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September 12, 2014

Ms. Donna Drogos
Alameda County Environmental Health
1131 Harbor Parkway, Suite 250
Oakland, CA 94502-6577

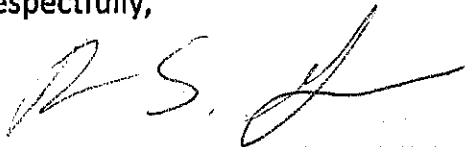
Subject: Second Quarter 2014 Groundwater Monitoring Report
Shore Acres Gas
403 East 12th Street, Oakland, Alameda County, California
RO #0002931
ECG # GHA.19009

Dear Ms. Drogos:

Enclosed please find a copy of the September 11, 2014 *Second Quarter 2014 Groundwater Monitoring Report* for the above-referenced site prepared by our consultant Environmental Compliance Group, LLC.

I declare, under penalty and perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Respectfully,



Rashid Ghafoor

SECOND QUARTER 2014
GROUNDWATER MONITORING AND
REMEDICATION STATUS REPORT

SHORE ACRES GAS
403 EAST 12TH STREET
OAKLAND, CALIFORNIA

Prepared for: Rashid Ghafoor

ECG Project Number: GHA.19009
Alameda County Fuel Leak Case No. R00002931

September 11, 2014



Drew Van Allen
Senior Project Manager



Michael S. Sgourakis
Principal Geologist
CA P.G. No. 7194

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INTRODUCTION

Environmental Compliance Group (ECG) has been authorized by Mr. Rashid Ghafoor to provide this report for the site.

This report describes activities conducted during Second Quarter 2014 groundwater monitoring event. Site information is as follows:

Site Location:	403 East 12 th Street Oakland, California
Geotracker Global ID:	T0600174667

LIMITATIONS

This report has been prepared for use by Rashid Ghafoor and the relevant regulatory agencies. The conclusions in this report are professional opinions based on the data presented in this report. This report was prepared in general accordance with hydrogeologic and engineering methods and standards. No other warranties are made as to the findings or conclusions presented in this report. The work described in this report was performed under the direct supervision of the professional geologist whose signature and State of California registration are shown above.

SITE DESCRIPTION AND HYDROGEOLOGIC CONDITIONS

SITE DESCRIPTION

The site occupies a parcel on the southeast corner of 4th Avenue and East 12th Street in Oakland, Alameda County, California (Figure 1). The site is situated in a commercial and residential area in central Oakland and is currently vacant. The site was historically used as a gasoline station. The area of interest at the site is the former location of three underground storage tanks (USTs) and fuel dispensers where impacted soil and groundwater was first identified in 2006. A detailed site plan is shown on Figure 2.

HYDROGEOLOGIC CONDITIONS

The site is underlain by Quaternary-age dune sand deposits referred to as the Merritt Sand. The Merritt Sand is typically described as loose, well-sorted fine- to medium-grained sand with a large silt component. The sand is reported to reach a maximum depth of 50-feet bgs in the area.

Based on boring logs from the advancement of 11 soil borings and the installation of six monitoring wells and four extraction wells, the stratigraphy of the site and vicinity consists of silt to approximately 30-feet bgs with discontinuous thin intervals of sandy silt and clayey sand present in the area.

Depth to groundwater is shallow, ranging between 10- to 14-feet bgs. The groundwater flow direction appears to be generally toward the south or southwest.

CLEANUP CRITERIA

It is prudent to establish cleanup goals for soil and groundwater based upon reaching the residential Environmental Screening Levels (ESLs) established by Region II for sites with shallow soil where groundwater is not a current or potential drinking water source. The primary constituents of concern relative to the site appear to be total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA). Accordingly, the following cleanup goals are proposed:

Constituent	Soil (mg/kg)	Groundwater (ug/L)
TPHd	100	210
TPHg	100	210
Benzene	0.12	46
Toluene	9.3	130
Ethylbenzene	2.3	43
Xylenes	11	100
MTBE	8.4	1,800
TBA	100	18,000

PROJECT BACKGROUND

INVESTIGATIONS

In July 2006, Geofon Incorporated (Geofon) advanced soil borings GP-1 and GP-2 and collected and analyzed soil samples. Results are detailed in Geofon's report entitled *Summary of Phase II Assessment Activities*, dated July 25, 2006.

In August 2009, Wright Environmental Services, Inc. (Wright) removed three USTs, associated fuel dispensers, and all associated piping. Results are detailed in Wright's *Closure Report for Three Underground Storage Tanks*, dated September 2009.

In April 2010, Apex Envirotech, Inc. (Apex) advanced nine soil borings to evaluate the lateral extent of impacted soil and groundwater. Results are documented in Apex's *Subsurface Investigation Results Report* dated June 23, 2010.

In June 2011, ECG supervised the installation of six groundwater monitoring wells (MW-1 through MW-6) and two extraction wells (EW-1 and EW-2). Results are documented in ECG's *Off-Site Investigation and Dual Phase Pilot Test Results with Fourth Quarter 2011 Monitoring Report*, dated January 26, 2012.

RISK ASSESSMENTS

In January 2011, ECG conducted a preferential pathway study for the site. Results are detailed in ECG's *Site Assessment and Soil Vapor Extraction Pilot Test Workplan*, dated February 9, 2011.

In January 2011, ECG conducted a sensitive receptor survey for the site. Results are detailed in ECG's *Site Assessment and Soil Vapor Extraction Pilot Test Workplan*, dated February 9, 2011.

A soil vapor survey has not been completed for the site.

CORRECTIVE ACTIONS

In June 2011, ECG supervised the installation of six groundwater monitoring wells (MW-1 through MW-6) and two extraction wells (EW-1 and EW-2). ECG also performed a 5-day dual phase extraction (DPE) test in June 2011. Results are documented in ECG's *Off-Site Investigation and Dual Phase Pilot Test Results with Fourth Quarter 2011 Monitoring Report*, dated January 26, 2012.

In May 2013, ECG supervised the installation of two extraction wells (EW-3 and EW-4). In September 2013, ECG installed the subsurface piping network from the remediation wells to the remediation compound and the subsurface conduit required by PG&E to install the electrical service required to operate the remediation compound.

In April 2014, the dual phase extraction system began operation. The DPE system includes a 25-horsepower liquid-ring blower capable of up to 400 standardized cubic feet per minute (scfm) flowrate, thermal/catalytic oxidizer, a conveyance piping network, and four individual extraction wells. The blower extracts vapors and groundwater from each extraction wells and through the conveyance piping where the impacted vapor is destroyed in the thermal/catalytic oxidizer prior to discharge to the atmosphere and the groundwater is treated with an air stripper and granular activated carbon prior to discharge to the municipal sewer system.

The DPE system is operated under Bay Area Air Quality Management District (BAAQMD) permit number 25354 and East Bay Municipal Utility District (EBMUD) Discharge Permit No. 68508758. The DPE system has removed approximately 2,833 pounds of TPHg, 16 pounds of benzene, and 1 pounds of MTBE from the subsurface. The remediation system was started on April 30, 2014 and shut down on June 27, 2014 due to carbon change out requirements.

SECOND QUARTER 2014 MONITORING EVENT

WORK PERFORMED AND PROPOSED

The following is a summary of work performed during the second quarter 2014 and work proposed for next quarter at the site.

WORK PERFORMED SECOND QUARTER 2014

1. The second quarter 2014 groundwater monitoring event was performed on June 27, 2014.
2. ECG performed DPE system startup, troubleshooting, and maintenance to the O&M unit.
3. The system was shut down on June 27, 2014 to perform carbon change out.

WORK SCHEDULED FOR THIRD QUARTER 2014

1. Prepare and finalize the second quarter 2014 monitoring report.
2. Restart the system and continue to operate the remediation system.

DISCUSSION OF RECENT MONITORING ACTIVITIES

ECG performed the second quarter 2014 groundwater monitoring and sampling event at the site on June 27, 2014. Gauging, development, purging, and sampling were conducted in accordance with ECG's SOPs included in Appendix A. The collected groundwater samples were submitted to Argon Analytical Services, Inc. located in Ceres, California for laboratory analysis under COC protocols (Appendix B).

The following is a summary of the current status of the groundwater monitoring program at the site:

Current Phase of Project:	Remediation
Groundwater Sampling Schedule:	Quarterly
	Wells MW-1 through MW-6, EW-1 through EW-4
Analysis:	TPHg by EPA Method 8015M, BTEX, 5 oxygenates, and 2 lead scavengers by EPA Method 8260B
Is Free Product Present On-Site:	Yes

The following is a summary of recent field and analytical data:

Average Depth to Groundwater	9.50-feet below ground surface (bgs)
Average Groundwater Elevation	21.74 -feet above mean sea level
Groundwater Gradient Direction	South southeast
Groundwater Gradient	0.008 feet/foot
TPHg Detected Range	1,300 ug/L (MW-4) to floating liquid hydrocarbons (FLH) ug/L (MW-5)
Benzene Detected Range	200 ug/L (MW-2) to FLH ug/L (MW-5)
MTBE Detected	4.9 ug/L (MW-6) to FLH (MW-5)

A sheen was observed in well MW-5 and this well was not sampled or used in groundwater gradient calculations. Laboratory analytical reports and COCs are provided in Appendix B. Field notes are located in Appendix C. Summaries of groundwater monitoring and analytical data are presented in Tables 4a.

DISCUSSION OF RECENT REMEDIATION ACTIVITIES

The system was started on April 30, 2014. ECG performed remediation system monitoring and operations and maintenance activities on May 2, 5, 9, 14, 19, 27 and June 11, 17, and 27, 2014. Multiple additional visits were made to the site to ensure the operation of the remediation systems and restart them as needed as the unit needed troubleshooting during initial startup. Operating parameters are recorded twice each month and are included on the field notes in Appendix C. Influent and effluent vapor samples are field screened each visit with a photoionization detector and samples are collected monthly in accordance with BAAQMD permit requirements. The collected vapor samples were submitted to Kiff Analytical, LLC, located in Davis, California for laboratory analysis under COC protocols.

The following is a summary of the second quarter 2014 remediation results at the site:

SVE System Operating Hours	961.5 hours, 40.1 days
----------------------------	------------------------

Active SVE Extraction Points	Varied
Inactive SVE Extraction Points	MW-4 and MW-7
Average Influent Flowrate	115 scfm
TPHg Detected Range in SVE Influent	40 parts per million by volume (ppmv) to 2,500 ppmv
Benzene Detected Range in SVE Influent	1.4 ppmv to 14 ppmv
MTBE Detected in SVE Influent	0.18 ppmv to 0.73 ppmv
SVE Destruction Efficiency	>97% or less than 0.109 pounds of benzene per day emission
Average Groundwater Extraction Rate	2.0 gallons per minute (gpm)
Average TPHg Detected in Groundwater Influent	37,500 ug/L
Average Benzene Detected in Groundwater Influent	2,600 ug/L
Average MTBE Detected in Groundwater Influent	96 ug/L

Summaries of remediation system operating parameters and analytical data are presented in Tables 5a, 5b, and 5c.

RESULTS AND CONCLUSIONS

Water levels and the gradient data were consistent with historical data. Tables 2a, 2b, 3a, 3b, 4a, and 4b tabulate the analytical data for soil and monitoring well sampling data.

The DPE system operated for 40.1 days during the second quarter of 2014 from April 30 to June 27, 2014 when the remediation system was shut down for carbon change out. The system removed approximately 2,778 pounds of TPHg, 12.3 pounds of benzene, and 0.8 pound of MTBE from the vapor phase during this reporting period (Table 5a). Approximately 52.9 pounds of TPHg, 3.6 pounds of benzene, and 0.13 pounds of MTBE were removed from the groundwater phase during this quarter (Table 5c). The DPE system operated within the rules of the BAAQMD permit issued to the facility.

Once carbon change out has been completed, ECG will restart the unit and continue DPE remediation activities. The next groundwater monitoring event will be in third quarter 2014.

FIGURES



0 1,000 2,000

Approximate Scale In Feet
1 inch = 1,000 Feet

FIGURE 1

Project Number:
GHA.19009

Date:
February 9, 2011

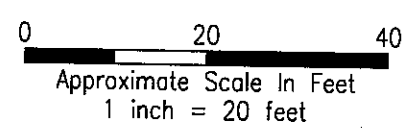
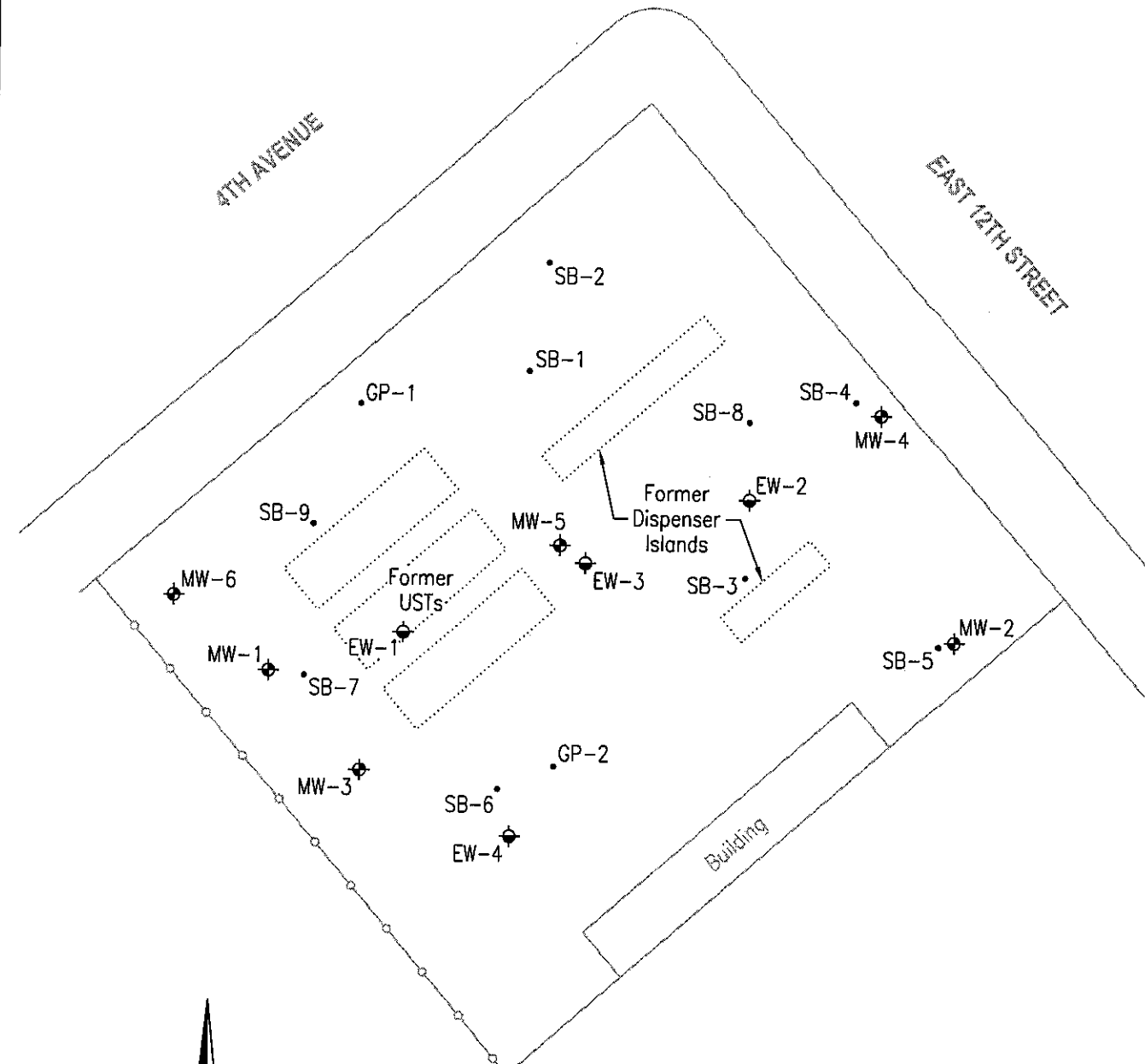
SITE LOCATION MAP

Shore Acre Gas
403 East 12th Street
Oakland, California



**Environmental
Compliance
Group, LLC**

270 Vintage Drive, Turlock, CA 95382
Phone: (209) 664-1035



LEGEND

- Soil Boring Location
- ◆ Monitoring Well Location
- ◆ DPE Well Location

FIGURE 2

Project Number:
GHA.19009

Date:
June 17, 2013

SITE MAP

Shore Acre Gas
403 East 12th Street
Oakland, California

Environmental Compliance Group, LLC
270 Vintage Drive, Turlock, CA 95382
Phone: (209) 664-1035



LEGEND



- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

(21.99) Elevation Of Groundwater Measured In Feet Above Mean Sea Level

— (21.80) — Lines Of Equipotential Measured In Feet Above Mean Sea Level (Dashed Where Inferred)

---> Flow Lines

$i = 0.008$ General Gradient

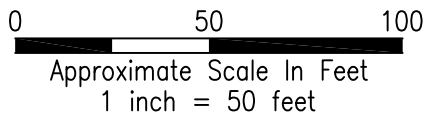


FIGURE 3	POTENTIOMETRIC SURFACE MAP JUNE 27, 2014 Shore Acre Gas 403 East 12th Street Oakland, California	 Environmental Compliance Group, LLC 270 Vintage Drive, Turlock, CA 95382 Phone: (209) 664-1035
Project Number: GHA.19009		
Date: September 10, 2014		



