flow day =

Average daily

#DIV/0! M2SCFD

\* total W/D for month # of W/D flow days 0.0

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of July, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.I. #212)

### Gas Volume Withdrawal in MMSCFD

DATE	VOLUME
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
14 15	12.1
16	23.9
17	15.3
18	0.0
19	0.0
20	0.0
21 22	0.0
22	10.3
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	18.4
29	0.0
30	0.0
31	0.0

Gas Volume Dehydrated in MMSCFD

.         1         0.0           2         0.0           3         0.0           4         0.0           5         0.0           6         0.0           7         0.0           8         0.0           9         0.0           10         0.0           11         0.0           12         0.0           13         0.0           14         0.0           15         12.0           16         23.0           17         15.0           18         0.0           20         0.0           21         0.0           22         10.0           23         0.0           24         0.0           25         0.0           26         0.0           27         0.0           28         18.0           29         1.0           30         0.0           31         0.0	DATE	VOLUME
2       0.0         3       0.0         4       0.0         5       0.0         6       0.0         7       0.0         8       0.0         9       0.0         10       0.0         11       0.0         12       0.0         13       0.0         14       0.0         15       12.0         16       23.0         17       15.0         18       0.0         19       0.0         20       0.0         21       0.0         22       10.0         23       0.0         24       0.0         25       0.0         26       0.0         27       0.0         28       18.0         29       1.0         30       0.0	· 1	0.0
3         0.0           4         0.0           5         0.0           6         0.0           7         0.0           8         0.0           9         0.0           10         0.0           11         0.0           12         0.0           13         0.0           14         0.0           15         12.0           16         23.0           17         15.0           18         0.0           20         0.0           21         0.0           22         10.0           23         0.0           24         0.0           25         0.0           26         0.0           27         0.0           28         18.0           29         1.0           30         0.0	2	0.0
6       0.0         7       0.0         8       0.0         9       0.0         10       0.0         11       0.0         12       0.0         13       0.0         14       0.0         15       12.0         16       23.0         17       15.0         18       0.0         20       0.0         21       0.0         22       10.0         23       0.0         24       0.0         25       0.0         26       0.0         27       0.0         28       18.0         29       1.0         30       0.0	3	0.0
6       0.0         7       0.0         8       0.0         9       0.0         10       0.0         11       0.0         12       0.0         13       0.0         14       0.0         15       12.0         16       23.0         17       15.0         18       0.0         20       0.0         21       0.0         22       10.0         23       0.0         24       0.0         25       0.0         26       0.0         27       0.0         28       18.0         29       1.0         30       0.0	4	0.0
6     0.0       7     0.0       8     0.0       9     0.0       10     0.0       11     0.0       12     0.0       13     0.0       14     0.0       15     12.0       16     23.0       17     15.0       18     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	5	0.0
8       0.0         9       0.0         10       0.0         11       0.0         12       0.0         13       0.0         14       0.0         15       12.0         16       23.0         17       15.0         18       0.0         20       0.0         21       0.0         22       10.0         23       0.0         24       0.0         25       0.0         26       0.0         27       0.0         28       18.0         29       1.0         30       0.0		0.0
9 0.0 10 0.0 11 0.0 11 0.0 12 0.0 13 0.0 14 0.0 15 12.0 16 23.0 17 15.0 18 0.0 19 0.0 20 0.0 21 0.0 21 0.0 22 10.0 23 0.0 24 0.0 25 0.0 26 0.0 27 0.0 28 18.0 29 1.0 30 0.0		0.0
10     0.0       11     0.0       12     0.0       13     0.0       14     0.0       15     12.0       16     23.0       17     15.0       18     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	8	0.0
10     0.0       11     0.0       12     0.0       13     0.0       14     0.0       15     12.0       16     23.0       17     15.0       18     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0		0.0
12     0.0       13     0.0       14     0.0       15     12.0       16     23.0       17     15.0       18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0		0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	11	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	12	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	13	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	14	0.0
18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	15	12.0
18     0.0       19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	16	23.0
19     0.0       20     0.0       21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	17	15.0
21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28.     18.0       29     1.0       30     0.0	18	0.0
21     0.0       22     10.0       23     0.0       24     0.0       25     0.0       26     0.0       27     0.0       28     18.0       29     1.0       30     0.0	19	0.0
21 0.0 22 10.0 23 0.0 24 0.0 25 0.0 26 0.0 27 0.0 28 18.0 29 1.0 30 0.0	20	0.0
25 0.0 26 0.0 27 0.0 28 18.0 29 1.0 30 0.0	21	0.0
25 0.0 26 0.0 27 0.0 28 18.0 29 1.0 30 0.0	22	10.0
25 0.0 26 0.0 27 0.0 28 18.0 29 1.0 30 0.0	23	0.0
26     0.0       27     0.0       28.     18.0       29     1.0       30     0.0	24	
27 0.0 28 18.0 29 1.0 30 0.0	25	
28. 18.0 29 1.0 30 0.0	26	
29 1.0 30 0.0	27	0.0
30 0.0		
		1.0
31 0.0		
	31	0.0

79.993

79.000

Average daily W/D this month per W/D flow day =

ĥ

16.0 M2SCFD

Average daily dehydration this month per W/D

flow day =

13.2 M2SCFD

\* total W/D for month5.0 # of W/D flow days

"Processed Gas Flow Measurement Plan" Withdrawal/Dehydration Activity Log Month of August, 2014

(Combined daily total through meters 3419w, 3433w)

(Combined daily total f.l. #212)

### Gas Volume Withdrawal in MMSCFD

DATE	VOLUME
1	0.0
2	0.0
3	0.0
2 3 4	0.0
	0.0
5 6 7	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	0.0

Gas Volume Dehydrated in MMSCFD

DATE	VOLUME
1	0.0
2	0.0
3	0.0
4	0.0
1 2 3 4 5 6	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
12 13 14 15 16 17	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
21 22 23	0.0
23	0.0
24	0.0
25	0.0
26	0.0
27	0.0
28	0.0
29	0.0
30	0.0
31	0.0

0.000

0.000

Average daily W/D this month per W/D flow day =

#DIV/01

M2SCFD

Average daily dehydration this month per W/D

flow day =

#DIV/0! M2SCFD

\* total W/D for month # of W/D flow days

# Goleta

# 2014

# Glycol Added to Dehydration System (gallons)

Jan	1370
Feb	1,220
Mar	200
Apr	0
May	0
Jun	0
Jul	0
Aug	0
Sep	_ 0
Oct	0
Nov	0
Dec	100

# Tank Farm Maintenance Permit Condition 9.C.7(d)(iii)A-D Recordkeeping Requirements Summary

T-1 (Float Cell) is #1219, T-2 (Float Cell) is #1220, T3 (Condensate) is #1217, T-4 (Brine Water) is #1218

These tanks are under blanket gas (Pipeline Quality) and are vented to a flare with 95% destruction efficiency.

5/22/2014 Tanks #T1-T4, SC Fields Annual PVSV inspections & maintenance, See Emissions sheet

La Goleta Tank Farm Maintenance Emissions

Start End 10:15:00 3:00PM

Date:

5/22/2014

5/22/2014 10:00 5/22/2014 12:12

#### Tank Farm R.V. Test Data

	Tank Pressures (" of H2O)	0.6	0 6 <b>RVs</b>	
Tanl	k Levels (Inches)	In s		Ft.
Tank #4	Brine Tank	89 0	89.0 LT-604	7.42
Tank #3	Condensate Tank	57 0	57.0 LT-603	4.75
Tank #1	Flotation Cell #1	14.0	14.0 LT-600	1 17
Tank #2	Flotation Cell #2	34.0	34.0 LT-601	2 83

Before

After

#### Relief Valves

	Setpoint (" of H2O)	Test	Lockup	Time (sec.)
IG-BG-090	6.5	6.5	6.1	10
IG-BG-091	6 5	6.5	6	35

#### **Tank Vapor Space Volumes**

Tank #1	(Tank Height - Min Level During Test) x Tank Volume Factor = (12 ft - 1 31 ft) x 113.09 ft <sup>3</sup> /ft =	1224.76
Tank #2	(Tank Height - Min Level During Test) x Tank Volume Factor = (12 ft - 1.40 ft) x 113.09 ft <sup>3</sup> /ft =	1037 04
Tank #3	(Tank Height - Min Level During Test) x Tank Volume Factor = (12 ft - 1.44 ft) x 78 54 ft <sup>3</sup> /ft =	569 42
Tank #4	(Tank Height - Min Level During Test) x Tank Volume Factor = (12 ft - 0 63 ft) x 452.40 ft <sup>3</sup> /ft =	2071.99
Volume of	Piping and Tank Roof Cones	478 80

ja lindting

Total Volume of Vapor Space 5382.01

#### Pipeline Quality Gas Sample Data (2/7/2014 Sample)

Mol wt		17 4	2/7/2014
Mol Wt % I	ROC	0 0468	2/7/2014

ROC = Change in Pressure \* 0.0361 (converts "H2O to lbs) \* Total Volume of Vapor Space/(10.73\*525) \* Mol Wt of Gas \* ROC %

#### Test #1 (IG-BG-090)

ROC = (c19-d19) \* 0 0361 \* j29/(10 73\*525) \* c32\*c33 = 0 01 lbs ROC

Test #2 (IG-BG-091)

ROC = (c20-d20) \* 0 0361 \* j29/(10.73\*525) \* c32\*c33 = 0.01 lbs ROC

5/22/2014

TOTAL ROC Emissions

0.02 lbs ROC

GOLETA
HYDROCARBON CONDENSATE TANK THROUGHPUT

Month	Condensate Tank (gallons)
Jan-15	0.0
Feb-15	1,225.0
Mar-15	0.0
Apr-15	0.0
May-15	0.0
Jun-15	0.0
Jul-15	0.0
Aug-15	0.0
Sep-15	0.0
Oct-15	0.0
Nov-15	0.0
Dec-15	0.0

TOTAL 1,225.0

# Goleta Truck Loading of Hydrocarbon Condensate 2014

1.	1/16/2014	$1 \log - 5040 \text{ gallons}$
2.	1/30/2014	$1 \log - 5040 \text{ gallons}$
3.	2/12/2014	$1 \log d - 5040 \text{ gallons}$

# Goleta Emergency Gas Venting 2014

There were no Emergency Gas venting occurrences in the 12 months of 2014.

# **EQUIPMENT HISTORY REPORT (7)**

Completion Date From: Jan 1, 2014 Completion Date To: Dec 31, 2014 ASSET # VALUES: APCD-H201

MAXIMO Asset ID	Asset Description	Work Order #	WORKTYPE	Completion Date	Work Order Description	Work Order Long Description	Failure Remark	Failure Remark Long Description
GOL-1003- H-201A	LINE 1003 WATER HEATER H-201A	5510110	PM+	4/23/14	ANNUAL LINE 1003 HEATER TUNE -UP		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
GOL-1003- H-201B	LINE 1003 WATER HEATER H-201B	5510110	PM+	4/23/14	ANNUAL LINE 1003 HEATER TUNE -UP		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
GOL- FE-4E478-1	FUEL METER FOR LINE 1003 HEATER H-201A (FE478-1)	5439197	PM+	2/20/14	SEMI-ANNUAL LINE 1003 HEATER FUEL METER INSPECTION		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
GOL- FE-4E478-1	FUEL METER FOR LINE 1003 HEATER H-201A (FE478-1)	5584678	PM+	8/12/14	SEMI-ANNUAL LINE 1003 HEATER FUEL METER INSPECTION		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
GOL- FE-4E478-2	FUEL METER FOR LINE 1003 HEATER H-201B (FE478-2)	5439197	PM+	2/20/14	SEMI-ANNUAL LINE 1003 HEATER FUEL METER INSPECTION		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	
GOL- FE-4E478-2	FUEL METER FOR LINE 1003 HEATER H-201B (FE478-2)	5584678	PM+	8/12/14	SEMI-ANNUAL LINE 1003 HEATER FUEL METER INSPECTION		INSPECTION COMPLETE, NO SUBSTANDARD CONDITIONS	

# **Sulfa-Treat or KMN Media Bed Changes And Odorant Carbon Canister Changes**

January 9, 2014 – Changed KMN Canister 2,000 lbs of Potassium Permanganate Zeolite

January 22, 2014 – Changed KMN Canister 2,000 lbs of Potassium Permanganate Zeolite

February 3, 2014 Changed KMN and SulfaTreat Canisters 2,000 lbs of Potassium Permanganate Zeolite 4,000 lbs of SulfaTreat CHP

February 12,, 2014 - Changed KMN Canister 2,000 lbs of Potassium Permanganate Zeolite

November 20, 2014 – Changed KMN Canister 2,000 lbs of Potassium Permanganate Zeolite

November 24, 2014 - Changed SulfaTreat canister 4,000 lbs of SulfaTreat

October 28, 2010 – Odorant Carbon Canister 55 Gal. Drum VoCarb 48C (Start Date 10/28/2010 – no media replacements in 2014)



Dennis Lowrey
Southern California Gas Company
PO BOX 818
Goleta, CA 93116

07 March 2014

RE: La Goleta Storage

Dear Client:

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on 06-Mar-14 13:30 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Meredith Sprister

Willoud Up Buren

**Project Manager** 

TEL: (805) 922-4772

Work Order: 1401080



Dennis Lowrey
Southern California Gas Company
PO BOX 818
Goleta, CA 93116

12 February 2014

RE: La Goleta Storage

Work Order: 1400558

Dear Client:

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on 05-Feb-14 15:30 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Meredith Sprister

Maria Us Ali ver

**Project Manager** 

TEL: (805) 922-4772



Southern California Gas Company

Project: La Goleta Storage

PO BOX 818

Project Number: TS2014-C015 Project Manager: Dennis Lowrey

Reported: 12-Feb-14 15:54

Goleta CA, 93116

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Reservoir Quality Gas Miller #8	1400558-01	Air	05-Feb-14 09:51	05-Feb-14 15:30
Pipeline Quality Gas Line 247	1400558-02	Air	05-Feb-14 09:44	05-Feb-14 15:30
Goleta Plant Fuel OM 3464	1400558-03	Air	05-Feb-14 08:19	05-Feb-14 15:30
Tank Farm Flare Inlet	1400558-04	Air	05-Feb-14 09:15	05-Feb-14 15:30
Microturbine Fuel Gas	1400558-05	Air	05-Feb-14 08:47	05-Feb-14 15:30



Southern California Gas Company Project: La Goleta Storage

PO BOX 818 Project Number: TS2014-C015 Goleta CA, 93116 Project Manager: Dennis Lowrey

Result

Reported: 12-Feb-14 15:54

# Reservoir Quality Gas Miller #8 1400558-01 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
	Oilfield Environmental and Compliance											
Sulfur Compounds												
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16				
Carbonyl Sulfide	ND	0.050	11	ıı	n	n .	н	11				
Carbon disulfide	ND	0.050	Ħ	"	11	"	11	11				
Sulfur dioxide	ND	0.050	11	ıı	n	11	. "	n				
Methyl Mercaptan	ND	0.050	11	ıı	11	"	11	"				
Ethyl Mercaptan	ND	0.050	"	и	п	"	11	и				
Dimethyl Sulfide	ND	0.050	11	ıı	II .	"	II	11				
otal Unknown Sulfur Compounds as H2S	ND	0.050	n	"	н	u u	ır	II				
Total Reduced Sulfur as S	ND	0.050	H	11	II	"	11	"				

# Pipeline Quality Gas Line 247 1400558-02 (Air)

Reporting

Units

Dilution

Batch

Prepared

Oilfield Environmental and Compliance											
Sulfur Compounds											
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16			
Carbonyl Sulfide	ND	0.050	11	11	11	"	u	n			

Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16	
Carbonyl Sulfide	ND	0.050	11	11	11	"	u	n	
Carbon disulfide	ND	0.050	**	н	B	н	μ	"	
Sulfur dioxide	ND	0.050	11		11	II	"	n n	
Methyl Mercaptan	ND	0.050	11	"	п	11	U	11	
Ethyl Mercaptan	ND	0.050	11	II .	II	"	"	"	
Dimethyl Sulfide	ND	0.050	II	n	и	11	11	u	
Total Unknown Sulfur Compounds as	ND	0.050	11	u	II.	11	11	"	
H2S									
Total Reduced Sulfur as S	ND	0.050	11	II .	11	11	"	II .	