LEGEND

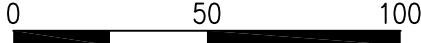


- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

(27,000) Concentration Of TPHg In Groundwater Measured In ug/L

(5,000) Line Of Equal Concentration Of TPHg In Groundwater Measured In ug/L (Dashed Where Inferred)

(FLH) Floating Liquid Hydrocarbons



Approximate Scale In Feet
1 inch = 50 feet

FIGURE 4	TPHg IN GROUNDWATER ISOCONCENTRATION MAP JUNE 27, 2014 Shore Acre Gas 403 East 12th Street Oakland, California	 Environmental Compliance Group, LLC 270 Vintage Drive, Turlock, CA 95382 Phone: (209) 664-1035
Project Number: GHA.19009		
Date: September 10, 2014		



LEGEND



- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

— (5,000) — Line Of Equal Concentration Of Benzene In Groundwater Measured In ug/L (Dashed Where Inferred)

(5,800) Concentration Of Benzene In Groundwater Measured In ug/L

(FLH) Floating Liquid Hydrocarbons

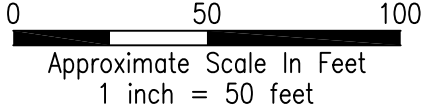


FIGURE 5	BENZENE IN GROUNDWATER ISOCONCENTRATION MAP JUNE 27, 2014 Shore Acre Gas 403 East 12th Street Oakland, California	 Environmental Compliance Group, LLC 270 Vintage Drive, Turlock, CA 95382 Phone: (209) 664-1035
Project Number: GHA.19009		
Date: September 10, 2014		



LEGEND

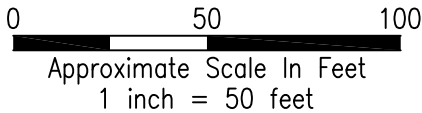


- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

(520) Concentration Of MTBE In Groundwater Measured In ug/L

(500) ——— Line Of Equal Concentration Of MTBE In Groundwater Measured In ug/L (Dashed Where Inferred)

(FLH) Floating Liquid Hydrocarbons



<p>FIGURE 6</p>	<p>MTBE IN GROUNDWATER ISOCONCENTRATION MAP</p>	 <p>Environmental Compliance Group, LLC</p>
<p>Project Number: GHA.19009</p>	<p>JUNE 27, 2014</p>	<p>270 Vintage Drive, Turlock, CA 95382</p>
<p>Date: September 10, 2014</p>	<p>Shore Acre Gas 403 East 12th Street Oakland, California</p>	<p>Phone: (209) 664-1035</p>

TABLES

Table 1
Well Construction Details
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Well ID	Date Installed	TOC Elevation (ft amsl)	Well Depth (ft bgs)	Casing Diameter (inches)	Casing Material	Screen/Filter	Screen Interval (ft bgs)
Monitoring Wells							
MW-1	June 2011	30.81	20	2	PVC	0.020/#3	10-20
MW-2		31.29	20	2	PVC	0.020/#3	10-20
MW-3		31.30	18	2	PVC	0.020/#3	8-18
MW-4		31.21	19	2	PVC	0.020/#3	9-19
MW-5		31.35	20	2	PVC	0.020/#3	10-20
MW-6		30.79	20	2	PVC	0.020/#3	10-20
Dual Phase Extraction Wells							
EW-1	June 2011	31.46	20	4	PVC	0.020/#3	5-20
EW-2		31.43	20	4	PVC	0.020/#3	5-20
EW-3	May 2012	---	20	6	PVC	0.020/#3	5-20
EW-4		---	20	6	PVC	0.020/#3	5-20

Notes:

- TOC - denotes top of casing
- ft - denotes feet
- amsl - denotes above mean sea level
- bgs - denotes below ground surface
- PVC - denotes polyvinyl chloride

Table 2a
Historical Soil Analytical Data
TPH and BTEX
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Boring ID	Sample Depth (feet)	Collection Date	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total xylenes (mg/kg)
UST Removal Samples								
SS-D1	2	August 2009	1,800*	3,000	<0.25	0.34	39	180
SS-D2	2		900*	2,400	<0.25	<0.25	36	120
SS-D3	2		460*	1,000	<0.15	<0.15	12	14
SS-D4	2		540*	640	<0.090	1.0	6.1	51
SS-D5	2		320	140	<0.025	<0.025	1.3	3.2
SS-D6	2.0		320*	260	<0.025	0.054	1.0	8.0
SS-J1	2.0		39*	160	<0.025	<0.025	0.71	0.94
SS-Isle	4.0		560*	100	<0.025	<0.025	0.30	0.084
SS-7	18.0		310*	1,600	6.9	76	39	200
Tank 1-SS-1	14.0		830*	2,500	4.2	100	69	360
Tank 1-SS-2	14.0		62*	480	1.8	5.3	14	62
Tank 2-SS-1	14.0		120*	290	0.37	2.4	6.3	31
Tank 2-SS-2	14.0		330*	80	0.074	0.051	1.2	5.8
Tank 3-SS-1	14.0		480*	2,100	2.4	41	62	320
Tank 3-SS-2	14.0		75*	130	0.23	0.26	3.1	15
Soil Borings								
GP-1-15.5	15.5	July 2006	13.0	18.0	0.63	0.052	0.69	0.13
GP-1-18.0	18.0		<1.0	<1.0	0.0056	0.0082	<0.005	0.019
GP-2-12.0	12.0		600	3,600	17	180	98	440
GP-2-20.0	20.0		79	1,100	3.2	41	25	130
SB-1-9.5	9.5	April 2010	---	1,600	5.1	43	30	180
SB-1-24.5	24.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-1-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-2-9.5	9.5		---	2.2	0.26	<0.010	0.066	<0.020
SB-2-24.5	24.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-2-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-3-14.5	14.5		---	17	17	100	42	240
SB-3-24.5	24.5		---	<1.0	<0.005	0.005	<0.005	0.013
SB-3-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-4-14.5	14.5		---	1,700	13	79	28	170
SB-4-19.5	19.5		---	<1.0	<0.005	0.009	<0.005	0.026
SB-4-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-5-14.5	14.5		---	470	<0.20	0.45	6.2	37
SB-5-24.5	24.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-5-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-6-9.5	9.5		---	6,100	21	170	95	580
SB-6-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-6-32	32.0		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-7-9.5	9.5		---	4,000	12	46	55	360
SB-7-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-7-32	32.0	---	<1.0	<0.005	<0.005	<0.005	<0.010	

Table 2a
Historical Soil Analytical Data
TPH and BTEX
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Boring ID	Sample Depth (feet)	Collection Date	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total xylenes (mg/kg)
SB-8-9.5	9.5	April 2010	---	2,500	16	110	63	370
SB-8-24.5	24.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-8-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-9-14.5	14.5		---	390	3.0	3.0	9.1	41
SB-9-29.5	29.5		---	<1.0	<0.005	<0.005	<0.005	<0.010
SB-9-32	32.0		---	<1.0	<0.005	<0.005	<0.005	<0.010
Groundwater Wells								
MW-1-5	5	June 2011	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-1-15	15		<5.0	18	0.55	<0.050	0.87	1.2
MW-1-20	20		<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-2-5	5		<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-2-10	10		<5.0	69	<0.005	<0.005	<0.005	<0.010
MW-2-15	15		<5.0	50	<0.050	0.48	3.1	19
MW-2-20	20		<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-3-5	5		<5.0	<1.0	<0.010	<0.010	<0.010	<0.020
MW-3-10	10		<15	840	3.4	33	20	140
MW-3-15	15		<5.0	380	3.0	4.5	7.3	41
MW-3-20	20		<5.0	<1.0	0.019	<0.005	0.006	<0.010
MW-4-5	5		<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-4-10	10		<15	420	1.7	2.6	9.2	51
MW-4-15	15		<5.0	3.1	0.036	0.20	0.15	0.95
MW-4-20	20		<5.0	<1.0	0.007	0.017	0.010	0.039
MW-5-5	5		<5.0	76	<0.10	<0.10	1.3	0.76
MW-5-10	10		<15	3,200	4.6	6.5	72	410
MW-5-15	15		<5.0	600	1.3	13	15	110
MW-6-5	5		<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-6-10	10		<5.0	5.1	0.015	<0.010	3.4	1.0
MW-6-15	15	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010	
MW-6-20	20	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010	
VW-1-5	5	<5.0	34	<0.005	<0.005	0.16	0.31	
VW-1-10	10	<15	85	<0.10	<0.10	2.2	0.89	
VW-1-15	15	<15	420	2.1	4.1	9.4	55	
VW-1-20	20	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010	
VW-2-5	5	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010	
VW-2-10	10	<5.0	130	<0.10	<0.10	2.9	15	
VW-2-15	15	<15	5,500	29	430	120	910	
VW-2-20	20	<5.0	<1.0	0.14	0.054	0.025	0.14	

Notes:

- TPHd - denotes total petroleum hydrocarbons as diesel
- TPHg - denotes total petroleum hydrocarbons as gasoline
- mg/kg - denotes milligrams per kilogram
- < - denotes less than the detection limit
- denotes no data

Table 2b
Historical Soil Analytical Data
Oxygenates and Lead Scavengers
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Boring ID	Sample Depth (feet)	Collection Date	DIPE (mg/kg)	ETBE (mg/kg)	MTBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)
UST Removal Samples									
SS-D1	2	August 2009	<0.25	<0.25	<0.25	<0.25	<1.5	---	---
SS-D2	2		<0.25	<0.25	<0.25	<0.25	<1.5	---	---
SS-D3	2		<0.15	<0.15	<0.15	<0.15	<0.70	---	---
SS-D4	2		<0.090	<0.090	<0.090	<0.090	<0.50	---	---
SS-D5	2		<0.025	<0.025	<0.025	<0.025	<0.15	---	---
SS-D6	2		<0.025	<0.025	<0.025	<0.025	<0.15	---	---
SS-J1	2		<0.025	<0.025	<0.025	<0.025	<0.15	---	---
SS-Isle	4		<0.025	<0.025	<0.025	<0.025	<0.15	---	---
SS-7	18		<0.25	<0.25	<0.25	<0.25	<1.5	<0.25	<0.25
Tank 1-SS-1	14		<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50
Tank 1-SS-2	14		<0.040	<0.040	0.37	<0.040	0.51	<0.040	<0.040
Tank 2-SS-1	14		<0.050	<0.050	0.18	<0.050	0.35	<0.050	<0.050
Tank 2-SS-2	14		<0.025	<0.025	0.090	<0.025	0.16	<0.025	<0.025
Tank 3-SS-1	14		<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50
Tank 3-SS-2	14	<0.025	<0.025	0.19	<0.025	0.15	<0.025	<0.025	
Soil Borings									
GP-1-15.5	15.5	July 2006	<0.005	<0.005	0.029	<0.005	0.27	---	---
GP-1-18.0	18.0		<0.005	<0.005	0.54	<0.005	0.33	---	---
GP-2-12.0	12.0		<0.50	<0.50	<0.50	<0.50	<2.5	---	---
GP-2-20.0	20.0		<0.025	<0.025	0.041	<0.025	<0.15	---	---
SB-1-9.5	9.5	April 2010	<0.80	<0.80	<0.80	<0.80	<8.0	<0.80	<0.80
SB-1-24.5	24.5		<0.005	<0.005	0.11	<0.005	<0.050	<0.005	<0.005
SB-1-29.5	29.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-2-9.5	9.5		<0.010	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010
SB-2-24.5	24.5		<0.005	<0.005	0.053	<0.005	<0.050	<0.005	<0.005
SB-2-29.5	29.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-3-14.5	14.5		<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0
SB-3-24.5	24.5		<0.005	<0.005	0.10	<0.005	<0.050	<0.005	<0.005
SB-3-29.5	29.5		<0.005	<0.005	0.010	<0.005	<0.050	<0.005	<0.005
SB-4-14.5	14.5		<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
SB-4-19.5	19.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-4-29.5	29.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-5-14.5	14.5		<0.20	<0.20	<0.20	<0.20	<2.0	<0.20	<0.20
SB-5-24.5	24.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-5-29.5	29.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-6-9.5	9.5		<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0
SB-6-29.5	29.5		<0.005	<0.005	0.20	<0.005	<0.050	<0.005	<0.005
SB-6-32	32.0		<0.005	<0.005	0.18	<0.005	<0.050	<0.005	<0.005
SB-7-9.5	9.5		<1.0	<1.0	4.0	<1.0	<10	<1.0	<1.0
SB-7-29.5	29.5		<0.005	<0.005	0.18	<0.005	<0.050	<0.005	<0.005
SB-7-32	32.0	<0.005	<0.005	0.11	<0.005	<0.050	<0.005	<0.005	

Table 2b
Historical Soil Analytical Data
Oxygenates and Lead Scavengers
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Boring ID	Sample Depth (feet)	Collection Date	DIPE (mg/kg)	ETBE (mg/kg)	MTBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)
SB-8-9.5	9.5	April 2010	<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0
SB-8-24.5	24.5		<0.005	<0.005	0.033	<0.005	<0.050	<0.005	<0.005
SB-8-29.5	29.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-9-14.5	14.5		<0.20	<0.20	5.5	<0.20	<2.0	<0.20	<0.20
SB-9-29.5	29.5		<0.005	<0.005	0.090	<0.005	0.15	<0.005	<0.005
SB-9-32	32.0		<0.005	<0.005	0.11	<0.005	<0.050	<0.005	<0.005
Groundwater Wells									
MW-1-5	5	June 2011	<0.005	<0.005	0.35	<0.005	0.093	<0.005	<0.005
MW-1-15	15		<0.050	<0.050	1.1	<0.050	<0.50	<0.050	<0.050
MW-1-20	20		<0.005	<0.005	0.31	<0.005	0.58	<0.005	<0.005
MW-2-5	5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
MW-2-10	10		<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050
MW-2-15	15		<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050
MW-2-20	20		<0.005	<0.005	0.006	<0.005	<0.050	<0.005	<0.005
MW-3-5	5		<0.010	<0.010	1.5	<0.010	0.37	<0.010	<0.010
MW-3-10	10		<0.80	<0.80	1.3	<0.80	<8.0	<0.80	<0.80
MW-3-15	15		<0.20	<0.20	3.0	<0.20	<2.0	<0.20	<0.20
MW-3-20	20		<0.005	<0.005	0.036	<0.005	0.16	<0.005	<0.005
MW-4-5	5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
MW-4-10	10		<0.40	<0.40	<0.40	<0.40	<4.0	<0.40	<0.40
MW-4-15	15		<0.010	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010
MW-4-20	20		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
MW-5-5	5		<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<0.10
MW-5-10	10		<4.0	<4.0	<4.0	<4.0	<40	<4.0	<4.0
MW-5-15	15		<0.40	<0.40	<0.40	<0.40	<4.0	<0.40	<0.40
MW-6-5	5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
MW-6-10	10		<0.010	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010
MW-6-15	15	<0.005	<0.005	0.026	<0.005	0.088	<0.005	<0.005	
MW-6-20	20	<0.005	<0.005	0.010	<0.005	0.37	<0.005	<0.005	
VW-1-5	5	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	
VW-1-10	10	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<0.10	
VW-1-15	15	<0.40	<0.40	0.59	<0.40	<4.0	<0.40	<0.40	
VW-1-20	20	<0.005	<0.005	0.009	<0.005	0.16	<0.005	<0.005	
VW-2-5	5	<0.005	<0.005	0.25	<0.005	0.14	<0.005	<0.005	
VW-2-10	10	<0.10	<0.10	0.33	<0.10	<1.0	<0.10	<0.10	
VW-2-15	15	<4.0	<4.0	<4.0	<4.0	<40	<4.0	<4.0	
VW-2-20	20	<0.005	<0.005	0.008	<0.005	0.26	<0.005	<0.005	

Notes:

mg/kg - denotes milligrams per kilogram	MTBE - denotes methyl tertiary butyl ether
< - denotes less than the detection limit	DIPE - denotes di-isopropyl ether
--- - denotes not analyzed/applicable	ETBE - denotes ethyl tertiary butyl ether
DCA - denotes dichloroethane	TAME - denotes tertiary amyl ether
EDB - denotes ethylene dibromide	TBA - denotes tertiary butyl alcohol

Table 3a
Grab Groundwater Sample Results
TPH and BTEX
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Sample ID	Collection Date	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)
Excavation							
Pit Sample 1	August 2009	21,000	21,000	3,800	1,000	1,200	3,700
Direct Push Grab Groundwater Samples							
SB-1	April 2010	---	60	2.9	6.7	2.1	9.7
SB-2		---	<50	<0.5	<0.5	<0.5	<1.0
SB-3		---	170	1.5	11	4.8	27
SB-4		---	6,500	78	440	190	960
SB-5		---	<50	<0.5	<0.5	<0.5	<1.0
SB-6		---	440	<20	<20	<20	<40
SB-7		---	270	<12	<12	<12	<25
SB-8		---	<50	0.6	1.3	0.6	3.3
SB-9		---	<50	<10	<10	<10	<20
SB-10	December 2011	---	<50	<0.5	<0.5	<0.5	<1.0
SB-11		---	2,300	83	1.9	140	43
SB-12		---	4,700	620	290	84	400
SB-13		---	400	51	2.4	4.2	9.7
SB-14		---	<50	1.7	<0.5	2.1	<1.0
SB-15		---	320	32	0.7	33	25
SB-16		---	4,800	1,600	10	49	<20
SB-17		---	990	290	7.2	27	4.3
SB-18		---	560	8.7	4.9	23	83
SB-19		---	260	7.1	<0.5	16	7.0
SB-21		---	<50	<0.5	<0.5	<0.5	<1.0