Oilfield Environmental and Compliance

Analyte

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

TEL: (805) 922-4772

www.oecusa.com

FAX: (805) 925-3376

Method

Analyzed

Notes



Southern California Gas Company

Project: La Goleta Storage

PO BOX 818 Goleta CA, 93116

Analyte

Project Number: TS2014-C015
Project Manager: Dennis Lowrey

Reported: 12-Feb-14 15:54

# Goleta Plant Fuel OM 3464 1400558-03 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
	Oilfield Environmental and Compliance											
Sulfur Compounds												
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16				
Carbonyl Sulfide	ND	0.050	11	"	"	**	II .	и				
Carbon disulfide	ND	0.050	"	u	и	н	н	и				
Sulfur dioxide	ND	0.050	11	"	31	ıı	11	"				
Methyl Mercaptan	ND	0.050	11	n		11	"	"				
Ethyl Mercaptan	ND	0.050	#	"	tr	n n	H .	ıı				
Dimethyl Sulfide	ND	0.050	"	ıı .	11	п	"	**				
Total Unknown Sulfur Compounds as H2S	ND	0.050	n	n	n	11	11	u				
Total Reduced Sulfur as S	ND	0.050	11	n n	11	11	"	II .				

# Tank Farm Flare Inlet 1400558-04 (Air)

Units

Reporting

0.050

Dilution

Batch

Prepared

Analyzed

Result

	Oilfield Environmental and Compliance											
Sulfur Compounds												
Hydrogen Sulfide (H2S)	0.77	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16				
Carbonyl Sulfide	0.20	0.050	н	"	11	11	"	Ħ				
Carbon disulfide	0.21	0.050	11	11	Ħ	II.	11	II .				
Sulfur dioxide	ND	0.050	"	"	11	H .	11	11				
Methyl Mercaptan	4.4	0.050	11	"	II	11	II	11				
Ethyl Mercaptan	2.3	0.050	11	11	n	н	11	11				
Dimethyl Sulfide	3.3	0.050	н	"	II	11	"	11				
Cotal Unknown Sulfur Compounds as	ND	0.050	11	и	н	U	11	и				

Oilfield Environmental and Compliance

Total Reduced Sulfur as S

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

www.oecusa.com

TEL: (805) 922-4772 FAX: (805) 925-3376

Method

Notes



Southern California Gas Company

Project: La Goleta Storage

PO BOX 818

Goleta CA, 93116

Project Number: TS2014-C015
Project Manager: Dennis Lowrey

Reported: 12-Feb-14 15:54

# Microturbine Fuel Gas 1400558-05 (Air)

Analyte	Result	Reporting Limit	Units	Dılution	Batch	Prepared	Analyzed	Method	Notes
	Oilfield E	Environm	ental a	and Co	mplian	ce			
Sulfur Compounds									
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16	
Carbonyl Sulfide	ND	0.050	n	11	17	11	n	11	
Carbon disulfide	ND	0.050	"	0	п	II .	II .	"	
Sulfur dioxide	ND	0.050	H	11	н	11	11	"	
Methyl Mercaptan	ND	0.050	"	11	11	n	11	11	
Ethyl Mercaptan	ND	0.050	57	11	11	п	н	ır	
Dimethyl Sulfide	ND	0.050	"	tř	11	11	11	11	
Total Unknown Sulfur Compounds as H2S	ND	0.050	"	11	n	n .	n	11	
Total Reduced Sulfur as S	ND	0.050	11	11	Ħ	19	"	11	

TEL: (805) 922-4772



Southern California Gas Company

PO BOX 818 Goleta CA, 93116 Project: La Goleta Storage

Project Number: TS2014-C015
Project Manager: Dennis Lowrey

**Reported:** 12-Feb-14 15:54

# **Sulfur Compounds - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A402100 - None-gases										
Blank (A402100-BLK1)				Prepared	& Analyz	ed: 05-Feb	-14			

Hydrogen Sulfide (H2S)	ND	0.050	ppmv
Carbonyl Sulfide	ND	0 050	"
Carbon disulfide	ND	0 050	n
Sulfur dioxide	ND	0.050	п
Methyl Mercaptan	ND	0 050	II
Ethyl Mercaptan	ND	0 050	11
Dimethyl Sulfide	ND	0.050	31
Total Unknown Sulfur Compounds as H2S	ND	0 050	и
Total Reduced Sulfur as S	ND	0 050	11

LCS (A402100-BS1)				Prepared & A	nalyzed: 05-Feb	0-14
Hydrogen Sulfide (H2S)	10	0.050	ppmv	9.98	101	70-130
arbonyl Sulfide	10	0 050	н	10.0	100	70-130
L'arbon disulfide	10	0 050	11	10.4	99 2	70-130
Methyl Mercaptan	99	0 050	11	10.0	98 3	70-130
Ethyl Mercaptan	10	0 050	н	10 2	98 6	70-130
Dimethyl Sulfide	10	0 050	"	10 2	99 0	70-130

TEL: (805) 922-4772



Southern California Gas Company Project: La Goleta Storage

PO BOX 818 Project Number: TS2014-C015 Reported:
Goleta CA, 93116 Project Manager: Dennis Lowrey 12-Feb-14 15:54

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

TEL: (805) 922-4772

# SOUTHERN CALIFORNIA GAS COMPANY CHAIN OF CUSTODY RECORD

Project No: TS2014-C015
Requestor: Dennis Lowrey

Special Instructions:	
Lab please furnish	
1. signed analysis report	
2. QA/QC report	
3. Chain of custody	

Sampling Site: La Golet	a Storage				•	5, 52		
Sample ID & Location	Date	Time	Collected by	Container type	Sample type	Preservative	Analysis Required	
Reservoir Quality Gas Miller # 8	2/5/2014	9:51AM	D. Lowrey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A and 16A 1400558	
Pipeline Quality Gas Line 247	2/5/2014	9:44AM	D. Loviey	Tedlar Bag	Gas	None .	Total Sulfur, EPA Method 15A and 16A	   2
Goleta Plant Fuel OM 3464	2/5/2014	8:19AM	D. Joyfey	Tedlar Bag	Gas	None .	Total Sulfur, EPA Method 15A and 16A	34
Tank Farm Flare Inlet	2/5/2014	9:15AM	D. Lowrey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A and 16A	46
roturbine Fuel Gas	2/5/2014	8:47AM	.D. Lowrey	Tedlar Bag	Gas	None	Total Sulfur, EPA Method 15A and 16A	54

Relinquished by	Company & Department	Date	Time .	Received by	Company & Department
(signature)			•	(signature)	
1/2 to the	h		101116	11-1-19	a dec
X4	SoCalGas/Goleta Storage	2/5/2014	4 1577	Murac 13	OEC
STO THE WAY		سامار	1.00	5 A V 3	·
Davo	OEC	0/5/19	15 <i>5</i> 0	NI	OEC-RECEIVING

e-mail results to <u>dalowrey@semprautilities.com</u> Dennis Lowrey 805.681.8072

COC RECEIVED DATE/TIME:	SAMPLE REC Rev. 01/15/10 /ED 2-5-14 © 1530	RECEIPT LOG	IN .			#: <u> 400</u> 5 <b>RE</b> I	Acceptable Range: 0°C to 6°C FRIGERATOR(s):
SAMPLE OEC Cou Delivery( Samples I Samples I Samples I After-Hot	TRANSPORT, RECEIPT, rier/Sampler Other than OEC Courier) Received on Ice Received Outside Temp. Range* Direct from field (Outside Temp) ars Outside Drop-off [Brought Insi Time):	CONDITION & PRESE  COC document(s) received  Correct containers for any  Container(s) intact and in  Container label(s) consist  OEC preservative added  de] Proper preservation on sa  VOA containers free of h  Tedlar Bags free of conde	ed with samples alysis requested good condition ent with COC (**note std ID) mple label(s) eadspace ensation		No N/.    *	A (*) PROI Custody Sea	BLEM CHAIN FORM NEEDED Is (circle) Present Absent Samples / Coolers Intact / Broken* Shipment & Tracking #(1f applicable) eservative ID: etals Filtration (Date/Intt/Preserve ID)
	ERS, COC CHANGES AN					THORIZED BY	
OEC ID	Client ID ***If blank, refer to CoC	Container Description	Preservative	ResCl /pH	Matrix	Date/Time Sampled ***	Comments / Remarks / Condition Notes, Etc.
1-64		1-TEOLAR EA			A		
RECEIPT I	OGIN BY:	14 RECEI	PT REVIEWI	ED BY: _	Ne	<u>٠</u> ٠	Page



Southern California Gas Company

Project: La Goleta Storage

PO BOX 818

Goleta CA, 93116

Project Number: TS2014-C015
Project Manager: Dennis Lowrey

**Reported:** 07-Mar-14 12:56

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Dehy Flare Inlet	1401080-01	Air	06-Mar-14 08:31	06-Mar-14 13:30

Page 2 of 5



Southern California Gas Company

PO BOX 818 Goleta CA, 93116 Project: La Goleta Storage

Project Number: TS2014-C015
Project Manager: Dennis Lowrey

Reported: 07-Mar-14 12:56

Dehy Flare Inlet 1401080-01 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Oilfield Environmental and Compliance									
Sulfur Compounds									
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A403139	06-Mar-14	06-Mar-14	EPA 15 & 16	
Methyl Mercaptan	ND	0.050	11	ĮJ	"	u	H .	"	
Dimethyl Sulfide	17	0.050	11	II	н	"	11	"	
Dimethyl Disulfide	13	0.10	"	n	n	"	"	и	
Total Reduced Sulfur as S	30	0.050	11	11	II.	II	"	II .	



Southern California Gas Company

Project: La Goleta Storage

PO BOX 818 Goleta CA, 93116 Project Number: TS2014-C015
Project Manager: Dennis Lowrey

**Reported:** 07-Mar-14 12:56

# **Sulfur Compounds - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A403139 - None-gases										
Blank (A403139-BLK1)				Prepared	& Analyze	ed: 06-Ma	r-14			
Hydrogen Sulfide (H2S)	ND	0 050	ppmv							
Methyl Mercaptan	ND	0 050	11							
Dimethyl Sulfide	ND	0 050	11							
Dimethyl Disulfide	ND	0 10	11							
Total Reduced Sulfur as S	ND	0 050	11							
LCS (A403139-BS1)				Prepared	& Analyze	ed: 06-Ma	r-14			
Hydrogen Sulfide (H2S)	9.7	0 050	ppmv	9 98		97.7	70-130			
Methyl Mercaptan	9.6	0 050	11	100		96 2	70-130			
Dimethyl Sulfide	97	0.050	п	10 2		95 5	70-130			

TEL: (805) 922-4772



Southern California Gas Company Project: La Goleta Storage

PO BOX 818 Project Number: TS2014-C015 Reported:
Goleta CA, 93116 Project Manager: Dennis Lowrey 07-Mar-14 12:56

### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

TEL: (805) 922-4772

# SOUTHERN CALIFORNIA GAS COMPANY SAMPLE CHAIN OF CUSTODY RECORD

Project No: TS2014-C015 Requestor: Dennis Lowrey Sampling Site: La Goleta Storag Special Instructions:
Lab \_\_\_\_\_\_ please furnish
1. signed analysis report
2. QA/QC report
3. chain of custody

Sampling Site: La Goleta Storage Container Preservative Analysis Required Sample ID & Location Date Time Collected Sample type type Dehy Flare Inlet 3/6/2014 8:31AM Tedlar Bag None Total Sulfur, EPA method 16 D. 1401080-1A

Relinquished by	Company & Department	Date Tin		Company & Department
(signature)	1		(signature)	
X WILLE	SoCalGas/Goleta Storage	3/6/14 <i>104</i>	3 Lagra	OEC-Councen
Llane	OFC/SR :	3-6-14 [3]	° M25	OEC- RECEIVING
		. —		

The <u>Dehy Flare Inlet results</u> require an ASAP result of the analysis. Please send to <u>dalowrey@semprautilities.com</u> Phone 805.681.8072 and Ed Wiegman @ <u>EWiegman@semprautilities.com</u>

	YED : 3-6-14 € 133		IN 3-6-14	@13	34		RIGERATOR(s): _ CC
OEC Con Delivery Samples Samples Samples	Other than OEC Courier) Received on Ice Received Outside Temp. Range* Direct from field (Outside Temp) urs Outside Drop-off [Brought Insi	COC document(s) received correct containers for an accordance (s) intact and in Container label(s) consist OEC preservative added	ed with samples alysis requested a good condition tent with COC (**note std ID) mple label(s) eadspace		No N/ 	Custody Seal  Method of S  (**) OEC Pro	Samples / Coolers Intact / Broken <sup>th</sup> hipment & Tracking #(1f applicable).
CONTAIN	IERS, COC CHANGES AN	D/OR CORRECTIONS		CHANG	GES AU	THORIZED BY	<b>7:</b>
OEC ID	Client ID ***If blank refer to CoC	Container Description	Preservative	ResCl /pH	Matrix	Date/Time Sampled ***	Comments / Remarks / Condition Notes, Etc.
1- A		1-Tedlar Bay		_	A		
					·		
					<u> </u>		
	-						
,							

### ENGINEERING ANALYSIS CENTER

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

MTG STD 1

TEST DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi HHY	Xi*LHV	Xi <sup>+</sup> SG
Component	Xi	HHV	LHV	SG	Mol. Wt	Wt %	Btu/SCF	Btu/SCF	
METHANE	88.2563	1012.3	911.5	0.5539	14.1585	77.1257	893.5	804.5	0.4889
ETHANE	5.0283	1773.8	1622.8	1.0382	1.5120	8.2361	89.2	81.6	0.0522
PROPANE	0.9875	2521.9	2320.4	1.5225	0.4354	2.3720	24.9	22,9	0.0150
iso-BUTANE	0.2988	3259.4	3006.9	2.0068	0.1737	0.9460	9.7	9.0	0.0060
n-BUTANE	0.2956	3269.8	3017.4	2.0068	0.1718	0.9359	9.7	8.9	0.0059
neo-PENTANE	0.0000	4010.2	3691.4	2.4911	0.0000	0.0000	0.0	0.0	0.0000
iso-PENTANE	0.0991	4010.2	3707.6	2.4911	0.0715	0.3895	4.0	3.7	0.0025
n-PENTANE	0.0999	4018.0	3715.6	2.4911	0.0721	0.3926	4.0	3.7	0.0025
C6 plus	0.0685	5194.5	4812.8	3.2521	0.0645	0.3515	3.6	3.3	0.0022
CARBON DIOXIDE	2.0075	0.0	0	0.9672	0.8835	4.8126	0.0	0.0	0.0194
OXYGEN	0.3506	0.0	0	1.5195	0.1122	0.6111	0.0	0.0	0.0053
NITROGEN	2.5079	0.0	0	1.1048	0.7025	3.8270	0.0	0.0	0.0277
Totals>	100.000				18.4	100.0	1038.5	937.6	0.6277

(4) Compressiblity Factor (Z) for mixed gases

(4) Compressionly Pactor (2) for infact gases					
Total Non-Hydrocarbons	4.9				
A = (Total SG)(0.0101)	0,00634				
B = (Total Non-HC)(.0070)	0.00034				
Z = 1.00369 - A + B	0.99769				

Total Mol Wt. ROC C3 to C6+= 0.5536 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 3.02%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1040.9 BTU/real cubic foot
LHV	939.7 BTU/real cubic foot
Specific Gravity	0.6291

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0015$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

ex; (BTU/Ideal Gas Volume)/Z where Z=(Real Gas Volume/Ideal Gas Volume)