Notes:

- TPHd - denotes total petroleum hydrocarbons as diesel
- TPHg - denotes total petroleum hydrocarbons as gasoline
- ug/L - denotes micrograms per liter
- < - denotes less than the detection limit
- - denotes not analyzed/applicable

Table 3b
Grab Groundwater Sample Results
Oxygenates and Lead Scavengers
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Sample ID	Collection Date	DIPE (ug/L)	ETBE (ug/L)	MTBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)
Excavation								
Water	February 2000	<10	<10	15,000	39	17,000	<10	<10
Direct Push Grab Groundwater Samples								
SB-1	April 2010	<0.5	<0.5	14	<0.5	<5.0	<0.5	<0.5
SB-2		<0.5	<0.5	45	<0.5	<5.0	<0.5	<0.5
SB-3		<0.5	<0.5	110	<0.5	32	<0.5	<0.5
SB-4		<5.0	<5.0	<5.0	<5.0	<50	<5.0	<5.0
SB-5		<0.5	<0.5	0.6	<0.5	<5.0	<0.5	<0.5
SB-6		<20	<20	4,000	<20	<200	<20	<20
SB-7		<12	<12	2,500	<12	<120	<12	<12
SB-8		<0.5	<0.5	26	<0.5	98	<0.5	<0.5
SB-9		<10	<10	1,800	<10	5,300	<10	<10
SB-10	December 2011	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
SB-11		<1.0	<1.0	22	<1.0	140	<1.0	<1.0
SB-12		<5.0	<5.0	100	<5.0	550	<5.0	<5.0
SB-13		<2.0	<2.0	39	<2.0	3,900	<2.0	<2.0
SB-14		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
SB-15		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
SB-16		<10	<10	<10	<10	<100	<10	<10
SB-17		<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0
SB-18		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
SB-19		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
SB-21		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5

Notes:

- | | |
|--|---|
| ug/L - denotes micrograms per liter | DIPE - denotes di-isopropyl ether |
| < - denotes less than the detection limit | ETBE - denotes ethyl tertiary butyl ether |
| DCA - denotes dichloroethane | TAME - denotes tertiary amyl ether |
| EDB - denotes ethylene dibromide | TBA - denotes tertiary butyl alcohol |
| MTBE - denotes methyl tertiary butyl ether | |

Table 4a
Monitoring Well Data
Water Level, TPH, and BTEX
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Well ID TOC	Date Measured	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft amsl)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
Monitoring Wells									
MW-1	6/23/2011	10.46	20.35	<250	23,000	4,500	820	1,700	3,800
	9/22/2011	12.13	18.68	<50	21,000	4,000	1,500	980	3,000
	12/11/2011	11.69	19.12	---	23,000	2,900	1,000	720	3,000
	3/30/2012	Inaccessible							
	6/1/2012	11.04	19.77	---	40,000	4,100	800	2,700	6,100
	9/14/2012	12.96	17.85	<100	20,000	2,700	160	830	2,600
	3/27/2013	8.57	22.24	<50	15,000	1,700	150	400	830
	5/20/2013	8.57	22.24	<100	22,000	2,800	870	560	2,000
	9/4/2013	9.29	21.52	<250	12,000	2,900	130	190	370
	12/6/2013	9.11	21.70	<120	15,000	3,000	780	580	2,400
6/27/2014	8.92	21.89	<120	15,000	2,500	280	2,400	2,400	
MW-2	6/23/2011	10.70	20.59	<250	13,000	1,000	160	370	1,600
	9/22/2011	12.42	18.87	<50	12,000	300	130	470	1,400
	12/11/2011	11.98	19.31	---	8,300	170	120	450	1,500
	3/30/2012	8.55	22.74	<250	17,000	850	700	710	2,900
	6/1/2012	11.26	20.03	---	5,300	830	260	630	1,700
	9/14/2012	13.11	18.18	<50	10,000	260	190	600	1,900
	3/27/2013	9.43	21.86	<50	12,000	440	98	320	810
	5/20/2013	9.41	21.88	<100	6,600	300	74	190	500
	9/4/2013	10.11	21.18	<100	5,300	300	50	180	280
	12/6/2013	9.93	21.36	<50	4,300	280	39	140	160
6/27/2014	9.93	21.36	<50	1,300	200	22	85	160	
MW-3	6/23/2011	10.79	20.51	<250	55,000	15,000	3,600	2,000	4,300
	9/22/2011	12.60	18.70	<250	77,000	15,000	3,900	1,700	4,900
	12/11/2011	12.13	19.17	---	64,000	12,000	3,100	1,600	4,500
	3/30/2012	7.90	23.40	<120	100,000	17,000	10,000	2,000	8,400
	6/1/2012	11.47	19.83	---	83,000	15,000	6,000	2,900	10,000
	9/14/2012	13.42	17.88	<200	69,000	10,000	1,500	1,800	5,900
	3/27/2013	9.15	22.15	<200	63,000	7,100	2,100	1,900	7,700
	5/20/2013	9.16	22.14	<250	80,000	9,700	2,900	2,400	8,600
	9/4/2013	9.87	21.43	<250	47,000	7,200	470	1,200	5,000
	12/6/2013	9.69	21.61	<50	19,000	5,600	240	520	1,600
6/27/2014	9.49	21.81	<50	12,000	5,800	240	860	760	

Table 4a
Monitoring Well Data
Water Level, TPH, and BTEX
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Well ID TOC	Date Measured	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft amsl)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)		
MW-4	6/23/2011	10.62	20.59	<250	47,000	3,500	7,100	2,300	11,000		
	9/22/2011	12.25	18.96	<250	46,000	2,000	2,400	1,100	5,300		
	12/11/2011	11.89	19.32	---	46,000	2,100	3,400	1,800	7,000		
	3/30/2012	8.51	22.70	<250	60,000	6,800	8,200	1,200	5,700		
	6/1/2012	11.14	20.07	---	72,000	9,700	8,500	2,300	9,000		
	9/14/2012	12.97	18.24	<50	15,000	940	880	450	1,700		
	3/27/2013	9.05	22.16	<50	25,000	1,800	2,200	660	2,500		
	5/20/2013	9.03	22.18	<250	18,000	1,600	1,700	470	1,900		
	9/4/2013	9.68	21.53	<50	15,000	510	410	260	820		
	12/6/2013	9.54	21.67	<50	9,600	630	650	240	970		
	6/27/2014	9.58	21.63	<50	3,300	550	2,900	200	420		
	MW-5	6/23/2011	10.12	21.23	<250	130,000	7,100	25,000	13,000	94,000	
9/22/2011		12.53	18.82	<250	120,000	6,900	7,600	3,800	17,000		
12/11/2011		12.09	19.26	---	110,000	7,800	14,000	4,200	20,000		
3/30/2012		8.06	23.29	Sheen - not sampled							
6/1/2012		11.38	19.97	Sheen - not sampled							
9/14/2012		13.61	17.74	Free product - not sampled							
3/27/2013		9.21	22.14	Free product - not sampled							
5/20/2013		9.17	22.18	Free product - not sampled							
9/4/2013		9.70	21.65	Free product - not sampled							
12/6/2013		9.67	21.68	<250	81,000	10,000	13,000	5,500	21,000		
6/27/2014		9.51	21.84	Free product - not sampled							
MW-6		6/23/2011	10.43	20.36	<250	11,000	2,400	120	480	840	
	9/22/2011	12.10	18.69	<50	15,000	1,500	270	880	2,500		
	12/11/2011	11.69	19.10	---	13,000	660	190	610	1,500		
	3/30/2012	7.50	23.29	<250	9,500	1,200	160	250	520		
	6/1/2012	11.04	19.75	---	23,000	2,200	220	1,300	3,000		
	9/14/2012	12.96	17.83	<50	14,000	1,000	86	420	1,200		
	3/27/2013	---	---	Inaccessible							
	5/20/2013	---	---	Inaccessible							
	9/4/2013	9.19	21.60	<100	9,500	1,400	120	1,400	1,600		
	12/6/2013	9.03	21.76	<100	14,000	1,200	24	1,400	810		
	6/27/2014	8.80	21.99	<100	9,800	1,200	75	2,800	530		

Table 4a
Monitoring Well Data
Water Level, TPH, and BTEX
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Well ID TOC	Date Measured	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft amsl)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
DPE Wells									
EW-1	6/28/2011	---	---	---	20,000	2,000	490	1,000	2,400
	9/22/2011	12.55	18.71	<120	39,000	3,900	610	1,400	4,600
	12/11/2011	12.09	19.17	---	27,000	2,600	270	1,400	4,400
	3/30/2012	8.06	23.20	<120	21,000	3,100	160	910	2,300
	6/1/2012	11.42	19.84	---	21,000	2,800	100	1,200	3,100
	9/14/2012	13.37	17.89	<50	22,000	1,900	50	1,000	2,600
	3/27/2013	9.06	22.20	<50	15,000	630	36	360	590
	5/20/2013	9.06	22.20	<100	11,000	600	28	210	350
	9/4/2013	9.77	21.49	<50	9,300	610	19	170	250
	12/6/2013	9.63	21.83	<100	11,000	740	17	260	340
	6/27/2014	9.55	21.91	<100	12,000	1,400	210	1,900	2,400
	EW-2	6/28/2011	---	---	---	33,000	3,100	2,000	790
9/22/2011		12.50	18.90	<250	66,000	2,400	4,500	2,000	11,000
12/11/2011		12.12	19.28	---	70,000	2,800	6,900	2,700	13,000
3/30/2012		8.48	22.92	<250	57,000	5,800	5,500	1,200	5,400
6/1/2012		11.40	20.00	---	82,000	8,800	8,600	3,300	13,000
9/14/2012		13.27	18.13	<100	32,000	2,600	2,400	1,000	4,500
3/27/2013		9.24	22.16	<100	18,000	940	790	390	1,700
5/20/2013		9.21	22.19	<50	10,000	540	430	220	790
9/4/2013		9.88	21.52	<250	10,000	680	580	480	1,700
12/6/2013		9.96	21.47	<50	13,000	620	380	350	1,600
6/27/2014		9.85	21.58	<50	27,000	3,200	5,600	1,200	8,000
EW-3	5/20/2013	8.82	---	<50	1,300	430	540	280	1,000
	9/4/2013	9.49	---	<100	9,800	480	220	560	1,800
	12/6/2013	10.05	---	<50	10,000	810	580	260	1,100
	6/27/2014	9.90	---	<50	27,000	4,300	4,300	1,200	7,900
EW-4	5/20/2013	9.12	---	<50	8,100	720	160	94	430
	9/4/2013	9.85	---	<250	11,000	990	580	310	1,200
	12/6/2013	9.62	---	<50	4,400	150	170	140	670
	6/27/2014	9.47	---	<50	8,400	1,500	940	540	2,100

Notes:

- TOC - denotes top of casing elevation
- TPHg - denotes total petroleum hydrocarbons as gasoline
- TPHd - denotes total petroleum hydrocarbons as diesel
- ft bgs - denotes feet below top of casing
- ft amsl - denotes feet above mean sea level
- ug/L - denotes micrograms per liter
- < - denotes less than the detection limit
- - denotes not available/applicable
- FLH - denotes floating liquid hydrocarbons
- * - denotes less than six inches of water and considered dry

Table 4b
Monitoring Well Data
Oxygenates and Lead Scavengers
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Well ID TOC	Date Measured	DIPE (ug/L)	ETBE (ug/L)	MTBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)	
Monitoring Wells									
MW-1	6/23/2011	<25	<25	3,000	<25	3,900	<25	<25	
	9/22/2011	<50	<50	2,600	<50	2,500	<50	<50	
	12/11/2011	<20	<20	1,800	<20	1,600	<20	<20	
	3/30/2012	Inaccessible							
	6/1/2012	<20	<20	2,800	<20	1,300	<20	<20	
	9/14/2012	<10	<10	2,200	<10	1,600	<10	<10	
	3/27/2013	<0.5	<0.5	590	<0.5	350	<0.5	<0.5	
	5/20/2013	<10	<10	1,100	<10	620	<10	<10	
	9/4/2013	<10	<10	240	<10	<100	<10	<10	
	12/6/2013	<5.0	<5.0	350	<50	<100	<5.0	<5.0	
	6/27/2014	<10	<10	97	<10	<100	<10	<10	
	MW-2	6/23/2011	<10	<10	240	<10	640	<10	<10
9/22/2011		<5.0	<5.0	110	<5.0	260	<5.0	<5.0	
12/11/2011		<2.5	<2.5	45	<2.5	110	<2.5	<2.5	
3/30/2012		<5.0	<5.0	140	<5.0	490	<5.0	<5.0	
6/1/2012		<5.0	<5.0	180	<5.0	490	<5.0	<5.0	
9/14/2012		<5.0	<5.0	65	<5.0	190	<5.0	<5.0	
3/27/2013		<0.5	<0.5	120	<0.5	930	<0.5	<0.5	
5/20/2013		<2.5	<2.5	120	<2.5	1,800	<2.5	<2.5	
9/4/2013		<5.0	<5.0	100	<5.0	780	<5.0	<5.0	
12/6/2013		<5.0	<5.0	63	<5.0	230	<5.0	<5.0	
6/27/2014		<5.0	<5.0	21	<5.0	<50	<5.0	<5.0	
MW-3		6/23/2011	<100	<100	8,200	<100	6,400	<100	<100
	9/22/2011	<100	<100	11,000	<100	2,800	<100	<100	
	12/11/2011	<100	<100	7,400	<100	1,800	<100	<100	
	3/30/2012	<100	<100	13,000	<100	<1,000	<100	<100	
	6/1/2012	<50	<50	12,000	<50	<500	<50	<50	
	9/14/2012	<50	<50	9,400	<50	<500	<50	<50	
	3/27/2013	<0.5	<0.5	7,900	<0.5	3,800	<0.5	<0.5	
	5/20/2013	<25	<25	10,000	<25	5,000	<25	<25	
	9/4/2013	<25	<25	5,300	<25	2,100	<25	<25	
	12/6/2013	<25	<25	1,400	<25	640	<25	<25	
	6/27/2014	<25	<25	520	<25	260	<25	<25	

Table 4b
Monitoring Well Data
Oxygenates and Lead Scavengers
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Well ID TOC	Date Measured	DIPE (ug/L)	ETBE (ug/L)	MTBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)	
MW-4	6/23/2011	<50	<50	<50	<50	<500	<50	<50	
	9/22/2011	<25	<25	<25	<25	<250	<25	<25	
	12/11/2011	<25	<25	<25	<25	<250	<25	<25	
	3/30/2012	<50	<50	56	<50	<500	<50	<50	
	6/1/2012	<50	<50	180	<50	<500	<50	<50	
	9/14/2012	<20	<20	<20	<20	<200	<20	<20	
	3/27/2013	<0.5	<0.5	77	<0.5	450	<0.5	<0.5	
	5/20/2013	<10	<10	61	<10	360	<10	<10	
	9/4/2013	<2.5	<2.5	17	<2.5	64	<2.5	<2.5	
	12/6/2013	<2.5	<2.5	6.6	<2.5	<25	<2.5	<2.5	
	6/27/2014	<2.5	<2.5	<2.5	<2.5	<25	<2.5	<2.5	
	MW-5	6/23/2011	<120	<120	440	<120	<1,200	<120	<120
9/22/2011		<50	<50	670	<50	1,500	<50	<50	
12/11/2011		<120	<120	690	<120	1,600	<120	<120	
3/30/2012		Sheen - not sampled							
6/1/2012		Sheen - not sampled							
9/14/2012		Free product - not sampled							
3/27/2013		Free product - not sampled							
5/20/2013		Free product - not sampled							
9/4/2013		Free product - not sampled							
12/6/2013		<25	<25	270	<25	<250	<25	<25	
6/27/2014		Free product - not sampled							
MW-6	6/23/2011	<25	<25	1,100	<25	4,000	<25	<25	
	9/22/2011	<12	<12	600	<12	2,800	<12	<12	
	12/11/2011	<10	<10	290	<10	1,300	<10	<10	
	3/30/2012	<10	<10	990	<10	3,500	<10	<10	
	6/1/2012	<10	<10	1,400	<10	2,200	<10	<10	
	9/14/2012	<10	<10	580	<10	2,000	<10	<10	
	3/27/2013	Inaccessible							
	5/20/2013	Inaccessible							
	9/4/2013	<5.0	<5.0	29	<5.0	140	<5.0	<5.0	
	12/6/2013	<2.5	<2.5	12	<2.5	<25	<2.5	<2.5	
	6/27/2014	<2.5	<2.5	4.9	<2.5	<25	<2.5	<2.5	