# ENGINEERING ANALYSIS CENTER

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

 PROJECT NO:
 TS2014-C013

 REPORTED BY:
 Vincent Arias

 REPORT DATE:
 2/11/14

 TEST LOCATION:
 MTG STD 2

 TEST DATE:
 2/7/14

	Mole %	(i)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	XitSG
Component	Xi	шну	LHV	8G	Mol Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	88.2564	1012.3	911.5	0.5539	14.1585	77.1212	893.5	804.5	0.4889
ETHANE	5.0300	1773.8	1622.8	1.0382	1.5125	8.2384	89.2	81.6	0.0522
PROPANE	0,9900	2521.9	2320.4	1.5225	0.4365	2.3779	25.0	23.0	0.0151
iso-BUTANE	0.2990	3259.4	3006.9	2.0068	0.1738	0.9466	9.7	9.0	0.0060
n-BUTANE	0.2960	3269.8	3017.4	2.0068	0.1720	0.9371	9.7	8.9	0.0059
neo-PENTANE	0.0000	4010.2	3691.4	2.4911	0.0000	0.0000	0.0	0.0	0.0000
iso-PENTANE	0.0990	4010.2	3707.6	2.4911	0.0714	0.3891	4.0	3.7	0.0025
n-PENTANE	0.1000	4018.0	3715.6	2.4911	0.0721	0.3930	4.0	3,7	0.0025
C6 plus	0.0686	5194.5	4812.8	3.2521	0.0646	0.3520	3.6	3.3	0.0022
CARBON DIOXIDE	2.0100	0.0	0	0.9672	0.8846	4.8183	0.0	0.0	0.0194
OXYGEN	0.3510	0.0	0	1.5195	0.1123	0.6118	0.0	0.0	0.0053
NITROGEN	2,5000	0.0	0	1.1048	0.7003	3.8147	0.0	0.0	0,0276
Totals>	100.000				18.4	100.0	1038.6	937.7	0.6277

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons 4.9 A = (Total SG)(0.0101) 0.00634 B = (Total Non-HC)(.0070) 0.00034 Z = 1.00369 - A + B 0.99769 Total Mol Wt. ROC C3 to C6+= 0.5540 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 3.02%

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0015$  lb/cf

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1041.0 BTU/real cubic foot
LHV	939.8 BTU/real cubic foot
Specific Gravity	0.6291

### (1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

### (2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

#### (3) Specific Gravity

**FOOTNOTES** 

Gas Processors Association (GPA) Standard 2145-09

# (4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

#### (5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

ex; (BTU/Ideal Gas Volume)/Z where Z=(Real Gas Volume/Ideal Gas Volume)

# ENGINEERING ANALYSIS CENTER

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias

REPORT DATE:

2/11/14

TEST LOCATION:

Reservoir Quality Gas Miller 8

SAMPLE DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHY	XirSG
Component	Xi	HHY	LHV	SG	Mol Wt	Wt%	Btu/8CF	Btu/SCF	
METHANE	93.0310	1012.3	911.5	0.5539	14.8943	85.2816	941.8	848.0	0.5153
ETHANE	3.5672	1773.8	1622.8	1.0382	1.0727	6.1418	63.3	57.9	0.0370
PROPANE	1.216	2521.9	2320.4	1.5225	0.5361	3.0698	30.7	28.2	0.0185
iso-BUTANE	0.1305	3259.4	3006.9	2.0068	0.0758	0.4343	4.3	3.9	0.0026
n-BUTANE	0.2284	3269.8	3017.4	2.0068	0.1327	0.7601	7.5	6.9	0.0046
iso-PENTANE	0.0421	4010.2	3707.6	2.4911	0.0304	0.1739	1.7	1.6	0.0010
n-PENTANE	0.0322	4018.0	3715.6	2.4911	0.0232	0.1330	1.3	1.2	0.0008
C6 plus	0.0445	5194,5	4812.8	3.2521	0.0419	0.2400	2.3	2.1	0.0014
CARBON DIOXIDE	1.1007	0.0	0	1.5195	0.4843	2.7731	0.0	0.0	0.0167
OXYGEN	0.0807	0.0	0	1.1048	0.0258	0.1479	0.0	0.0	0.0009
NITROGEN	0.5268	0.0	0	0.9672	0.1475	0.8446	0.0	0.0	0.0051
Totals>	100.000				17.5	100.0	1052.7	949.8	0.6041

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons 1.7
A = (Total SG)(0.0101) 0.00610
B = (Total Non-HC)(.0070) 0.00012
Z = 1.00369 - A + B 0.99771

Total Mol Wt. ROC C3 to C6+= 0.8402 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 4.81%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1055.2 BTU/real cubic foot
LHV	952.0 BTU/real cubic foot
Specific Gravity	0.6054

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0022$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

ex; (BTU/Ideal Gas Volume)/Z where Z=(Real Gas Volume/Ideal Gas Volume)

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO:

TS2014-C013

REPORTED BY:

Vincent Arias 2/11/14

REPORT DATE: TEST LOCATION:

Pipeline Quality Gas L-247

SAMPLE DATE:

2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	HHV	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	93.2489	1012.3	911.5	0,5539	14.9291	85.7098	944.0	850.0	0.5165
ETHANE	3.4541	1773.8	1622.8	1.0382	1.0386	5.9630	61.3	56.1	0.0359
PROPANE	1.1746	2521.9	2320.4	1.5225	0.5179	2.9732	29.6	27.3	0.0179
iso-BUTANE	0.1260	3259.4	3006.9	2.0068	0.0732	0.4204	4.1	3.8	0.0025
n-BUTANE	0.2191	3269.8	3017.4	2.0068	0.1273	0.7311	7.2	6.6	0.0044
iso-PENTANE	0.0405	4010.2	3707.6	2.4911	0.0292	0.1678	1.6	1.5	0.0010
n-PENTANE	0.0311	4018.0	3715.6	2.4911	0.0224	0.1288	1.2	1.2	0.0008
C6 plus	0.0470	5194.5	4812.8	3.2521	0.0443	0.2541	2.4	2.3	0.0015
CARBON DIOXIDE	1.0520	0.0	0	1.5195	0.4629	2.6574	0.0	0.0	0.0160
OXYGEN	0.0829	0.0	0	1.1048	0.0265	0.1523	0.0	0.0	0.0009
NITROGEN	0.5238	0.0	0	0.9672	0.1467	0.8420	0.0	0.0	0.0051
Totals>	100.000				17.4	100.0	1051.5	948.6	0.6025

(4) Compressibility Factor (Z) for mixed gases

(4) Compressionly raciol (2) for in	IACU gases
Total Non-Hydrocarbons	1.7
A = (Total SG)(0.0101)	0.00608
B = (Total Non-HC)(.0070)	0.00012
Z = 1.00369 - A + B	0.99772

Total Mol Wt. ROC C3 to C6+ = 0.8144 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 4.68%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

(3) Aujusteu Vatues (14.73 psia, ooi	, Gross, Dry, rear volume basis)
HHV	1053.9 BTU/real cubic foot
LHV	950.8 BTU/real cubic foot
Specific Gravity	0.6038

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0022$  lb/cf

# **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14

TEST LOCATION: Goleta plant fuel OM 3464

SAMPLE DATE: 2/7/14

	Mole %	(a)	(2)	(3)	Mole % *	RO€	Xi*HHV	Xi*LHV	Xi†SG
Component	Χi	HHV	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	93.2314	1012.3	911.5	0.5539	14.9263	85.6779	943.8	849.8	0.5164
ETHANE	3.4601	1773.8	1622.8	1.0382	1.0405	5.9722	61.4	56.1	0.0359
PROPANE	1.1674	2521.9	2320.4	1.5225	0.5147	2.9544	29.4	27.1	0.0178
iso-BUTANE	0.1260	3259.4	3006.9	2.0068	0.0732	0.4204	4.1	3.8	0.0025
n-BUTANE	0.2195	3269.8	3017.4	2.0068	0.1276	0.7323	7.2	6,6	0.0044
iso-PENTANE	0.0406	4010.2	3707.6	2.4911	0.0293	0.1681	1.6	1.5	0.0010
n-PENTANE	0.0312	4018.0	3715.6	2.4911	0.0225	0.1292	1.3	1.2	0.0008
C6 plus	0.0475	5194.5	4812.8	3.2521	0.0447	0.2568	2.5	2.3	0.0015
CARBON DIOXIDE	1.0616	0.0	0	1.5195	0.4671	2.6812	0.0	0.0	0.0161
OXYGEN	0.0850	0.0	0	1.1048	0.0272	0.1561	0.0	0.0	0.0009
NITROGEN	0.5297	0.0	0	0.9672	0.1483	0.8513	0.0	0,0	0.0051
Totals>	100.000				17.4	100.0	1051.3	948.4	0.6026