Table 4b
Monitoring Well Data
Oxygenates and Lead Scavengers

Shore Acres Gas
403 East 12th Street
Oakland, California

Well ID TOC	Date Measured	DIPE (ug/L)	ETBE (ug/L)	MTBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)
DPE Wells								
EW-1	6/28/2011	<25	<25	1,500	<25	5,300	<25	<25
	9/22/2011	<50	<50	640	<50	1,800	<50	<50
	12/11/2011	<25	<25	490	<25	1,000	<25	<25
	3/30/2012	<20	<20	370	<20	1,100	<20	<20
	6/1/2012	<25	<25	500	<25	1,700	<25	<25
	9/14/2012	<10	<10	370	<10	1,400	<10	<10
	3/27/2013	<0.5	<0.5	270	<0.5	560	<0.5	<0.5
	5/20/2013	<5.0	<5.0	250	<5.0	560	<5.0	<5.0
	9/4/2013	<2.5	<2.5	220	<2.5	590	<2.5	<2.5
	12/6/2013	<2.5	<2.5	130	<2.5	270	<2.5	<2.5
	6/27/2014	<10	<10	40	<10	<100	<10	<10
EW-2	6/28/2011	<25	<25	670	<25	4,100	<25	<25
	9/22/2011	<50	<50	740	<50	1,600	<50	<50
	12/11/2011	<50	<50	540	<50	880	<50	<50
	3/30/2012	<50	<50	1,800	<50	2,800	<50	<50
	6/1/2012	<50	<50	2,600	<50	3,300	<50	<50
	9/14/2012	<20	<20	1,100	<20	2,400	<20	<20
	3/27/2013	<0.5	<0.5	360	<0.5	1,800	<0.5	<0.5
	5/20/2013	<2.5	<2.5	390	<2.5	2,600	<2.5	<2.5
	9/4/2013	<5.0	<5.0	460	<5.0	1,400	<5.0	<5.0
	12/6/2013	<10	<10	210	<10	560	<10	<10
	6/27/2014	<10	<10	110	<10	<50	<10	<10
EW-3	5/20/2013	<2.5	<2.5	140	<2.5	1,100	<2.5	<2.5
	9/4/2013	<2.5	<2.5	120	<2.5	650	<2.5	<2.5
	12/6/2013	<2.5	<2.5	96	<2.5	690	<2.5	<2.5
	6/27/2014	<5.0	<5.0	150	<5.0	360	<5.0	<5.0
EW-4	5/20/2013	<5.0	<5.0	480	<5.0	1,900	<5.0	<5.0
	9/4/2013	<5.0	<5.0	220	<5.0	1,300	<5.0	<5.0
	12/6/2013	<5.0	<5.0	58	<5.0	430	<5.0	<5.0
	6/27/2014	<2.5	<2.5	82	<2.5	65	<2.5	<2.5

Notes:

- | | |
|--|---|
| ug/L - denotes micrograms per liter | DIPE - denotes di-isopropyl ether |
| < - denotes less than the detection limit | ETBE - denotes ethyl tertiary butyl ether |
| DCA - denotes dichloroethane | TAME - denotes tertiary amyl ether |
| EDB - denotes ethylene dibromide | TBA - denotes tertiary butyl alcohol |
| MTBE - denotes methyl tertiary butyl ether | --- - denotes no data available |

Table 5a
Soil Vapor Extraction System Performance Calculations

Shore Acres Gas
 403 East 12th Street
 Oakland, California

Date	Meter* (hours)	Influent Flow Rate (scfm)	Influent Sample Results			Extraction Rates (lb/day)			Cumulative Extraction (lb)		
			TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	TPHg (lb/day)	Benzene (lb/day)	MTBE (lb/day)	TPHg (lb)	Benzene (lb)	MTBE (lb)
05/27/14	590.3	106.0	2,500	14	0.73	112	0.5	0.0	2,745	11.4	0.7
06/17/14	961.5	125.0	40	1.4	0.18	2	0.05	0.0	2,778	12.3	0.8

MW_{TPHg} = Molecular Weight of TPHg = 105

MW_{MTBE} = Molecular Weight of Methyl tert-butyl ether = 88.15

MW_{Benzene} = Molecular Weight of Benzene = 78.11

days of operation during quarter 40.1

ft³ = cubic feet

min = minutes

lb/day = pounds per day

ppmv = parts per million by volume = ft³ / 1x10⁶ ft³

scfm = standard cubic feet per minute

NS = not sampled

NA = not analyzed

NC = not calculated

$$\text{Extraction rate} = (\text{flow rate}(\text{ft}^3/\text{min}) \times \text{concentration} (\text{ft}^3 / 1 \times 10^6 \text{ ft}^3) \times \text{MW}_{\text{TPHg}}(\text{lb}/\text{lb-mol}) \times 1440 \text{ min}/\text{day}) / (359 \text{ ft}^3/\text{lb-mol}^*)$$

* - Hour meter readings does not match field data sheets because hour meter was 5472.6 when unit was started.

Table 5b
Soil Vapor Extraction System Destruction Efficiency and Emission Calculations
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

Date	Stack Flow Rate (scfm)	Stack Sample Results (ppmv)			Emission Rates (lb/day)			Destruction Efficiency (%)		
		TPHg	Benzene	MTBE	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE
05/27/14	106.0	< 5.0	< 0.050	< 0.10	< 0.2	< 0.002	< 0.004	100.0	100.0	100.0
06/17/14	125.0	< 5.0	< 0.050	< 0.10	< 0.2	< 0.002	< 0.004	100.0	100.0	100.0

Note: "<" indicates analytical method detection limit; method detection limits are used as stack concentrations to estimate emission rates. Destruction efficiency is assumed to be 100%.

Sample Calculations

Emission rate = flow rate(ft³/min) x concentration (ft³ / 1x10⁶ ft³) x MW (lb/lb-mole)/359 (ft³/lb-mole*) x 1440 min/day

Destruction Efficiency = [(Extraction rate - Emission rate)/Extraction rate] x 100%

Stack flow = Catox Influent + Natural Gas flow rate

lb/day = pounds per day

ft³ = cubic feet

ppmv = parts per million by volume = ft³ / 1x10⁶ ft³

NS = not sampled

min = minutes

scfm = standard cubic feet per minute

NA = Not applicable

Table 5c
 Groundwater Treatment System Performance Data
 Shore Acres Gas
 403 East 12th Street
 Oakland, California

DATE	TOTAL FLOW (gallons)	AVG. PERIOD FLOW RATE (gallons/min)	Influent Water Analytical Results			Estimated Removal Rates			Estimated Removal (Period)			Estimated Removal (Cumulative)			
			TPHg (ug/L)	Benzene (ug/L)	MTBE (ug/L)	TPHg (lb/day)	Benzene (lb/day)	MTBE (lb/day)	TPHg (pounds)	Benzene (pounds)	MTBE (pounds)	TPHg (pounds)	Benzene (pounds)	MTBE (pounds)	
04/30/14	189,810														
06/27/14	358,850	2.02	37,500	2,600	96	0.91	0.063	0.002	52.85	3.66	0.13	52.85	3.66	0.13	

Unit Start Up

169,040 total gallons pumped during current reporting period
 2817 average gallons per day during current reporting period
 2.0 average gallons per minute during current reporting period

52.85 3.66 0.13

Notes:
 Influent concentrations are an average of extraction wells EW-1 through EW-4
 Groundwater flow meter was 189,910 when unit was started up
 Sample Calculations:

$$\text{Extraction/ disposal rate} = \text{flow rate(gallons/min)} * \text{concentration (ug/L)} * 3.785 \text{ L/gallon} * \text{lb}/454,000,000 \text{ ug} * 1440 \text{ min/day}$$

NC - Not calculated
 NS - Not Sampled
 --- - Not Analyzed

MTBE - Methyl tertiary butyl ether
 TPHg - Total Petroleum Hydrocarbons as gasoline
 TBA - Tertiary butyl ether

lb/day - pounds per day
 ug/L - micrograms per liter

APPENDICES

ENVIRONMENTAL COMPLIANCE GROUP, LLC

STANDARD OPERATING AND SAFETY AND LOSS CONTROL PROCEDURES

1.0 SOIL BORING/DRILLING SAMPLE COLLECTION AND CLASSIFICATION PROCEDURES

ECG will prepare a site-specific Health and Safety Plan as required by the Occupational Health and Safety Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR.1910.120). The document will be reviewed and signed by all ECG personnel and subcontractors prior to performing work at the site.

Prior to conducting and subsurface work at the site, Underground Services Alert (USA) will be contacted to delineate subsurface utilities near the site with surface markings. In addition, the first five feet of every location will be hand cleared to a diameter larger than the diameter of the auger or probe as a further precaution against damaging underground utilities. Sites that are currently operated as gas stations will be cleared with a private utility locator prior to drilling activities.

Soil samples to be submitted for chemical analyses are collected into brass or stainless steel tubes. The tubes are placed in an 18-inch long split-barrel sampler. The split-barrel sampler is driven its entire length hydraulically or by 140-pound drop hammer. The split-barrel sampler is removed from the borehole and the tubes are removed. When the tubes are removed from the split-barrel sampler, the tubes are trimmed and capped with Teflon sheets and plastic caps or the soil is removed from the tubes and placed in other appropriate sample containers. The samples are sealed, labeled, and placed in ice under chain-of-custody to be delivered to the analytical laboratory. All samples will be kept refrigerated until their delivery to the analytical laboratory.

One soil sample collected from each split-barrel sampler is field screened with a photoionization detector (PID), flame ionization detector (FID), or other equivalent field screening meter. The soil sample is sealed in a plastic bag or other appropriate container to allow volatilization of volatile organic compounds (VOCs). The field meter is used to measure the VOC concentration in the container's headspace and is recorded on the boring logs at the appropriate depth interval.

Other soil samples collected from each split-barrel sampler are inspected and documented to identify the soil stratigraphy beneath the site and classify the soil types according to the United Soil Classification System. The soil types are recorded on boring logs with the appropriate depth interval and any pertinent field observations. Drilling and sampling equipment are steam cleaned or washed in solution and rinsed in deionized water prior to use, between sample collections and boreholes and after use.

2.0 SOIL EXCAVATION SAMPLE COLLECTION AND CLASSIFICATION PROCEDURES

Soil samples to be submitted for chemical analyses are collected into brass or stainless steel tubes or other appropriate containers. The samples are sealed, labeled, and placed in ice under chain-of-custody (COC) to be delivered to the analytical laboratory. All samples will be kept refrigerated until their delivery to the analytical laboratory.

Select soil samples are placed into a sealed plastic bag or other appropriate container and field screened using a PID, FID, or equivalent meter. Other soil samples collected are inspected and documented to identify the soil stratigraphy beneath the site and classify the soil types according to the United Soil Classification System. The soil types are recorded field notes with the appropriate depth interval and any pertinent field observations. Sampling equipment are steam cleaned or washed in solution and rinsed in deionized water prior to use, between sample collections, and after use. Soil cuttings and rinsewater are temporarily stored onsite pending laboratory analytical results and proper transport and disposal.

3.0 SAMPLE IDENTIFICATION AND COC PROCEDURES

Sample containers are labeled with job number, job name, sample collection time and date, sample collection point, and analyses requested. Sampling method, sampler's name, and any pertinent field observations are recorded on boring logs or excavation field notes. COC forms track the possession of the sample from the time of its collection until the time of its delivery to the analytical laboratory. During sample transfers, the person with custody of the samples will relinquish them to the next person by signing the COC and documenting the time and date. The analytical laboratory Quality Control/Quality Assurance (QA/QC) staff will document the receipt of the samples and confirm the analyses requested on the COC matches the sample containers and preservative used, if any. The analytical laboratory will assign unique log numbers for identification during the analyses and reporting. The log numbers will be added to the COC form and maintained in a log book maintained by the analytical laboratory.

4.0 ANALYTICAL LABORATORY QA/QC PROCEDURES

The analytical laboratory analyzes spikes, replicates, blanks, spiked blanks, and certified reference materials to verify analytical methods and results. The analytical laboratory QA/QC also includes:

- Routine instrument calibration,
- Complying with state and federal laboratory accreditation and certification programs,
- Participation in U.S. EPA performance evaluation studies,
- Standard operating procedures, and
- Multiple review of raw data and client reports

5.0 HOLLOW STEM AUGER WELL INSTALLATION

Boreholes for wells are often drilled with a truck-mounted hollow stem auger drill rig. The borehole diameter is at least 4 inches wider than the outside diameter of the well casing. Soil samples are collected and screened as described in **Section 1.0** and decontamination procedures are also the same as described in **Section 1.0**.

Wells are cased with both blank and factory-perforated Schedule 40 PVC. The factory perforations are typically 0.020 inches wide by 1.5 inch long slots, with 42 slots per foot. A PVC cap is typically installed at the bottom of the casing with stainless steel screws. No solvents or cements are used in the construction of the wells. Well stabilizers or centering devices may be installed around the casing to ensure the filter material and grout in the annulus are evenly distributed. The casing is purchased pre-cleaned or steam cleaned and washed prior to installation in the borehole.

The casing is set inside the augers and sand, gravel, or other filter material is poured into the annulus to fill the borehole from the bottom to approximately 1-2 feet above the perforations. A two foot thick bentonite plug is placed above the filter material to prevent the grout from filling the filter pack. Neat cement or sand-cement grout is poured into the annulus from the top of the bentonite plug to the surface. For wells located in parking lots or driveways, or roads, a traffic rated well box is installed around the well. For wells located in landscaped areas or fields, a stovepipe well protection device is installed around the well. Soil cuttings and rinsewater are temporarily stored onsite pending laboratory analytical results and proper transport and disposal.

6.0 MUD AND AIR ROTARY WELL INSTALLATION

Boreholes for wells can also be drilled with a truck-mounted air rotary or mud rotary drill rig. Air or mud can be used as a drill fluid to fill the borehole and prevent the borehole from caving in and remove drill cuttings. Mud or air can be chosen depending on the subsurface conditions. Soil samples are collected and screened as described in **Section 1.0** and decontamination procedures are also the same as described in **Section 1.0**.

Wells are cased with both blank and factory-perforated Schedule 40 PVC. The factory perforations are typically 0.020 inches wide by 1.5 inch long slots, with 42 slots per foot. A PVC cap is typically installed at the bottom of the casing with stainless steel screws. No solvents or cements are used in the construction of the wells. Well stabilizers or centering devices may be installed around the casing to ensure the filter material and grout in the annulus are evenly distributed. The casing is purchased pre-cleaned or steam cleaned and washed prior to installation in the borehole. Soil cuttings and drilling fluids are temporarily stored onsite pending laboratory analytical results and proper transport and disposal.

The casing is set inside the augers and sand, gravel, or other filter material is poured into the annulus to fill the borehole from the bottom to approximately 1-2 feet above the perforations. A two foot thick bentonite plug is placed above the filter material to prevent the grout from filling the filter pack. Neat cement or sand-cement grout is poured into the annulus from the top of the bentonite plug to the surface. For wells located in parking lots or driveways, or roads, a traffic rated well box is installed around the well. For wells located in landscaped areas or fields, a stovepipe well protection device is installed around the well. Soil cuttings and rinsewater are temporarily stored onsite pending laboratory analytical results and proper transport and disposal.

7.0 WELL DEVELOPMENT

After well installation, the wells are developed to remove residual drilling materials from the annulus and to improve well production by fine materials from the filter pack. Possible well development methods include pumping, surging, bailing, jetting, flushing, and air lifting. Development water is temporarily stored onsite pending laboratory analytical results and proper transport and disposal. Development equipment are steam cleaned or washed in solution and rinsed in deionized water prior to use, between sample collections and after use. After well development the wells are typically allowed to stabilize for at least 24 hours prior to purging and sampling.

8.0 LIQUID LEVEL MEASUREMENTS

Liquid level measurements are made with a water level meter and/or interface probe and disposable bailers. The probe tip attached to a measuring tape is lowered into the well and into the groundwater when a beeping tone indicates the probe is in the groundwater. The probe and measuring tape (graduated to hundredths of a foot) are slowly raised until the beeping stops and the depth to water measurement is recorded. If the meter makes a steady tone, this indicates the presence of floating liquid hydrocarbons (FLH) and the probe and measuring tape are raised until the steady tone stops and the depth to the FLH is measured. Once depth to water and depth to FLH (if present) has been recorded, the probe and measuring tape are lowered to the bottom of the well where the total depth of the well is measured. The depth to water, depth to FLH, and depth to bottom are measured again to confirm the results.

If FLH is encountered in the well, a disposable bailer is lowered into the well and brought back to the surface to confirm the thickness/presence of FLH. To minimize potential for cross contamination between wells, all measurements are done from cleanest to dirtiest well. Prior to beginning liquid level measurements, in between measurements in all wells, and at the completion of liquid level measurements, the water level probe and measuring tape is cleaned with solution (Alconox, Simple Green, or equivalent) and rinsed with deionized water.

9.0 WELL PURGING AND SAMPLING

Each well is typically purged of at least three well casing volumes of groundwater prior to collecting a groundwater sample. Purging can continue beyond three well casing volumes if field parameters including pH, temperature, electrical conductivity are not stabilizing during the purging process. If the well is purged dry before the three well casing volumes has been purged, the well is typically allowed to recharge to 80 percent of its initial water level before a groundwater sample is collected.

Purging equipment can include submersible pumps, PVC purging bailers, disposable bailers, air lift pumps, or pneumatic pumps. Prior to beginning well purging, in between each well purging, and at the completion of purging activities, all non-dedicated purging equipment is cleaned with solution (Alconox, Simple Green, or equivalent) and rinsed with deionized water.

Once the well has been purged, it will be sampled with a disposable bailer, PVC bailer, stainless steel bailer, or through a low flow groundwater pump. The groundwater sample is transferred from the bottom of the bailer to reduce volatilization to the appropriate sample container. The sample containers are specified by the analytical laboratory depending on the analyses requested. Sample containers typically include volatile organic compound (VOA) vials with septa of Teflon like materials. The groundwater sample is collected into the VOAs to minimize air bubbles and once the cap has been placed on the VOA, the VOA is tipped upside down to see if air bubbles are present in the VOA. Typically a duplicate VOA is collected from each well to be analyzed by the analytical laboratory, if warranted, to verify results.

Sample containers are labeled as described in **Section 3.0** and placed immediately in an ice chest and kept refrigerated until its delivery to the analytical laboratory. A trip blank may also be prepared by the analytical laboratory to travel with the ice chest during transport to the laboratory. Field blanks from equipment that has been decontaminated may be collected in between use in different wells to verify the decontamination procedure is effective. To minimize potential for cross contamination between wells, all wells are purged and sampled from cleanest to dirtiest well.

10.0 TEDLAR BAG SOIL VAPOR SAMPLING

Sampling equipment to collect Tedlar bag soil vapor samples includes an air pump, a Tedlar bag which can range in size from 1 to 10 liters, and 3/16-inch diameter polyethylene tubing. The air pump should be equipped with 3/16-inch hose barbs for the polyethylene tubing to attach to. The Tedlar bag must be equipped with a valve for filling and sealing the bag.

When soil vapor samples are collected from remediation equipment, the sample collection port on the remediation equipment is typically fitted with a 3/16-inch hose barb. Prior to collecting soil vapor samples from remediation equipment, air flow, temperature, and pressure or vacuum of the sampling point/remediation equipment are recorded. One end of the polyethylene tubing is connected to the sample collection port and one end is connected to the influent of the air pump, creating an air tight seal. The air pump is turned on and soil vapor from the sample collection port is pumped through the air pump for at least one minute. The air pump is turned off and one end of another piece of polyethylene tubing is connected to the effluent of the air pump and one end is connected to the valve on the Tedlar bag. The valve is opened and the air pump is turned on filling the Tedlar bag with the soil vapor sample until the bag has reached 75% capacity, when the valve on the Tedlar bag is closed and the air pump is turned off.

Tedlar bags are labeled as described in **Section 3.0** and placed immediately in an empty ice chest and kept dry and unrefrigerated until its delivery to the analytical laboratory. After each soil vapor sample collection, the air pump is turned on for five minutes to allow ambient air to clear the air pump and polyethylene tubing.

11.0 SUMMA CANISTER SOIL VAPOR SAMPLING

Sampling equipment to collect Summa canister soil vapor samples includes a sterilized Summa stainless steel canister under vacuum, ¼-inch diameter polyethylene tubing, and a laboratory calibrated flow meter, if required.

When soil vapor samples are collected from remediation equipment, the sample collection port on the remediation equipment is typically fitted with brass connection with silicone septa that has been threaded into a tapped hole on the piping network. Prior to collecting soil vapor samples from remediation equipment, air flow, temperature, and pressure or vacuum of the sampling point/remediation equipment are recorded. One end of the polyethylene tubing is connected to the brass sample collection port and one end is connected to the canister valve or flow meter, creating an air tight seal. Prior to collecting the soil vapor sample, the valve on the Summa canister is opened to verify the Summa canister has the required vacuum which is recorded. Three well volumes of vapor will be purged at a rate less than 200 milliliters per minute (ml/min.), including sand pack pore volume from each soil vapor probe prior to sample collection. The sample valve or flow meter is opened and the soil vapor sample is collected into the Summa canister and the sample valve is closed and the final vacuum reading (typically greater than 5 inches per square inch) on the Summa canister is recorded.

Per the DTSC *Advisory Active Soil Gas Investigations*, April 2012, high quality soil gas data collection is driven by project-specific data quality objectives (DQOs) and can be enhanced by using a shroud and a gaseous tracer compound. This method of leak detection ensures that soil gas wells are properly constructed and the sample train components do not leak. Most gaseous tracer compounds do not affect target analyte measurements nor does their detection require sample dilution. Also, gaseous leak tracer compounds allow a quantitative determination of a leak either in the sampling train or from ambient air intrusion down the borehole.

The shroud will be designed to contain the entire sampling train and the soil gas well annulus. The sampling train will be constructed of material that does not react with the sample analytes and will not off gas or adsorb volatile compounds. The sampling equipment will be clean and shut-in tested prior to use. The gaseous leak tracer compound (isobutylene 100 ppm) concentration inside the shroud will be monitored frequently to verify initial concentrations. A photoionization detector will be used to monitor tracer gas concentrations.

Summa canisters are labeled as described in **Section 3.0** and placed immediately in an empty ice chest and kept dry and unrefrigerated until its delivery to the analytical laboratory.

12.0 SYRINGE SOIL VAPOR SAMPLING

Sampling equipment to collect syringe soil vapor samples includes a sterilized, 100 cubic centimeter, gas tight syringe and silicone septa.

When soil vapor samples are collected from remediation equipment, the sample collection port on the remediation equipment is typically fitted with brass connection with silicone septa that has been threaded into a tapped hole on the piping network. Prior to collecting soil vapor samples from remediation equipment, air flow, temperature, and pressure or vacuum of the sampling point/remediation equipment are recorded. The syringe is inserted into the silicone septa and the plunger is purged or pumped at least three times. The sample is collected the fourth time the syringe plunger is extracted and the syringe is removed from the sample collection port and the needle on the syringe is capped with a rubber stopper.

Syringes are labeled as described in **Section 3.0** and placed immediately in an empty ice chest and kept dry and unrefrigerated until its delivery to the analytical laboratory.

13.0 TEMPORARY SAMPLING POINTS

A temporary borehole is advanced using either a slam bar or a direct push drill rig. In the case of the slam bar, once the borehole has been created, a temporary soil vapor probe is inserted into the borehole and advanced with a slide hammer or other physical force two additional feet. A bentonite seal is then placed in the borehole above the soil vapor probe to create an air tight seal and prevent ambient air from entering the sample collection space. In the case of the direct push drill rig, the sampling rod is advanced to the desired depth with a 6-inch retractable vapor screen at the tip. The sample screen on the 6-inch vapor screen is removed and a bentonite seal is then placed in the borehole above the soil vapor probe to create an air tight seal and prevent ambient air from entering the sample collection space.

Once the bentonite seal has set, at least one hour, the soil vapor survey samples are collected into Tedlar bags as described in **Section 10.0** or Summa canisters as described in **Section 11.0**. Samples are labeled as described in **Section 3.0** and placed immediately in an empty ice chest and kept dry and unrefrigerated until its delivery to the analytical laboratory. After each soil vapor sample collection, the air pump is turned on for five minutes to allow ambient air to clear the air pump and polyethylene tubing.

14.0 REPEATABLE SAMPLING POINTS

A borehole is advanced using either a hand auger or a drill rig. A 6-inch slotted probe with caps on both ends is placed in the borehole. A Swagelok fitting is attached to one end cap and 3/16-inch diameter Nylon tubing is attached to the Swagelok fitting. A one foot sand pack is placed around the probe and the remainder of the borehole is sealed with a layer of dry bentonite powder, followed by a layer of bentonite chips, and an additional layer of dry bentonite powder. A well box is placed on the surface of the repeatable sampling point and the excess Nylon tubing is placed inside the well box.

Soil vapor survey samples will be collected at least one week after probe installation. In addition, soil vapor survey samples will only be collected after five consecutive precipitation free days and after any onsite irrigation has been suspended.

The soil vapor survey samples are collected into Tedlar bags as described in **Section 10.0** or Summa canisters as described in **Section 11.0**. Tedlar bags or Summa canisters are labeled as described in **Section 3.0** and placed immediately in an empty ice chest and kept dry and unrefrigerated until its delivery to the analytical laboratory. After each soil vapor sample collection, the air pump is turned on for five minutes to allow ambient air to clear the air pump and polyethylene tubing.



Report Number : 88255

Date : 06/04/2014

Laboratory Results

Drew Van Allen
Environmental Compliance Group
270 Vintage Dr
Turlock, CA 95382

Subject : 2 Vapor Samples
Project Name : Shore Acres Gas
Project Number : GHA.19009

Dear Mr. Van Allen,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Troy D. Turpen". The signature is written in a cursive, flowing style.

Troy Turpen



Report Number : 88255

Date : 06/04/2014

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

Sample : **Effluent**

Matrix : Air

Lab Number : 88255-01

Sample Date :05/27/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.050	0.050	ppmv	EPA 8260B	05/29/14 20:59
Toluene	< 0.050	0.050	ppmv	EPA 8260B	05/29/14 20:59
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	05/29/14 20:59
Total Xylenes	0.14	0.050	ppmv	EPA 8260B	05/29/14 20:59
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	05/29/14 20:59
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	05/29/14 20:59
1,2-Dichloroethane-d4 (Surr)	98.0		% Recovery	EPA 8260B	05/29/14 20:59
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	05/29/14 20:59

Sample : **Influent**

Matrix : Air

Lab Number : 88255-02

Sample Date :05/27/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	14	0.60	ppmv	EPA 8260B	05/29/14 20:25
Toluene	40	0.60	ppmv	EPA 8260B	05/29/14 20:25
Ethylbenzene	9.6	0.60	ppmv	EPA 8260B	05/29/14 20:25
Total Xylenes	89	1.5	ppmv	EPA 8260B	05/29/14 23:01
Methyl-t-butyl ether (MTBE)	0.73	0.60	ppmv	EPA 8260B	05/29/14 20:25
TPH as Gasoline	2500	150	ppmv	EPA 8260B	05/29/14 23:01
1,2-Dichloroethane-d4 (Surr)	99.0		% Recovery	EPA 8260B	05/29/14 20:25
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	05/29/14 20:25

Report Number : 88255

Date : 06/04/2014

QC Report : Method Blank Data

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.050	0.050	ppmv	EPA 8260B	05/29/2014
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	05/29/2014
Toluene	< 0.050	0.050	ppmv	EPA 8260B	05/29/2014
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	05/29/2014
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	05/29/2014
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	05/29/2014
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	05/29/2014
Toluene - d8 (Surr)	104		%	EPA 8260B	05/29/2014

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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2795 2nd Street, Suite 300
 Davis, CA 95618
 Lab: 530.297.4800
 Fax: 530.297.4802

SRG # / Lab No. 88255
86255 MS 052914

Project Contact (Hardcopy or PDF To):
 Drew Van Allen

Company / Address:
 270 Vintage Drive, Turlock, CA 95382

Phone Number:
 209.664.1035

Fax Number:
 209.664.1040

Project #: GHA.19009 P.O. #:

Project Name:
 Shore Acres Gas

California EDF Report? Yes No

Sampling Company Log Code:
 ECGT

Global ID:
 T0600174667

EDF Deliverable To (Email Address):
 ecg_ust@gmail.com

Bill to:
 ECG LLC

Sampler Print Name:
 Drew Van Allen

Sampler Signature:

Chain-of-Custody Record and Analysis Request											TAT											
Analysis Request																						
PLEASE CIRCLE METHOD																						
MTBE @ 0.5 ppb (EPA 8260B)	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (MTBE, DIPE, ETBE, TAME, TBA) (EPA 8260B)	7 Oxygenates (5 oxy + EtOH, MeOH) (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	CAM 17 Metals (EPA 200.7 / 6010)	5 Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010)	Mercury (EPA 245.1 / 7470 / 7471)	Total Lead (EPA 200.7 / 6010)	W.E.T. Lead (STLC)	TPHg, BTEX, and MTBE by EPA 8260B	<input type="checkbox"/> 12 hr	<input type="checkbox"/> 24 hr	<input type="checkbox"/> 48 hr	<input type="checkbox"/> 72hr	<input checked="" type="checkbox"/> 1 wk	For Lab Use Only
Effluent																						
Influent																						

Project Address: 403 East 12th Street Oakland, CA	Sampling		Container				Preservative			Matrix			
	Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil	Air
	5/27/14	1200				X							X
	↓	1225				X							X

Relinquished by: Drew Van Allen Date: 5/20/14 Time: 1200 Received by: Michelle Spencer

Relinquished by: _____ Date: _____ Time: _____ Received by: _____

Relinquished by: _____ Date: _____ Time: _____ Received by Laboratory: Michelle Spencer

Remarks:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No

SAMPLE RECEIPT CHECKLIST

SRG #: 88255

Sample Receipt	Initials/Date: <u>MAS 052914</u>	Storage Time: <u>0953</u>	Sample Login	Initials/Date: <u>MAS 052913</u>
TAT: <input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush	<input type="checkbox"/> Split	<input type="checkbox"/> None	Method of Receipt: <input type="checkbox"/> Courier
				<input type="checkbox"/> Over-the-counter
				<input checked="" type="checkbox"/> Shipped
Temp °C	<input checked="" type="checkbox"/> N/A	Therm ID	Time	Coolant present
				<input type="checkbox"/> Yes
				<input type="checkbox"/> No
				<input type="checkbox"/> Water
				<input type="checkbox"/> Temp Excursion
For Shipments Only:	Cooler Receipt Initials/Date/Time: <u>ECG 052914 0947</u>	Custody Seals	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Intact
				<input type="checkbox"/> Broken

Chain-of-Custody:	Yes	No
Is COC present?	<input checked="" type="checkbox"/>	
Is COC signed by relinquisher?	<input checked="" type="checkbox"/>	
Is COC dated by relinquisher?	<input checked="" type="checkbox"/>	
Is the sampler's name on the COC?	<input checked="" type="checkbox"/>	
Are there analyses or hold for all samples?	<input checked="" type="checkbox"/>	

Documented on	COC	Labels	Discrepancies:
Sample ID	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Project ID	<input checked="" type="checkbox"/>		
Sample Date	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Sample Time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Does COC match project history?	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No		

Samples:	N/A	Yes	No
Are sample custody seals intact?	<input checked="" type="checkbox"/>		
Are sample containers intact?		<input checked="" type="checkbox"/>	
Is preservation documented?	<input checked="" type="checkbox"/>		
In-house Analysis:	N/A	Yes	No
Are preservatives acceptable?	<input checked="" type="checkbox"/>		
Are samples within holding time?		<input checked="" type="checkbox"/>	
Are sample container types correct?		<input checked="" type="checkbox"/>	
Is there adequate sample volume?		<input checked="" type="checkbox"/>	

Comments:

Receipt Details:

Matrix	Container Type	# of Containers
<u>AR</u>	<u>Tedlar</u>	<u>2</u>

CS Required:

Proceed With Analysis: YES NO Init/Date:

Client Communication:



Report Number : 88448

Date : 06/19/2014

Laboratory Results

Drew Van Allen
Environmental Compliance Group
270 Vintage Dr
Turlock, CA 95382

Subject : 2 Vapor Samples
Project Name : Shore Acres Gas
Project Number : GHA.19009

Dear Mr. Van Allen,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Troy D. Turpen". The signature is written in a cursive, flowing style.

Troy Turpen



Report Number : 88448

Date : 06/19/2014

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

Sample : **Effluent**

Matrix : Air

Lab Number : 88448-01

Sample Date :06/17/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.050	0.050	ppmv	EPA 8260B	06/18/14 15:21
Toluene	< 0.050	0.050	ppmv	EPA 8260B	06/18/14 15:21
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	06/18/14 15:21
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	06/18/14 15:21
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	06/18/14 15:21
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	06/18/14 15:21
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	06/18/14 15:21
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	06/18/14 15:21

Sample : **Influent**

Matrix : Air

Lab Number : 88448-02

Sample Date :06/17/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	1.4	0.050	ppmv	EPA 8260B	06/18/14 15:54
Toluene	0.85	0.050	ppmv	EPA 8260B	06/18/14 15:54
Ethylbenzene	0.31	0.050	ppmv	EPA 8260B	06/18/14 15:54
Total Xylenes	1.4	0.050	ppmv	EPA 8260B	06/18/14 15:54
Methyl-t-butyl ether (MTBE)	0.18	0.10	ppmv	EPA 8260B	06/18/14 15:54
TPH as Gasoline	40	5.0	ppmv	EPA 8260B	06/18/14 15:54
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/18/14 15:54
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	06/18/14 15:54

Report Number : 88448

Date : 06/19/2014

QC Report : Method Blank Data

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.050	0.050	ppmv	EPA 8260B	06/18/2014
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	06/18/2014
Toluene	< 0.050	0.050	ppmv	EPA 8260B	06/18/2014
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	06/18/2014
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	06/18/2014
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	06/18/2014
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	06/18/2014
Toluene - d8 (Surr)	107		%	EPA 8260B	06/18/2014

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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2795 2nd Street, Suite 300
 Davis, CA 95618
 Lab: 530.297.4800
 Fax: 530.297.4802

SRG # / Lab No. 88448

Project Contact (Hardcopy or PDF To): Drew Van Allen
 California EDF Report? Yes No
 Company / Address: 270 Vintage Drive, Turlock, CA 95382
 Phone Number: 209.664.1035
 Fax Number: 209.664.1040
 Project #: GHA.19009 P.O. #:
 Project Name: Shore Acres Gas
 Sampling Company Log Code: ECGT
 Global ID: T0600174667
 EDF Deliverable To (Email Address): ecg_ust@gmail.com
 Bill to: ECG LLC
 Sampler Print Name: Drew Van Allen
 Sampler Signature:

Chain-of-Custody Record and Analysis Request

Project Address:	Sampling		Container				Preservative			Matrix			
	Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil	Air
403 East 12th Street Oakland, CA													
Sample Designation													
Effluent	1025	6/17/14				X						X	
Influent	1030	↓				X						X	

Analysis Request												TAT		
PLEASE CIRCLE METHOD														
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12 hr
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24 hr
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	48hr
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	72hr
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 wk