(4) Compressiblity Factor (Z) for mixed gases

 Total Non-Hydrocarbons
 1.7 

 A = (Total SG)(0.0101) 0.00609 

 B = (Total Non-HC)(.0070) 0.00012 

 Z = 1.00369 - A + B 0.99772 

Total Mol Wt. ROC C3 to C6+= 0.8121 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 4.66%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1053.7 BTU/real cubic foot
LHV	950.6 BTU/real cubic foot
Specific Gravity	0.6039

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0021$  lb/cf

# **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14
TEST LOCATION: Micro Turbine Fuel Gas

SAMPLE DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	XitSG
Component	Xi	HHV	LHV	SG	Mol. Wt	Wt %	Btu/SCF	Btu/SCF	
METHANE	93.1154	1012.3	911.5	0.5539	14.9078	85.5040	942.6	848.7	0.5158
ETHANE	3.4524	1773.8	1622.8	1.0382	1.0381	5.9543	61.2	56.0	0.0358
PROPANE	1.1714	2521.9	2320.4	1.5225	0.5165	2.9622	29.5	27.2	0.0178
iso-BUTANE	0.1259	3259.4	3006.9	2.0068	0.0732	0.4197	4.1	3.8	0.0025
n-BUTANE	0.2192	3269.8	3017.4	2.0068	0.1274	0.7307	7.2	6.6	0.0044
iso-PENTANE	0.0407	4010.2	3707.6	2.4911	0.0294	0.1684	1.6	1.5	0.0010
n-PENTANE	0.0314	4018.0	3715.6	2.4911	0.0227	0.1299	1.3	1.2	0.0008
C6 plus	0.0459	5194.5	4812.8	3.2521	0.0432	0.2479	2.4	2.2	0.0015
CARBON DIOXIDE	1.0560	0.0	0	1.5195	0.4646	2.6650	0.0	0.0	0.0160
OXYGEN	0.1153	0.0	0	1.1048	0.0369	0.2116	0.0	0.0	0.0013
NITROGEN	0.6266	0.0	0	0.9672	0.1754	1.0063	0.0	0.0	0.0061
Totals>	100.000				17.4	100.0	1050.0	947.2	0.6030

(4) Compressiblity Factor (Z) for mixed gases

Total Non-Hydrocarbons	1.8
A = (Total SG)(0.0101)	0.00609
B = (Total Non-HC)(.0070)	0.00013
Z = 1.00369 - A + B	0.99773

Total Mol Wt. ROC C3 to C6+= 0.8123 lb/lb-mol

Mol Wt, % ROC C3 to C6+= 4.66%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1052.4 BTU/real cubic foot
LHV	949.4 BTU/real cubic foot
Specific Gravity	0.6044

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0021$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14

TEST LOCATION: Dehy Flare Inlet

SAMPLE DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole %	ROC	XiaHHA	Xi*LHV	Xi*SG
Component	Xi	HHY	LHV	SG	Mol. Wt	W1 %	Btu/SCF	Btu/SCF	
METHANE	66.9557	1012.3	911.5	0.5539	10.7196	42.1258	677.8	610.3	0.3709
ETHANE	8.6067	1773.8	1622.8	1.0382	2.5880	10.1704	152.7	139.7	0.0894
PROPANE	5.5264	2521.9	2320.4	1.5225	2.4366	9.5753	139.4	128.2	0.0841
iso-BUTANE	0.8079	3259.4	3006.9	2.0068	0.4696	1.8452	26.3	24.3	0.0162
n-BUTANE	2.0264	3269.8	3017.4	2.0068	1.1777	4.6283	66.3	61.1	0.0407
iso-PENTANE	0.5030	4010.2	3707.6	2.4911	0.3629	1.4262	20.2	18.6	0.0125
n-PENTANE	0.4486	4018.0	3715.6	2.4911	0.3237	1.2719	18.0	16.7	0.0112
C6 plus	1.4882	5194.5	4812.8	3.2521	1.4016	5.5081	77.3	71.6	0.0484
CARBON DIOXIDE	13.4107	0.0	0	1.5195	5.9007	23.1885	0.0	0.0	0.2038
OXYGEN	0.0711	0.0	0	1.1048	0.0228	0.0894	0.0	0.0	0.0008
NITROGEN	0.1553	0.0	0	0.9672	0.0435	0.1709	0.0	0.0	0.0015
Totals>	100.000				25.4	100.0	1177.9	1070.6	0.8794

(4) Compressibility Factor (Z) for mixed gases

(1)	
Total Non-Hydrocarbons	13.6
A = (Total SG)(0.0101)	0.00888
B = (Total Non-HC)(.0070)	0.00095
Z = 1.00369 - A + B	0.99576

Total Mol Wt. ROC C3 to C6+= 6.1721 lb/lb-mol

Mol Wt. % ROC C3 to C6+ = 24.25%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

HHV	1183.0 BTU/real cubic foot
LHV	1075.1 BTU/real cubic foot
Specific Gravity	0,8831

Total lbs of ROC C3 to C6+ per  $ft^3 = 0.0163$  lb/cf

#### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

 PROJECT NO:
 TS2014-C013

 REPORTED BY:
 Vincent Arias

 REPORT DATE:
 2/11/14

 TEST LOCATION:
 Tank Farm Flare

 SAMPLE DATE:
 2/7/14

	Male %	(1)	(2)	(3)	Male % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	72.7804	1012.3	911.5	0.5539	11.6521	51.9036	736.8	663.4	0.4031
ETHANE	6.9004	1773.8	1622.8	1.0382	2.0750	9.2427	122.4	112.0	0.0716
PROPANE	5,2386	2521.9	2320.4	1.5225	2.3097	10.2884	132.1	121.6	0.0798
iso-BUTANE	0.7406	3259.4	3006.9	2.0068	0.4304	1.9173	24.1	22.3	0.0149
n-BUTANE	1.4706	3269.8	3017.4	2.0068	0.8547	3.8073	48.1	44.4	0.0295
iso-PENTANE	0,2896	4010.2	3707.6	2.4911	0.2089	0.9307	11.6	10.7	0.0072
n-PENTANE	0.2349	4018.0	3715.6	2.4911	0.1695	0.7549	9.4	8.7	0.0059
C6 plus	0.6763	5194.5	4812.8	3.2521	0.6370	2,8373	35.1	32.5	0.0220
CARBON DIOXIDE	4.9151	0.0	0	1.5195	2.1626	9.6333	0.0	0.0	0.0747
OXYGEN	1.4653	0.0	0	1.1048	0.4689	2.0887	0.0	0.0	0.0162
NITROGEN	5.2883	0.0	0	0.9672	1.4807	6.5958	0.0	0.0	0.0511
Totals>	100.000				22.4	100.0	1119.7	1015.6	0.7760

(4) Compressibility Factor (Z) for	mixed gases
Total Non-Hydrocarbons	11.7
A = (Total SG)(0.0101)	0.00784
B = (Total Non-HC)(.0070)	0.00082
Z = 1.00369 - A + B	0.99667

Total Mol Wt, ROC C3 to C6+= 4.6102 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 20.54%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis) Total lbs of ROC C3 to C6+ per ft<sup>3</sup> = 0.0122 lb/cf

HHV	1123.4 BTU/real cubic foot
LHV	1019.0 BTU/real cubic foot
Specific Gravity	0.7786

### **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14

TEST LOCATION: MTG STD FINAL

TEST DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	Xi*LHV	Xi*SG
Component	Xi	нну	LHV	SG	Mol. Wt	Wt%	Btu/SCF	Btu/SCF	
METHANE	88.2343	1012.3	911.5	0.5539	14.1550	77.0818	893.2	804.3	0.4887
ETHANE	5.0374	1773.8	1622.8	1.0382	1.5147	8.2484	89.4	81.7	0.0523
PROPANE	0.9857	2521.9	2320.4	1.5225	0.4347	2.3669	24.9	22.9	0.0150
iso-BUTANE	0.2989	3259.4	3006.9	2.0068	0.1737	0.9460	9.7	9.0	0.0060
n-BUTANE	0.2957	3269.8	3017.4	2.0068	0.1719	0.9359	9.7	8.9	0.0059
neo-PENTANE	0.0000	3993.9	3691.4	2.4911	0.0000	0.0000	0.0	0.0	0.0000
iso-PENTANE	0.0989	4010.2	3707.6	2.4911	0.0714	0.3886	4.0	3.7	0.0025
n-PENTANE	0.1000	4018.0	3715.6	2.4911	0.0721	0.3929	4.0	3.7	0.0025
C6 plus	0.0688	5194.5	4812.8	3.2521	0.0648	0.3529	3.6	3.3	0.0022
CARBON DIOXIDE	2.0261	0.0	0	1.5195	0.8917	4.8557	0.0	0.0	0.0308
OXYGEN	0,3543	0.0	0	1.1048	0.1134	0.6174	0.0	0.0	0.0039
NITROGEN	2.4999	0.0	0	0.9672	0.7003	3.8136	0.0	0.0	0.0242
Totals>	100.000				18.4	100.0	1038.4	937.5	0.6340