For Lab Use Only

Relinquished by: Drew Van Allen Date: 6/17/14 Time: 12:00 Received by: Feder
 Relinquished by: _____ Date: _____ Time: _____ Received by: _____
 Relinquished by: _____ Date: 06/18/14 Time: 11:15 Received by Laboratory: [Signature]

Remarks:

For Lab Use Only: Sample Receipt					
Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No

argon laboratories

30 May 2014

Mike Sgourakis
Environmental Compliance Group, LLC
270 Vintage Drive
Turlock, CA 95382

RE: Shore Acres Gas Project Data

Enclosed are the results for sample(s) received on 05/19/14 09:32 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,



Hiram Cueto
Lab Manager

Argon Analytical Services, Inc.
CHAIN OF CUSTODY

Project Information:				Report To:				Samples Submitted To:													
Project No: GHA.18009 Project Title: Shore Acres Gas Location: 403 East 12th Street Oakland, CA				Consultant: Environmental Compliance Group, LLC Address: 270 Vintage Drive Turlock, CA 95382 Contact: Mike Spourakis Phone: 918.600.4580 Fax: 209.864.1040				Laboratory: Argon Labs Address: 2905 Railroad Avenue Ceres, CA 95307 Contact: Phone: (209) 881-9280 Fax: (209) 881-9282													
Sampler's Name: (print) Sampler's Signature:				Bill To: Client: Environmental Compliance Group, LLC Address: 270 Vintage Drive Turlock, CA				Date Results Required: Date Report Required:													
TURN AROUND TIME					ANALYSIS							COMMENTS									
RUSH	24 Hour	48 Hour	Standard (5 days)	Special (10-14 days)	TPHg and TPHd by EPA Method 8015M	BTEX, 3-DAYS/60-DAYS	1,2-DCA, 1,2-DCE, 1,2-DCA, 1,2-DCE, 1,2-DCA, 1,2-DCE	EDF Reports													
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
Sample ID	Date	Time	# Containers	Matrix																	Preservative
1015	5/15/14	1015	5	water	X	X	X														
EMW	↓	1000	↓		X	X	X														
MID	↓	1005	↓		X	X	X														
Relinquished By: <i>[Signature]</i>				Date: 5/19/14	Time: 0932	Received By: <i>[Signature]</i>				Date: 5/19/14	Time: 9:32	SPECIAL INSTRUCTIONS: Global ID# T0600174667									
Relinquished By:				Date:	Time:	Received By:				Date:	Time:										
Relinquished By:				Date:	Time:	Received By:				Date:	Time:										

Argon Laboratories Sample Receipt Checklist

Client Name: Environmental Compliance Grot Date & Time Received: 05/19/14 9:32

Project Name: Shore Acres Gas Client Project Number: GHA.19009

Received By: AH Matrix: Water Soil Sludge

Sample Carrier: Client Laboratory Fed Ex UPS Other

Argon Labs Project Number: P405028

Shipper Container in good condition? N/A Yes No Samples received in proper containers? Yes No

Samples received intact? Yes No

Samples received under refrigeration? Yes No Sufficient sample volume for requested tests? Yes No

Chain of custody present? Yes No Samples received within holding time? Yes No

Chain of Custody signed by all parties? Yes No Do samples contain proper preservative? N/A Yes No

Chain of Custody matches all sample labels? Yes No Do VOA vials contain zero headspace? (None submitted) Yes No

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: _____ Person Contacted: _____

Contacted By: _____ Subject: _____

Comments:

Action Taken:

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____

Call Received By: _____

Comments:





2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Influent	P405028-01	Water	05/15/14 10:15	05/19/14 09:32
Effluent	P405028-02	Water	05/15/14 10:00	05/19/14 09:32
MID	P405028-03	Water	05/15/14 10:05	05/19/14 09:32

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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ICP-MS Metals EPA Method 200.8

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
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Influent (P405028-01) Water Sampled: 15-May-14 10:15 Received: 19-May-14 09:32

Antimony	ND	1.0	ug/L	1	21-May-14	200.8	
Arsenic	20	1.0	"	"	"	"	
Barium	210	5.0	"	"	"	"	
Beryllium	ND	2.0	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	
Chromium	ND	1.0	"	"	"	"	
Cobalt	1.8	1.0	"	"	"	"	
Copper	6.4	5.0	"	"	"	"	
Lead	1.1	1.0	"	"	"	"	
Mercury	ND	0.10	"	"	"	"	
Molybdenum	ND	1.0	"	"	"	"	
Nickel	5.2	5.0	"	"	"	"	
Selenium	ND	1.0	"	"	"	"	
Silver	ND	1.0	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	
Vanadium	ND	1.0	"	"	"	"	
Zinc	12	5.0	"	"	"	"	

Effluent (P405028-02) Water Sampled: 15-May-14 10:00 Received: 19-May-14 09:32

Antimony	ND	1.0	ug/L	1	21-May-14	200.8	
Arsenic	12	1.0	"	"	"	"	
Barium	99	5.0	"	"	"	"	
Beryllium	ND	2.0	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	
Chromium	ND	1.0	"	"	"	"	
Cobalt	ND	1.0	"	"	"	"	
Copper	ND	5.0	"	"	"	"	
Lead	ND	1.0	"	"	"	"	
Mercury	ND	0.10	"	"	"	"	
Molybdenum	2.1	1.0	"	"	"	"	
Nickel	7.7	5.0	"	"	"	"	
Selenium	ND	1.0	"	"	"	"	
Silver	ND	1.0	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	
Vanadium	1.7	1.0	"	"	"	"	
Zinc	41	5.0	"	"	"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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Total Petroleum Hydrocarbons @ Diesel

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
Influent (P405028-01) Water Sampled: 15-May-14 10:15 Received: 19-May-14 09:32							
Diesel	ND	50	ug/L	1	20-May-14	EPA 8015Mod	
Surr. Rec.:		117 %			"	"	
Effluent (P405028-02) Water Sampled: 15-May-14 10:00 Received: 19-May-14 09:32							
Diesel	ND	50	ug/L	1	20-May-14	EPA 8015Mod	
Surr. Rec.:		110 %			"	"	
MID (P405028-03) Water Sampled: 15-May-14 10:05 Received: 19-May-14 09:32							
Diesel	ND	50	ug/L	1	20-May-14	EPA 8015Mod	
Surr. Rec.:		115 %			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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Total Petroleum Hydrocarbons @ Gasoline

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
Influent (P405028-01) Water Sampled: 15-May-14 10:15 Received: 19-May-14 09:32							
Total Petroleum Hydrocarbons @ Gasoline	1800	50	ug/L	1	20-May-14	8015M	
Surr. Rec.:		107 %			"	"	
Effluent (P405028-02) Water Sampled: 15-May-14 10:00 Received: 19-May-14 09:32							
Total Petroleum Hydrocarbons @ Gasoline	ND	50	ug/L	1	20-May-14	8015M	
Surr. Rec.:		98 %			"	"	
MID (P405028-03) Water Sampled: 15-May-14 10:05 Received: 19-May-14 09:32							
Total Petroleum Hydrocarbons @ Gasoline	ND	50	ug/L	1	20-May-14	8015M	
Surr. Rec.:		93 %			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgurakis	Work Order No.: P405028
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Volatile Organic Compounds by GC/MS - EPA Method 624

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
Influent (P405028-01) Water Sampled: 15-May-14 10:15 Received: 19-May-14 09:32							
Benzene	98	0.5	ug/L	1	28-May-14	EPA 624	
Bromodichloromethane	ND	0.5	"	"	"	"	
Bromoform	ND	0.5	"	"	"	"	
Bromomethane	ND	0.5	"	"	"	"	
Carbon tetrachloride	ND	0.5	"	"	"	"	
Chlorobenzene	ND	0.5	"	"	"	"	
Chloroethane	ND	0.5	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	
Chloroform	ND	0.5	"	"	"	"	
Chloromethane	ND	0.5	"	"	"	"	
Dibromochloromethane	ND	0.5	"	"	"	"	
1,2-Dichlorobenzene	ND	0.5	"	"	"	"	
1,3-Dichlorobenzene	ND	0.5	"	"	"	"	
1,4-Dichlorobenzene	ND	0.5	"	"	"	"	
Dichlorodifluoromethane	ND	0.5	"	"	"	"	
1,1-Dichloroethane	ND	0.5	"	"	"	"	
1,2-Dichloroethane	ND	0.5	"	"	"	"	
1,1-Dichloroethene	ND	0.5	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.5	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.5	"	"	"	"	
1,2-Dichloropropane	ND	0.5	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.5	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.5	"	"	"	"	
Ethylbenzene	50	0.5	"	"	"	"	
Methylene chloride	ND	0.5	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.5	"	"	"	"	
Tetrachloroethene	ND	0.5	"	"	"	"	
Toluene	310	0.5	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.5	"	"	"	"	
1,1,1-Trichloroethane	ND	0.5	"	"	"	"	
1,1,2-Trichloroethane	ND	0.5	"	"	"	"	
Trichloroethene	ND	0.5	"	"	"	"	
Trichlorofluoromethane	ND	0.5	"	"	"	"	
Vinyl chloride	ND	0.5	"	"	"	"	
Surr. Rec.:		111 %			"	"	
Surr. Rec.:		102 %			"	"	
Surr. Rec.:		111 %			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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Volatile Organic Compunds by GC/MS - EPA Method 624

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
Effluent (P405028-02) Water Sampled: 15-May-14 10:00 Received: 19-May-14 09:32							
Benzene	ND	0.5	ug/L	1	28-May-14	EPA 624	
Bromodichloromethane	ND	0.5	"	"	"	"	
Bromoform	ND	0.5	"	"	"	"	
Bromomethane	ND	0.5	"	"	"	"	
Carbon tetrachloride	ND	0.5	"	"	"	"	
Chlorobenzene	ND	0.5	"	"	"	"	
Chloroethane	ND	0.5	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	
Chloroform	ND	0.5	"	"	"	"	
Chloromethane	ND	0.5	"	"	"	"	
Dibromochloromethane	ND	0.5	"	"	"	"	
1,2-Dichlorobenzene	ND	0.5	"	"	"	"	
1,3-Dichlorobenzene	ND	0.5	"	"	"	"	
1,4-Dichlorobenzene	ND	0.5	"	"	"	"	
Dichlorodifluoromethane	ND	0.5	"	"	"	"	
1,1-Dichloroethane	ND	0.5	"	"	"	"	
1,2-Dichloroethane	ND	0.5	"	"	"	"	
1,1-Dichloroethene	ND	0.5	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.5	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.5	"	"	"	"	
1,2-Dichloropropane	ND	0.5	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.5	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.5	"	"	"	"	
Ethylbenzene	ND	0.5	"	"	"	"	
Methylene chloride	ND	0.5	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.5	"	"	"	"	
Tetrachloroethene	ND	0.5	"	"	"	"	
Toluene	ND	0.5	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.5	"	"	"	"	
1,1,1-Trichloroethane	ND	0.5	"	"	"	"	
1,1,2-Trichloroethane	ND	0.5	"	"	"	"	
Trichloroethene	ND	0.5	"	"	"	"	
Trichlorofluoromethane	ND	0.5	"	"	"	"	
Vinyl chloride	ND	0.5	"	"	"	"	
Surr. Rec.:		119 %			"	"	
Surr. Rec.:		102 %			"	"	
Surr. Rec.:		107 %			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC	Project Number: GHA.19009	Work Order No.:
270 Vintage Drive	Project Name: Shore Acres Gas	P405028
Turlock, CA 95382	Project Manager: Mike Sgourakis	

Volatile Organic Compunds by GC/MS - EPA Method 624

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
MID (P405028-03) Water Sampled: 15-May-14 10:05 Received: 19-May-14 09:32							
Benzene	ND	0.5	ug/L	1	28-May-14	EPA 624	
Bromodichloromethane	ND	0.5	"	"	"	"	
Bromoform	ND	0.5	"	"	"	"	
Bromomethane	ND	0.5	"	"	"	"	
Carbon tetrachloride	ND	0.5	"	"	"	"	
Chlorobenzene	ND	0.5	"	"	"	"	
Chloroethane	ND	0.5	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	
Chloroform	ND	0.5	"	"	"	"	
Chloromethane	ND	0.5	"	"	"	"	
Dibromochloromethane	ND	0.5	"	"	"	"	
1,2-Dichlorobenzene	ND	0.5	"	"	"	"	
1,3-Dichlorobenzene	ND	0.5	"	"	"	"	
1,4-Dichlorobenzene	ND	0.5	"	"	"	"	
Dichlorodifluoromethane	ND	0.5	"	"	"	"	
1,1-Dichloroethane	ND	0.5	"	"	"	"	
1,2-Dichloroethane	ND	0.5	"	"	"	"	
1,1-Dichloroethene	ND	0.5	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.5	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.5	"	"	"	"	
1,2-Dichloropropane	ND	0.5	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.5	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.5	"	"	"	"	
Ethylbenzene	2.4	0.5	"	"	"	"	
Methylene chloride	ND	0.5	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.5	"	"	"	"	
Tetrachloroethene	ND	0.5	"	"	"	"	
Toluene	ND	0.5	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.5	"	"	"	"	
1,1,1-Trichloroethane	ND	0.5	"	"	"	"	
1,1,2-Trichloroethane	ND	0.5	"	"	"	"	
Trichloroethene	ND	0.5	"	"	"	"	
Trichlorofluoromethane	ND	0.5	"	"	"	"	
Vinyl chloride	ND	0.5	"	"	"	"	
Surr. Rec.:		117 %			"	"	
Surr. Rec.:		103 %			"	"	
Surr. Rec.:		110 %			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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ICP-MS Metals EPA Method 200.8 - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P400585 - EPA 3005A

Blank (P400585-BLK1)

Prepared: 05/20/14 Analyzed: 05/21/14

Antimony	ND	1.0	ug/L							
Arsenic	ND	1.0	"							
Barium	ND	5.0	"							
Beryllium	ND	2.0	"							
Cadmium	ND	1.0	"							
Chromium	ND	1.0	"							
Cobalt	ND	1.0	"							
Copper	ND	5.0	"							
Lead	ND	1.0	"							
Mercury	ND	0.10	"							
Molybdenum	ND	1.0	"							
Nickel	ND	5.0	"							
Selenium	ND	1.0	"							
Silver	ND	1.0	"							
Thallium	ND	1.0	"							
Vanadium	ND	1.0	"							
Zinc	ND	5.0	"							

LCS (P400585-BS1)

Prepared: 05/20/14 Analyzed: 05/21/14

Antimony	49.80		ug/L	50		100	80-120			
Arsenic	51.00		"	50		102	80-120			
Barium	47.40		"	50		95	80-120			
Beryllium	49.40		"	50		99	80-120			
Cadmium	49.30		"	50		99	80-120			
Chromium	48.80		"	50		98	80-120			
Cobalt	50.80		"	50		102	80-120			
Copper	50.50		"	50		101	80-120			
Lead	49.90		"	50		100	80-120			
Mercury	1.10		"	1.2		92	80-120			
Molybdenum	48.00		"	50		96	80-120			
Nickel	49.90		"	50		100	80-120			
Selenium	51.30		"	50		103	80-120			
Silver	49.30		"	50		99	80-120			
Thallium	49.00		"	50		98	80-120			
Vanadium	48.60		"	50		97	80-120			
Zinc	509.0		"	500		102	80-120			

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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Total Petroleum Hydrocarbons @ Diesel - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P400553 - EPA 3510C

Blank (P400553-BLK1) Prepared & Analyzed: 05/20/14

Surrogate: <i>p-Terphenyl</i>	100		ug/L	100		100	70-130			
Diesel	ND	50	"							

LCS (P400553-BS1) Prepared & Analyzed: 05/20/14

Diesel	176		ug/L	200		88	80-120			
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LCS Dup (P400553-BSD1) Prepared & Analyzed: 05/20/14

Diesel	180		ug/L	200		90	80-120	2	20	
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Matrix Spike (P400553-MS1) Source: P405016-01 Prepared & Analyzed: 05/20/14

Diesel	171		ug/L	200	ND	86	70-130			
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Matrix Spike Dup (P400553-MSD1) Source: P405016-01 Prepared & Analyzed: 05/20/14

Diesel	172		ug/L	200	ND	86	70-130	0.6	20	
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Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC
 270 Vintage Drive
 Turlock, CA 95382

Project Number: GHA.19009
 Project Name: Shore Acres Gas
 Project Manager: Mike Sgourakis

Work Order No.:
 P405028

Total Petroleum Hydrocarbons @ Gasoline - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P400554 - EPA 5030B										
Blank (P400554-BLK1)										
					Prepared & Analyzed: 05/20/14					
<i>Surrogate: a,a,a-Trifluorotoluene</i>	50.0		ug/L	50		100	70-130			
Total Petroleum Hydrocarbons @ Gasoline	ND	50	"							
LCS (P400554-BS1)										
					Prepared & Analyzed: 05/20/14					
Total Petroleum Hydrocarbons @ Gasoline	848		ug/L	1000		85	80-120			
LCS Dup (P400554-BSD1)										
					Prepared & Analyzed: 05/20/14					
Total Petroleum Hydrocarbons @ Gasoline	878		ug/L	1000		88	80-120	3	20	
Matrix Spike (P400554-MS1)										
					Source: P405028-03		Prepared & Analyzed: 05/20/14			
Total Petroleum Hydrocarbons @ Gasoline	889		ug/L	1000	ND	89	70-130			
Matrix Spike Dup (P400554-MSD1)										
					Source: P405028-03		Prepared & Analyzed: 05/20/14			
Total Petroleum Hydrocarbons @ Gasoline	843		ug/L	1000	ND	84	70-130	5	20	

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Environmental Compliance Group, LLC
 270 Vintage Drive
 Turlock, CA 95382

Project Number: GHA.19009
 Project Name: Shore Acres Gas
 Project Manager: Mike Sgourakis

Work Order No.:
 P405028

Volatile Organic Compounds by GC/MS - EPA Method 624 - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P400586 - EPA 5030B

Blank (P400586-BLK1)

Prepared & Analyzed: 05/28/14

<i>Surrogate: Dibromofluoromethane</i>	60.5		ug/L	50		121	70-130			
<i>Surrogate: Toluene-d8</i>	50.5		"	50		101	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	55.0		"	50		110	70-130			
Benzene	ND	0.5	"							
Bromodichloromethane	ND	0.5	"							
Bromoform	ND	0.5	"							
Bromomethane	ND	0.5	"							
Carbon tetrachloride	ND	0.5	"							
Chlorobenzene	ND	0.5	"							
Chloroethane	ND	0.5	"							
2-Chloroethylvinyl ether	ND	1.0	"							
Chloroform	ND	0.5	"							
Chloromethane	ND	0.5	"							
Dibromochloromethane	ND	0.5	"							
1,2-Dichlorobenzene	ND	0.5	"							
1,3-Dichlorobenzene	ND	0.5	"							
1,4-Dichlorobenzene	ND	0.5	"							
Dichlorodifluoromethane	ND	0.5	"							
1,1-Dichloroethane	ND	0.5	"							
1,2-Dichloroethane	ND	0.5	"							
1,1-Dichloroethene	ND	0.5	"							
cis-1,2-Dichloroethene	ND	0.5	"							
trans-1,2-Dichloroethene	ND	0.5	"							
1,2-Dichloropropane	ND	0.5	"							
cis-1,3-Dichloropropene	ND	0.5	"							
trans-1,3-Dichloropropene	ND	0.5	"							
Ethylbenzene	ND	0.5	"							
Methylene chloride	ND	0.5	"							
1,1,2,2-Tetrachloroethane	ND	0.5	"							
Tetrachloroethene	ND	0.5	"							
Toluene	ND	0.5	"							
1,2,4-Trichlorobenzene	ND	0.5	"							
1,1,1-Trichloroethane	ND	0.5	"							
1,1,2-Trichloroethane	ND	0.5	"							
Trichloroethene	ND	0.5	"							
Trichlorofluoromethane	ND	0.5	"							

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Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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Volatile Organic Compounds by GC/MS - EPA Method 624 - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch P400586 - EPA 5030B

Blank (P400586-BLK1)	Prepared & Analyzed: 05/28/14									
Vinyl chloride	ND	0.5	ug/L							

LCS (P400586-BS1)	Prepared & Analyzed: 05/28/14									
Benzene	23.7		ug/L	25		95	80-120			
Chlorobenzene	22.8		"	25		91	80-120			
1,1-Dichloroethene	28.9		"	25		116	80-120			
Toluene	25.7		"	25		103	80-120			
Trichloroethene	23.0		"	25		92	80-120			

LCS Dup (P400586-BSD1)	Prepared & Analyzed: 05/28/14									
Benzene	24.6		ug/L	25		98	80-120	4	20	
Chlorobenzene	23.5		"	25		94	80-120	3	20	
1,1-Dichloroethene	28.3		"	25		113	80-120	2	20	
Toluene	26.6		"	25		106	80-120	3	20	
Trichloroethene	23.5		"	25		94	80-120	2	20	

Matrix Spike (P400586-MS1)	Source: P405028-02		Prepared & Analyzed: 05/28/14							
Benzene	25.6		ug/L	25	ND	102	70-130			
Chlorobenzene	24.6		"	25	ND	98	70-130			
1,1-Dichloroethene	28.4		"	25	ND	114	70-130			
Toluene	27.4		"	25	ND	110	70-130			
Trichloroethene	25.4		"	25	ND	102	70-130			

Matrix Spike Dup (P400586-MSD1)	Source: P405028-02		Prepared & Analyzed: 05/28/14							
Benzene	24.5		ug/L	25	ND	98	70-130	4	20	
Chlorobenzene	24.6		"	25	ND	98	70-130	0	20	
1,1-Dichloroethene	27.7		"	25	ND	111	70-130	2	20	
Toluene	26.7		"	25	ND	107	70-130	3	20	
Trichloroethene	23.8		"	25	ND	95	70-130	7	20	

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Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P405028
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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

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argon laboratories

08 July 2014

Mike Sgourakis
Environmental Compliance Group, LLC
270 Vintage Drive
Turlock, CA 95382

RE: Shore Acres Gas Project Data

Enclosed are the results for sample(s) received on 06/30/14 16:40 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,



Hiram Cueto
Lab Manager

Argon Laboratories Sample Receipt Checklist

Client Name: Environmental Compliance Gro Date & Time Received: 06/30/14 16:40
Project Name: Shore Acres Gas Client Project Number: GHA.19009
Received By: JH Matrix: Water Soil Sludge
Sample Carrier: Client Laboratory Fed Ex UPS Other
Argon Labs Project Number: P406048
Shipper Container in good condition? N/A Yes No Samples received in proper containers? Yes No
Samples received intact? Yes No Sufficient sample volume for requested tests? Yes No
Chain of custody present? Yes No Samples received within holding time? Yes No
Chain of Custody signed by all parties? Yes No Do samples contain proper preservative?
N/A Yes No
Chain of Custody matches all sample labels? Yes No Do VOA vials contain zero headspace?
(None submitted) Yes No

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: 07/01/14 Person Contacted: Drew
Contacted By: Araceli Subject: TPH-Diesel

Comments:
No amber liters were received so TPH-Diesel was cancelled by Drew on 07/01/14.

Action Taken:

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____
Call Received By: _____

Comments:



Environmental Compliance Group, LLC
270 Vintage Drive
Turlock, CA 95382

Project Number: GHA.19009
Project Name: Shore Acres Gas
Project Manager: Mike Sgourakis

Work Order No.:
P406048

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	P406048-01	Water	06/27/14 12:40	06/30/14 16:40
MW-2	P406048-02	Water	06/27/14 10:58	06/30/14 16:40
MW-3	P406048-03	Water	06/27/14 12:50	06/30/14 16:40
MW-4	P406048-04	Water	06/27/14 11:15	06/30/14 16:40
MW-6	P406048-05	Water	06/27/14 11:38	06/30/14 16:40
EW-1	P406048-06	Water	06/27/14 13:00	06/30/14 16:40
EW-2	P406048-07	Water	06/27/14 11:25	06/30/14 16:40
EW-3	P406048-08	Water	06/27/14 12:15	06/30/14 16:40
EW-4	P406048-09	Water	06/27/14 12:20	06/30/14 16:40

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Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P406048
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Total Petroleum Hydrocarbons @ Gasoline

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
MW-1 (P406048-01) Water Sampled: 27-Jun-14 12:40 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	15000	1000	ug/L	20	03-Jul-14	8015M	
Surr. Rec.:		104 %			"	"	
MW-2 (P406048-02) Water Sampled: 27-Jun-14 10:58 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	1300	100	ug/L	2	03-Jul-14	8015M	
Surr. Rec.:		92 %			"	"	
MW-3 (P406048-03) Water Sampled: 27-Jun-14 12:50 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	12000	1000	ug/L	20	03-Jul-14	8015M	
Surr. Rec.:		98 %			"	"	
MW-4 (P406048-04) Water Sampled: 27-Jun-14 11:15 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	3300	250	ug/L	5	03-Jul-14	8015M	
Surr. Rec.:		103 %			"	"	
MW-6 (P406048-05) Water Sampled: 27-Jun-14 11:38 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	9800	500	ug/L	10	03-Jul-14	8015M	
Surr. Rec.:		103 %			"	"	
EW-1 (P406048-06) Water Sampled: 27-Jun-14 13:00 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	12000	1000	ug/L	20	03-Jul-14	8015M	
Surr. Rec.:		98 %			"	"	
EW-2 (P406048-07) Water Sampled: 27-Jun-14 11:25 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	27000	620	ug/L	12.5	03-Jul-14	8015M	
Surr. Rec.:		100 %			"	"	

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Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgurakis	Work Order No.: P406048
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Total Petroleum Hydrocarbons @ Gasoline

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
EW-3 (P406048-08) Water Sampled: 27-Jun-14 12:15 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	27000	620	ug/L	12.5	03-Jul-14	8015M	
Surr. Rec.:		103 %			"	"	
EW-4 (P406048-09) Water Sampled: 27-Jun-14 12:20 Received: 30-Jun-14 16:40							
Total Petroleum Hydrocarbons @ Gasoline	8400	250	ug/L	5	03-Jul-14	8015M	
Surr. Rec.:		104 %			"	"	

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Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC
 270 Vintage Drive
 Turlock, CA 95382

Project Number: GHA.19009
 Project Name: Shore Acres Gas
 Project Manager: Mike Sgourakis

Work Order No.:
 P406048

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting		Dilution	Analyzed	Method	Notes
		Limit	Units				

MW-1 (P406048-01) Water Sampled: 27-Jun-14 12:40 Received: 30-Jun-14 16:40

Benzene	2500	10	ug/L	20	01-Jul-14	8260B	
Toluene	280	10	"	"	"	"	
Xylenes, total	2400	20	"	"	"	"	
Ethylbenzene	2400	10	"	"	"	"	
t-Butanol	ND	100	"	"	"	"	
Methyl tert-Butyl Ether	97	10	"	"	"	"	
Di-Isopropyl Ether	ND	10	"	"	"	"	
Ethyl tert-Butyl Ether	ND	10	"	"	"	"	
tert-Amyl Methyl Ether	ND	10	"	"	"	"	
1,2-Dichloroethane	ND	10	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	10	"	"	"	"	

Surr. Rec.: 101 %

MW-2 (P406048-02) Water Sampled: 27-Jun-14 10:58 Received: 30-Jun-14 16:40

Benzene	200	5.0	ug/L	10	01-Jul-14	8260B	
Toluene	22	5.0	"	"	"	"	
Xylenes, total	160	10	"	"	"	"	
Ethylbenzene	85	5.0	"	"	"	"	
t-Butanol	ND	50	"	"	"	"	
Methyl tert-Butyl Ether	21	5.0	"	"	"	"	
Di-Isopropyl Ether	ND	5.0	"	"	"	"	
Ethyl tert-Butyl Ether	ND	5.0	"	"	"	"	
tert-Amyl Methyl Ether	ND	5.0	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	

Surr. Rec.: 97 %

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Environmental Compliance Group, LLC
 270 Vintage Drive
 Turlock, CA 95382

Project Number: GHA.19009
 Project Name: Shore Acres Gas
 Project Manager: Mike Sgourakis

Work Order No.:
 P406048

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting		Units	Dilution	Analyzed	Method	Notes
		Limit						
MW-3 (P406048-03) Water Sampled: 27-Jun-14 12:50 Received: 30-Jun-14 16:40								
Benzene	5800	25		ug/L	50	01-Jul-14	8260B	
Toluene	240	25		"	"	"	"	
Xylenes, total	760	50		"	"	"	"	
Ethylbenzene	860	25		"	"	"	"	
t-Butanol	260	250		"	"	"	"	
Methyl tert-Butyl Ether	520	25		"	"	"	"	
Di-Isopropyl Ether	ND	25		"	"	"	"	
Ethyl tert-Butyl Ether	ND	25		"	"	"	"	
tert-Amyl Methyl Ether	ND	25		"	"	"	"	
1,2-Dichloroethane	ND	25		"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25		"	"	"	"	
Surr. Rec.:		102 %				"	"	
MW-4 (P406048-04) Water Sampled: 27-Jun-14 11:15 Received: 30-Jun-14 16:40								
Benzene	550	2.5		ug/L	5	01-Jul-14	8260B	
Toluene	290	2.5		"	"	"	"	
Xylenes, total	420	5.0		"	"	"	"	
Ethylbenzene	200	2.5		"	"	"	"	
t-Butanol	ND	25		"	"	"	"	
Methyl tert-Butyl Ether	ND	2.5		"	"	"	"	
Di-Isopropyl Ether	ND	2.5		"	"	"	"	
Ethyl tert-Butyl Ether	ND	2.5		"	"	"	"	
tert-Amyl Methyl Ether	ND	2.5		"	"	"	"	
1,2-Dichloroethane	ND	2.5		"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5		"	"	"	"	
Surr. Rec.:		94 %				"	"	

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Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P406048
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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting		Dilution	Analyzed	Method	Notes
		Limit	Units				
MW-6 (P406048-05) Water Sampled: 27-Jun-14 11:38 Received: 30-Jun-14 16:40							
Benzene	1200	2.5	ug/L	5	01-Jul-14	8260B	
Toluene	75	2.5	"	"	"	"	
Xylenes, total	530	5.0	"	"	"	"	
Ethylbenzene	2800	2.5	"	"	"	"	
t-Butanol	ND	25	"	"	"	"	
Methyl tert-Butyl Ether	4.9	2.5	"	"	"	"	
Di-Isopropyl Ether	ND	2.5	"	"	"	"	
Ethyl tert-Butyl Ether	ND	2.5	"	"	"	"	
tert-Amyl Methyl Ether	ND	2.5	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	
Surr. Rec.:		100 %			"	"	

EW-1 (P406048-06) Water Sampled: 27-Jun-14 13:00 Received: 30-Jun-14 16:40							
Benzene	1400	10	ug/L	20	01-Jul-14	8260B	
Toluene	210	10	"	"	"	"	
Xylenes, total	2400	20	"	"	"	"	
Ethylbenzene	1900	10	"	"	"	"	
t-Butanol	ND	100	"	"	"	"	
Methyl tert-Butyl Ether	40	10	"	"	"	"	
Di-Isopropyl Ether	ND	10	"	"	"	"	
Ethyl tert-Butyl Ether	ND	10	"	"	"	"	
tert-Amyl Methyl Ether	ND	10	"	"	"	"	
1,2-Dichloroethane	ND	10	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	10	"	"	"	"	
Surr. Rec.:		95 %			"	"	

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Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P406048
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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting		Dilution	Analyzed	Method	Notes
		Limit	Units				
EW-2 (P406048-07) Water . Sampled: 27-Jun-14 11:25 Received: 30-Jun-14 16:40							
Benzene	3200	5.0	ug/L	10	01-Jul-14	8260B	
Toluene	5600	5.0	"	"	"	"	
Xylenes, total	8000	10	"	"	"	"	
Ethylbenzene	1200	5.0	"	"	"	"	
t-Butanol	ND	50	"	"	"	"	
Methyl tert-Butyl Ether	110	5.0	"	"	"	"	
Di-Isopropyl Ether	ND	5.0	"	"	"	"	
Ethyl tert-Butyl Ether	ND	5.0	"	"	"	"	
tert-Amyl Methyl Ether	ND	5.0	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	
Surr. Rec.:		101 %			"	"	
EW-3 (P406048-08) Water Sampled: 27-Jun-14 12:15 Received: 30-Jun-14 16:40							
Benzene	4300	5.0	ug/L	10	01-Jul-14	8260B	
Toluene	4300	5.0	"	"	"	"	
Xylenes, total	7900	10	"	"	"	"	
Ethylbenzene	1200	5.0	"	"	"	"	
t-Butanol	360	50	"	"	"	"	
Methyl tert-Butyl Ether	150	5.0	"	"	"	"	
Di-Isopropyl Ether	ND	5.0	"	"	"	"	
Ethyl tert-Butyl Ether	ND	5.0	"	"	"	"	
tert-Amyl Methyl Ether	ND	5.0	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	
Surr. Rec.:		103 %			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382	Project Number: GHA.19009 Project Name: Shore Acres Gas Project Manager: Mike Sgourakis	Work Order No.: P406048
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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting		Units	Dilution	Analyzed	Method	Notes
		Limit						
EW-4 (P406048-09) Water Sampled: 27-Jun-14 12:20 Received: 30-Jun-14 16:40								
Benzene	1500	2.5		ug/L	5	01-Jul-14	8260B	
Toluene	940	2.5		"	"	"	"	
Xylenes, total	2100	5.0		"	"	"	"	
Ethylbenzene	540	2.5		"	"	"	"	
t-Butanol	65	25		"	"	"	"	
Methyl tert-Butyl Ether	82	2.5		"	"	"	"	
Di-Isopropyl Ether	ND	2.5		"	"	"	"	
Ethyl tert-Butyl Ether	ND	2.5		"	"	"	"	
tert-Amyl Methyl Ether	ND	2.5		"	"	"	"	
1,2-Dichloroethane	ND	2.5		"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5		"	"	"	"	
Surr. Rec.:								103 %

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC
 270 Vintage Drive
 Turlock, CA 95382

Project Number: GHA.19009
 Project Name: Shore Acres Gas
 Project Manager: Mike Sgourakis

Work Order No.:
 P406048

Total Petroleum Hydrocarbons @ Gasoline - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P400733 - EPA 5030B										
Blank (P400733-BLK1)				Prepared & Analyzed: 07/03/14						
Surrogate: <i>a,a,a</i> -Trifluorotoluene	48.0		ug/L	50		96	70-130			
Total Petroleum Hydrocarbons @ Gasoline	ND	50	"							
LCS (P400733-BS1)				Prepared & Analyzed: 07/03/14						
Total Petroleum Hydrocarbons @ Gasoline	947		ug/L	1000		95	80-120			
LCS Dup (P400733-BSD1)				Prepared & Analyzed: 07/03/14						
Total Petroleum Hydrocarbons @ Gasoline	1010		ug/L	1000		101	80-120	7	20	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