(4) Compressiblity Factor (Z) for mixed gases

(1) Compressions, 1 deter (2) 101 minute Busts						
Total Non-Hydrocarbons	4.9					
A = (Total SG)(0.0101)	0.00640					
B = (Total Non-HC)(.0070)	0.00034					
Z = 1.00369 - A + B	0.99763					

Total Mol Wt. ROC C3 to C6+= 0.5539 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 3.02%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)						
HHV	1040.9 BTU/real cubic foot					
LHV	939.7 BTU/real cubic foot					
Specific Gravity	0.6355					

Total lbs of ROC C3 to C6+ per  $tt^3 = 0.0015$  lb/cf

# **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.

# SOUTHERN CALIFORNIA GAS COMPANY

# CHAIN OF CUSTODY RECORD

Special Instructions:		
Lab	please	furnish
1 signed analysis repor	+	

2. QA/QC report
3. chain of custody

Project No: TS2014-C015 Requestor: Dennis Lowrey Sampling Site: La Goleta Storage

Sample ID & Location	Date	Time	Collected by	Container type	Sample type	Preservative	Analysis Required
Reservoir Quality Gas Miller 8	2/5/2014	9:55AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Pipeline Quality Gas L-247	2/5/2014	`9:35AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Goleta plant fuel OM 3464	2/5/2014	8:17AM	Dennis Lowred	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Micro-Turbine Fuel Gas	2/5/2014	8:41AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Dehy Flare Inlet	2/5/2014	8:05AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98
Tank Farm Flare	2/5/2014	9:05AM	Dennis Lowrey	Tedlar Bag	Gas	None	BTU & ROC using ASTM 1945-03 & 3588-98

Relinquished by Company & Department	Date T	Γime	Received by	Company & Department	
(signature)	2/2/11	7:30 Am	(signature)		
VA 1 Up / VII/da a sa	2/1/1/2014	D 7,30,112		11.7	16-1
SoCalGas/Goleta Storage	<del>2/5/2014</del>		This Many	EAC Johnita	Verduzo
			V		0

# SOUTHERN CALIFORNIA GAS COMPANY GOLETA COMPRESSOR STATION EMISSION OFFSET INFORMATION FOR 2014

Summary CAM Data - fulfillment of 9.C.15(b)(i) and (iii)

	MT1 Running	MT1 Running	<b>Sum of Total</b>	MT2 Running	MT3 Running	MT3 Running	MT4 Running	MT4 Running
Month	Days	Hours	<b>Hours MT2</b>	Hours	Days	Hours	Days	Hours
Jan	- 31	734	57	6	26	326	30	696
Feb	28	672	37	2	25	494	24	515
Mar	29	644	743	31	12	129	10	139
Apr	22	409	522	24	24	439	21	393
May	27	495	515	27	25	502	27	526
Jun	28	501	494	28	26	502	27	497
Jul	28	507	507	28	27	495	27	515
Aug	27	536	507	26	27	518	27	511
Sep	28	591	623	29	29	613	15	301
Oct	23	448	427	24	, 23	429	31	728
Nov	20	382	465	24	25	479	23	464
Dec	24	466	454	25	27	456	20	393
<b>Grand Total</b>	315	6385	5351	274	296	5382	282	5678

		Total Fuel G	as Use (Micro	Total Fuel Ga	s Use Quarterly	_	
		Turl	oines)	To	otals	_	
		MSCF	MMBTU*	MSCF	MMBTU*		
	Jan	890.49	936.79			*Conversion from MSCF to BTU based on	1052
	Feb	866.30	911.35	2420	2546	2/7/14 sample result of:	(BTU/SCF)
	Mar	663.54	698.05				
	Apr	691.19	727.13				
P	May	795.35	836.71	2339	2460		
	Jun	852.22	896.54				
~	Jul	883.59	929.53				
_	Aug	917.66	965.38	2693	2833		•
	Sep	891.48	937.84				
	Oct	844.92	888.86				
i	Nov	713.28	750.37	2300	2419		
	Dec	741.30	779.85				
Annual Total				9751	10258		

BTU Content of Natural Gas by Gas Composition (Southern California Gas Company)

PROJECT NO: TS2014-C013

REPORTED BY: Vincent Arias

REPORT DATE: 2/11/14
TEST LOCATION: Micro Turbine Fuel Gas

SAMPLE DATE: 2/7/14

	Mole %	(1)	(2)	(3)	Mole % *	ROC	Xi*HHV	XiIIIV	XirSG
Component	Xi	HHV	LHV	SG	Mol. Wt	₩t%	Btu/SCF	Btu/SCF	
METHANE	93.1154	1012.3	911.5	0.5539	14.9078	85.5040	942.6	848.7	0.5158
ETHANE	3.4524	1773.8	1622.8	1.0382	1.0381	5.9543	61.2	56.0	0.0358
PROPANE	1.1714	2521.9	2320.4	1.5225	0.5165	2.9622	29.5	27.2	0.0178
iso-BUTANE	0.1259	3259.4	3006.9	2.0068	0.0732	0.4197	4.1	3.8	0.0025
n-BUTANE	0.2192	3269.8	3017.4	2.0068	0.1274	0.7307	7.2	6.6	0.0044
iso-PENTANE	0.0407	4010.2	3707.6	2.4911	0.0294	0.1684	1.6	1.5	0.0010
n-PENTANE	0.0314	4018.0	3715.6	2.4911	0.0227	0.1299	1.3	1.2	0.0008
C6 plus	0.0459	5194.5	4812.8	3.2521	0.0432	0.2479	2.4	2.2	0.0015
CARBON DIOXIDE	1.0560	0.0	0	1.5195	0.4646	2.6650	0.0	0.0	0.0160
OXYGEN	0.1153	0.0	0	1.1048	0.0369	0.2116	0.0	0.0	0.0013
NITROGEN	0.6266	0.0	0	0.9672	0.1754	1.0063	0.0	0.0	0.0061
Totals>	100.000				17.4	100.0	1050.0	947.2	0.6030

(4) Compressibility Factor (Z) for mixed gases

Total Non-Hydrocarbons	1.8
A = (Total SG)(0.0101)	0.00609
B = (Total Non-HC)(.0070)	0.00013
Z = 1.00369 - A + B	0.99773

Total Mol Wt, ROC C3 to C6+= 0.8123 lb/lb-mol

Mol Wt. % ROC C3 to C6+= 4.66%

At Standard Temp & Press, 1 lb-mol = 378.4 cf

(5) Adjusted Values (14.73 psia, 60F, Gross, Dry, real volume basis)

нну	1052.4 BTU/real cubic foot
LHV	949.4 BTU/real cubic foot
Specific Gravity	0.6044

Total lbs of ROC C3 to C6+ per  $\Re^3 = 0.0021$  lb/cf

# **FOOTNOTES**

(1) Higher Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(2) Lower Heating Value per ideal cubic foot @ 14.73 psia

Gas Processors Association (GPA) Standard 2145-09

(3) Specific Gravity

Gas Processors Association (GPA) Standard 2145-09

(4) Empirical formula for compressibility factor

American Gas Association's Transmission Report No. 5.-1996

(5) Values are adjusted to reflect real volumes rather than ideal

volumes by dividing by the compressibility factor.



# Oilfield Environmental and Compliance, INC.

Southern California Gas Company

Project: La Goleta Storage

PO BOX 818

Goleta CA, 93116

Project Number: TS2014-C015 Project Manager: Dennis Lowrey

Reported: 12-Feb-14 15:54

# Microturbine Fuel Gas 1400558-05 (Air)

Analyte	Result	Reporting	Units	Dılution	Batch	Prepared	Analyzed	Method	Notes
Oilfield Environmental and Compliance									
Sulfur Compounds									
Hydrogen Sulfide (H2S)	ND	0.050	ppmv	1	A402100	05-Feb-14	05-Feb-14	EPA 15 & 16	
Carbonyl Sulfide	ND	0.050	11	"	11	II	11	n	
Carbon disulfide	ND	0.050	**	11	II	11	ti	II .	
Sulfur dioxide	ND	0.050	11	н	"	n	ır	"	
Methyl Mercaptan	ND	0.050	11	11	11	II.	11	12	
Ethyl Mercaptan	ND	0.050	11	11	11	11	11	11	
Dimethyl Sulfide	ND	0.050	"	ıı	n	II.	11	"	
Total Unknown Sulfur Compounds as H2S	ND	0.050	"	H	II	и	11	11	
Total Reduced Sulfur as S	ND	0.050	11	11	11	"	II .	И	

307 Roemer Way, Suite 300, Santa Maria, CA 93454

TEL: (805) 922-4772

# Goleta 2014 Fugitive Hydrocarbon Component Emissions

No changes in the component count in January 1, 2014 through December 31, 2014.

		CASH
McCormix Corp.	- CASH	CHECKS
Jobber, Petroleum Products POX 848-22 N. CALLE CESAR CHAVEZ	l — · ·	
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OFFICE		· .

# Goleta 2014 Equivalent Routine I.C. Engine Replacement

There were no engine replacements from January 1, 2014 through December 31, 2014.

## SBCAPCD \_\_rt 70 Reporting Form-Summary of Permit Deviations

Source Name Facility Name

Part 70 Permit number

Calendar Period (e g , Jan -June 98) Operating Scenario ID , if applicable Southern California Gas Company

La Goleta Plant

9584-R4 and ATC 13699 and 14159

January - December 2014

N/A

Deviation information:								
a. Permit	b Emissions		d time	ne began e time ended f		f Deviation		
condition	unit(s)	c cause	(date)	(nour)	(date)	(nour)	Quantification	g correction/ prevention
9 C 1 c iii.B	(District IDs 1199, 1200, 1201, 1202, 1203, 1204, and 1205)	Scehduling oversight	n/a	n/a	n/a	n/a	The second semi-annual monitoring of heating value of the fuel was not undertaken	Goleta will implement a routine testing schedule in their work management system to prevent future lapse in monitoring
9 C 1 c m C	(District IDs 1199, 1200, 1201, 1202, 1203, 1204, and 1205)	Scehduling oversight	n/a	n/a	n/a	n/a	The second semi-annual monitoring of total sulfur content and H2S was not undertaken	Goleta will implement a routine testing schedule in their work management system to prevent future lapse in monitoring.
9 C.5.c 1i	(District IDs 1211 and 1212)	Scehduling oversight	n/a	n/a	n/a	n/a	The second semi-annual monitoring of total sulfur content and H2S was not undertaken	Goleta will implement a routine testing schedule in their work management system to prevent future lapse in monitoring

# Goleta 2014 Summary List of Breakdowns and Variances

Breakdowns						
ID Number	Date	Description	Excess Emissions			
		NONE				

Variances								
ID Number	Date	Description	Excess Emissions					
Case No 29-14-N	11/12/2014	On November 12,2014 Hearing Board member Larry Lavagnino approved a 90-Day Variance for the period of November 12, 2014 through February 9, 2015, or the date that the break-in period of the engine is complete, whichever occurs first, and not to exceed 150 hours of engine run-time. Said variance provides relieffrom District Rule 206, Conditions 9.C.1(a), 9.C.1(b)(iv), 9.C.1(b)(v) and 9.C.1(b)(vi)(A) of Part 70 Permit to Operate 9584-R4 and District Rule 333 E.1(a) and allows for continued operation of Petitioner's Main Unit #2 during the post-overhaul break-in period of the engine and compressor.	emissions in pounds: o NOx 2,156 o CO 3,593					

Goleta
2014

ROC and NOx Emissions from Each Exempt Emissions Unit

	NO	Ox	ROC			
<b>Exempt Emission Unit</b>	Pounds (lb)	Pounds (lb) Tons per		Tons per		
		Year (tpy)		Year (tpy)		
Emergency Electrical	10.1	0.01	0.5	0.00		
Generator						
Fugitives: Gas De	0.0	0.00	2362.9	1.18		
Minimus valves						
Fugitives: Gas De	0.0	0.00	3449.1	1.72		
Minimus connections						
Fugitives: Gas De	0.0	0.00	104.0	0.05		
Minimus compressor						
seals						

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# Goleta 2014 Annual Emissions Summary

Year 2014	Emissions (Tons Per Year)					
	NOx	ROC	co	SOx	PM	PM10
#2: Ingersoll-Rand LVG-82: Compressor ICE	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	3.27	0.00	0.00	0.00
#3: Ingersoll-Rand LVG-82: Compressor ICE	0.16	0.00	8.79	0.00	0.11	0.11
#4: Ingersoll-Rand LVG-82: Compressor ICE	0.24	0.00	14.97	0.00	0.12	0.12
#5: Ingersoll-Rand LVG-82: Compressor ICE	0.38	0.00	4.89	0.00	0.14	0.14
#6: Ingersoll-Rand KVG-62: Compressor ICE	0.09	0.00	16.41	0.00	0.15	0.15
#7: Ingersoll-Rand KVG-62: Compressor ICE	0.19	0.00	6.78	0.00	0.13	0.13
#8: Ingersoll-Rand KVG-62: Compressor ICE	2.51	0.00	6.10	0.00	0.14	0.68
#9: Cooper-Bessemer GMV-10C Compressor ICE	2.51	0.97	6.10	0.00	0.00	0.00
#4A: Waukesha VRG220U Air Compressor Engine	0.09	0.00	0.02	0.00	0.00	0.00
#5A: Waukesha VRG220U Air Compressor Engine	0.00	0.00	0.02	0.00	0.00	0.00
Emergency Fire Pump #12A	0.04	0.01	0.01	0.01	0.01	0.01
Emergency Fire Pump #13A	0.04	0.01	0.01	0.01	0.01	0.01
Flare #3: Tank Farm	0.01	0.00	0.01	0.00	0.00	0.00
Flare #2: Dehy Secondary	0.01	0.00	0.01	0.00	0.00	0.00
Flare #1: Dehy Primary	0.04	0.00	0.03	0.00	0.00	0.00
Hot Oil Heater #1	1.50	0.08	1.26	0.00	0.11	0.11
Hot Oil Heater #2	0.94	0.05	0.79	0.00	0.07	0.07
H-201A	0.01	0.00	0.00	0.00	0.00	0.00
H-201B	0.01	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00
Flotation Cell Tank #1	0.00 0.00		0.00	0.00	0.00	0.00
Flotation Cell Tank #2		0.00	0.00	0.00	0.00	0.00
Liquid Hydrocarbon Storage Tank	0.00	0.00	0.00	0.00	0.00	0.00
Loading Station	0.00	0.01	0.00	0.00	0.00	0.00
Fugitives: Pipeline Depressuring - Reservoir/Pipeline	0.00	0.45	0.00	0.00	0.00	0.00
Fugitives: Valves	0.00	19.20	0.00	0.00	0.00	0.00
Fugitives: Connections	0.00	31.44	0.00	0.00	0.00	0.00
Fugitives: Pressure Relief (Uncontrolled)	0.00	14.73	0.00	0.00	0.00	0.00
Fugitives: Compressor Seals	0.00	0.88	0.00	0.00	0.00	0.00
Fugitives: Pump Seals	0.00	0.05	0.00	0.00	0.00	0.00
Solvent Usage	0.00	0.00	0.00	0.00	0.00	0.00
Micro Turbine #1	0.05	0.11	0.64	0.00	0.01	0.01
Micro Turbine #2	0.04	0.09	0.54	0.00	0.01	0.01
Micro Turbine #3	0.05	0.09	0.54	0.00	0.01	0.01
Micro Turbine #4	0.05	0.10	0.57	0.00	0.01	0.01
TOTALS	6.60	68.29	65.67	0.02	1.71	1.71