Environmental Compliance Group, LLC
 270 Vintage Drive
 Turlock, CA 95382

Project Number: GHA.19009
 Project Name: Shore Acres Gas
 Project Manager: Mike Sgourakis

Work Order No.:
 P406048

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P400730 - EPA 5030B										
Blank (P400730-BLK1)				Prepared & Analyzed: 07/01/14						
<i>Surrogate: Fluorobenzene</i>	52.0		ug/L	50		104	70-130			
Benzene	ND	0.5	"							
Toluene	ND	0.5	"							
Xylenes, total	ND	1.0	"							
Ethylbenzene	ND	0.5	"							
t-Butanol	ND	5.0	"							
Methyl tert-Butyl Ether	ND	0.5	"							
Di-Isopropyl Ether	ND	0.5	"							
Ethyl tert-Butyl Ether	ND	0.5	"							
tert-Amyl Methyl Ether	ND	0.5	"							
1,2-Dichloroethane	ND	0.5	"							
1,2-Dibromoethane (EDB)	ND	0.5	"							
LCS (P400730-BS1)				Prepared & Analyzed: 07/01/14						
Benzene	25.5		ug/L	25		102	80-120			
LCS Dup (P400730-BSD1)				Prepared & Analyzed: 07/01/14						
Benzene	25.1		ug/L	25		100	80-120	2	20	
Matrix Spike (P400730-MS1)				Source: P406047-03		Prepared & Analyzed: 07/01/14				
Toluene	25.1		ug/L	25	ND	100	70-130			
Matrix Spike (P400730-MS2)				Source: P406047-07		Prepared & Analyzed: 07/01/14				
Toluene	26.9		ug/L	25	ND	108	70-130			
Matrix Spike Dup (P400730-MSD1)				Source: P406047-03		Prepared & Analyzed: 07/01/14				
Toluene	24.9		ug/L	25	ND	100	70-130	0.8	20	
Matrix Spike Dup (P400730-MSD2)				Source: P406047-07		Prepared & Analyzed: 07/01/14				
Toluene	26.8		ug/L	25	ND	107	70-130	0.4	20	

Approved By

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Environmental Compliance Group, LLC
270 Vintage Drive
Turlock, CA 95382

Project Number: GHA.19009
Project Name: Shore Acres Gas
Project Manager: Mike Sgourakis

Work Order No.:
P406048

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

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	04/30/14
Time of arrival:	09:00
Time of departure:	14:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level (OK/Low)	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)	Flow (SCFM)	Blower Pressure			
OK				123.0	23	0	5,520.6	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES			
	Natural Gas		Gas Train	EFFLUENT	Time (hours)	Sampler	PID (ppmv)
	Meter (ft ³ X 1000)	Flow Rate (SCFM)	Pressure (psig)	Flow (SCFM)			
				123.0	EFFLUENT		
					INFLUENT		

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	100%	---	---	---	water
EW-3	0%	---	---	---	---
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1456 Dil 1263
Collected AS influent sample
Groundwater flow meter 189810

Shore Acres Gas
403 East 12th Street
Oakland, California

Date of site visit:	05/02/14
Time of arrival:	09:00
Time of departure:	11:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)								
OK				153.0	23	0	5,566.4	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT Flow (SCFM)		Time	Sampler	PID
	Meter (ft ³ X 1000)	Flow Rate (SCFM)	Pressure (psig)			(hours)		(ppmv)
				153.0	EFFLUENT			
					INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	100%	---	---	---	water
EW-3	0%	---	---	---	---
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Opened well EW-3 halfway when left site
Temp 1618 Dil 1556
Groundwater flow meter 202550

Shore Acres Gas
403 East 12th Street
Oakland, California

Date of site visit:	05/05/14
Time of arrival:	09:00
Time of departure:	10:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	shutdown

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)								
OK						0	5,633.1	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT Flow (SCFM)		Time	Sampler	PID
	Meter (ft ³ X 1000)	Flow Rate (SCFM)	Pressure (psig)			(hours)		(ppmv)
					EFFLUENT			
					INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	100%	---	---	---	---
EW-3	50%	---	---	---	---
EW-4	100%	---	---	---	---

MISC. FIELD NOTES
System down, ran out of propane
Contacted Amerigas
Groundwater flow meter 222620

Shore Acres Gas
403 East 12th Street
Oakland, California

Date of site visit:	05/08/14
Time of arrival:	09:00
Time of departure:	14:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)				139.0	20	0	5,640.0	09:00
OK								

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT Flow (SCFM)		Time	Sampler	PID
	Meter (ft³ X 1000)	Flow Rate (SCFM)	Pressure (psig)			(hours)		(ppmv)
				139.0	EFFLUENT			
					INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	0%	---	---	---	---
EW-3	50%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Restarted unit, it had run out of propane
Temp 1490 DII 1415
Groundwater flow meter 222840

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	05/09/14
Time of arrival:	09:00
Time of departure:	11:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level (OK/Low)	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)	Flow (SCFM)	Blower Pressure			
OK				149.0	20	0	5,659.9	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES			
	Natural Gas		Gas Train	EFFLUENT	Time (hours)	Sampler	PID (ppmv)
	Meter (ft³ X 1000)	Flow Rate (SCFM)	Pressure (psig)	Flow (SCFM)			
				149.0	EFFLUENT		
					INFLUENT		

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	0%	---	---	---	---
EW-3	100%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1571 Dil 1516
Groundwater flow meter 229080

Shore Acres Gas
403 East 12th Street
Oakland, California

Date of site visit:	05/14/14
Time of arrival:	09:00
Time of departure:	12:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours	Time
	ΔP	Temp.	Pressure	Flow	Blower			
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
OK				134.0	25	0	5,749.8	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT		Time	Sampler	PID
	Meter	Flow Rate	Pressure			Flow		
	(ft ³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT			
				134.0	INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open	Vacuum	Delta PI	Temp	Field PID
	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	0%	---	---	---	---
EW-2	0%	---	---	---	---
EW-3	100%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Restarted unit
Temp 1667 Dil 1601
Groundwater flow meter 254410

Shore Acres Gas
403 East 12th Street
Oakland, California

Date of site visit:	05/15/14
Time of arrival:	09:00
Time of departure:	12:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)								
OK				138.0	20	0	5,772.1	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT Flow (SCFM)		Time	Sampler	PID
	Meter (ft ³ X 1000)	Flow Rate (SCFM)	Pressure (psig)			(hours)		(ppmv)
				138.0	EFFLUENT			
					INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	0%	---	---	---	---
EW-3	100%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1645 Dil 1583
Groundwater flow meter 258910

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	05/19/14
Time of arrival:	09:00
Time of departure:	11:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours	Time
	ΔP	Temp.	Pressure	Flow	Blower			
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
OK				140.0	20	0	5,870.8	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES			
	Natural Gas		Gas Train	EFFLUENT	Time	Sampler	PID
	Meter	Flow Rate	Pressure	Flow			
	(ft ³ X 1000)	(SCFM)	(psig)	(SCFM)	(hours)		(ppmv)
				140.0	EFFLUENT		
					INFLUENT		

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open	Vacuum	Delta PI	Temp	Field PID
	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	0%	---	---	---	---
EW-2	0%	---	---	---	---
EW-3	100%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1599 Dil 1540
Groundwater flow meter 275820

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	05/21/14
Time of arrival:	08:00
Time of departure:	14:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)				122.0	22	0	5,915.2	08:00
OK								

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train Pressure (psig)	EFFLUENT Flow (SCFM)		Time	Sampler	PID (ppmv)
	Meter (ft³ X 1000)	Flow Rate (SCFM)				(hours)		
				122.0	EFFLUENT			
					INFLUENT		dva	2,104

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open	Vacuum	Delta Pl	Temp	Field PID
	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	100%	---	---	---	water
EW-2	100%	---	---	---	water
EW-3	---	---	---	---	---
EW-4	---	---	---	---	---

MISC. FIELD NOTES
Put more holes in stingers
Temp 1650 Dil 1558
John Orick onsite to help with unit diagnostic
Groundwater flow meter 275820

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	05/27/14
Time of arrival:	10:00
Time of departure:	13:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)								
OK				106.0	23	0	6,062.9	10:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT Flow (SCFM)		Time (hours)	Sampler	PID (ppmv)
	Meter (ft ³ X 1000)	Flow Rate (SCFM)	Pressure (psig)					
				106.0	EFFLUENT	12:00	dva	1.9
					INFLUENT	12:05	dva	1.014

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	0%	---	---	---	---
EW-2	50%	---	---	---	water
EW-3	100%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1786 Dil 1701
Groundwater flow meter 314220

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	05/30/14
Time of arrival:	09:00
Time of departure:	11:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT Flow (SCFM)	Traviani Blower Pressure	Dilution %	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)					
(OK/Low)				92.0	23	0	6.132.5	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train Pressure (psig)	EFFLUENT Flow (SCFM)		Time (hours)	Sampler	PID (ppmv)
	Meter (ft ³ X 1000)	Flow Rate (SCFM)						
				92.0	EFFLUENT			
					INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open	Vacuum	Delta PI	Temp	Field PID
	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	0%	---	---	---	---
EW-2	50%	---	---	---	water
EW-3	100%	---	---	---	water
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1758 Dil 1677
Groundwater flow meter 322420

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	06/11/14
Time of arrival:	09:00
Time of departure:	13:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours	Time
	ΔP	Temp.	Pressure	Flow	Blower			
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
OK				104.0	23	0	6,293.1	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES			
	Natural Gas		Gas Train	EFFLUENT	Time	Sampler	PID
	Meter	Flow Rate	Pressure	Flow			
	(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	(hours)		(ppmv)
				104.0	EFFLUENT		
					INFLUENT		138

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open	Vacuum	Delta PI	Temp	Field PID
	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	100%	---	---	---	water
EW-2	100%	---	---	---	water
EW-3	0%	---	---	---	---
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Unit down 6/6/14 due to power outage
Temp 1612 Dil 1508
Groundwater flow meter 341850

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	06/17/14
Time of arrival:	09:00
Time of departure:	11:00

ECG employee:	dva
System status upon arrival:	operating
System status upon departure:	operating

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours	Time
	ΔP	Temp.	Pressure	Flow	Blower			
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
OK				125.0	22.5	0	6,434.1	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT		Time	Sampler	PID
	Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
	(ft ³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	10:26	dva	0.9
				125.0	INFLUENT	10:30	dva	78

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open	Vacuum	Delta PI	Temp	Field PID
	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	100%	---	---	---	water
EW-2	100%	---	---	---	water
EW-3	0%	---	---	---	---
EW-4	100%	---	---	---	water

MISC. FIELD NOTES
Temp 1542 Dil 1487
Groundwater flow meter 356170

**Shore Acres Gas
403 East 12th Street
Oakland, California**

Date of site visit:	06/27/14
Time of arrival:	09:00
Time of departure:	13:00

ECG employee:	dva
System status upon arrival:	shutdown
System status upon departure:	shutdown

SOIL VAPOR EXTRACTION SYSTEM								
Oil Level (OK/Low)	Vapor Manifold (influent)			INFLUENT	Traviani	Dilution	Hours (Hours)	Time (Hours)
	ΔP ("w.c.)	Temp. (°F)	Pressure ("w.c.)	Flow (SCFM)	Blower Pressure			
OK						0	6,460.8	09:00

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIMES				
	Natural Gas		Gas Train	EFFLUENT Flow (SCFM)		Time	Sampler	PID
	Meter (ft ³ X 1000)	Flow Rate (SCFM)	Pressure (psig)			(hours)		(ppmv)
				125.0	EFFLUENT			
					INFLUENT			

VAPOR EXTRACTION WELL MANIFOLD LINES					
Line	% Open (%)	Vacuum ("Hg)	Delta PI ("w.c.)	Temp (°F)	Field PID (ppmv)
EW-1	100%	---	---	---	water
EW-2	100%	---	---	---	water
EW-3	0%	---	---	---	---
EW-4	100%	---	---	---	water

MISC. FIELD NOTES

Unit shut down 6/18/14, water in blower/compressor
 Cleaned AS filter
 Left unit down for carbon change out
 Groundwater flow meter 358850

PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres
 PROJECT MANAGER: MSS
 SITE ADDRESS: 403 East 12th Street, Oakland

PROJECT NUMBER: GHA.19009
 TASK NUMBER: _____

WELL ID: MW-1

TYPE OF WELL: Monitoring

WATER COLUMN DATA: (feet)
 Well Total Depth: 19.98
 Depth to Water: 8.92
 Water Column Length: 11.06

WELL DIAMETER:
 2-inch:
 4-inch: _____
 6-inch: _____

PURGE VOLUME CALCULATION:

Water Column Length x Multiplier x No. Volumes = Purge Volume

$$\frac{11.06}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{5.75}{\text{Purge Volume}}$$

MULTIPLIER DATA:

Multiplier for Schedule 40 PVC; Gallons/Linear Foot Based on Casing Diameter:

2-inch: 0.17
 4-inch: 0.65
 6-inch: 1.5

PURGE METHOD:

Disposable Bailer
 PVC Bailer _____
 Submersible Pump _____
 Other _____

SAMPLE METHOD:

Disposable Bailer
 Pump: _____
 Other: _____

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1230	2	7.21	20.3	1228	960		
1234	4	7.12	19.9	1232	919		
1238	6	7.10	19.9	1236	921		
1240							sample

FIELD TECHNICIAN: DW
 DATE: 6/27/14

PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres
 PROJECT MANAGER: MSS
 SITE ADDRESS: 403 East 12th Street, Oakland

PROJECT NUMBER: GHA.19009
 TASK NUMBER: _____

WELL ID: MW-3

TYPE OF WELL: Monitoring

WATER COLUMN DATA:
 Well Total Depth: 17.85 (feet)
 Depth to Water: 9.49
 Water Column Length: 8.36

WELL DIAMETER:
 2-inch:
 4-inch: _____
 6-inch: _____

PURGE VOLUME CALCULATION:

Water Column Length x Multiplier x No. Volumes = Purge Volume

$$\frac{8.36}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{4.5}{\text{Purge Volume}}$$

MULTIPLIER DATA:

Multiplier for Schedule 40 PVC; Gallons/Linear Foot Based on Casing Diameter:

2-inch: 0.17
 4-inch: 0.65
 6-inch: 1.5

PURGE METHOD:

Disposable Bailer
 PVC Bailer _____
 Submersible Pump _____
 Other _____

SAMPLE METHOD:

Disposable Bailer
 Pump: _____
 Other: _____

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1240	1.5	7.29	21.0	821			
1244	3.0	7.23	20.2	818			
1248	4.5	7.19	20.2	816			
1250							sample

FIELD TECHNICIAN: DWA
 DATE: 6/27/14

PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres
 PROJECT MANAGER: MSS
 SITE ADDRESS: 403 East 12th Street, Oakland

PROJECT NUMBER: GHA.19009
 TASK NUMBER: _____

WELL ID: MW-4

TYPE OF WELL: Monitoring

WATER COLUMN DATA:
 Well Total Depth: 18.69 (feet)
 Depth to Water: 9.58
 Water Column Length: 9.11

WELL DIAMETER:
 2-inch:
 4-inch: _____
 6-inch: _____

PURGE VOLUME CALCULATION:

Water Column Length x Multiplier x No. Volumes = Purge Volume

$$\frac{9.11}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{4.75}{\text{Purge Volume}}$$

MULTIPLIER DATA:

Multiplier for Schedule 40 PVC; Gallons/Linear Foot Based on Casing Diameter:

2-inch: 0.17
 4-inch: 0.65
 6-inch: 1.5

PURGE METHOD:

Disposable Bailer
 PVC Bailer _____
 Submersible Pump _____
 Other _____

SAMPLE METHOD:

Disposable Bailer
 Pump: _____
 Other: _____

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1107	1.5	7.31	22.0	681			
1110	3.25	7.41	21.3	701			
1113	4.75	7.36	21.4	679			
1115							stop

FIELD TECHNICIAN: DYA
 DATE: 6/27/14

PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres
 PROJECT MANAGER: MSS
 SITE ADDRESS: 403 East 12th Street, Oakland

PROJECT NUMBER: GHA.19009
 TASK NUMBER: _____

WELL ID: MW-6

TYPE OF WELL: Monitoring

WATER COLUMN DATA:
 Well Total Depth: 19.94 (feet)
 Depth to Water: 8.80
 Water Column Length: 11.14

WELL DIAMETER:
 2-inch:
 4-inch: _____
 6-inch: _____

PURGE VOLUME CALCULATION:

Water Column Length x Multiplier x No. Volumes = Purge Volume

$$\frac{11.14}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{5.5}{\text{Purge Volume}}$$

MULTIPLIER DATA:

Multiplier for Schedule 40 PVC; Gallons/Linear Foot Based on Casing Diameter:

2-inch: 0.17
 4-inch: 0.65
 6-inch: 1.5

PURGE METHOD:

Disposable Bailer
 PVC Bailer _____
 Submersible Pump _____
 Other _____

SAMPLE METHOD:

Disposable Bailer
 Pump: _____
 Other: _____

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1128	2	7.21	21.0	541			
1132	4	7.19	19.9	555			
1136	6	7.20	19.0	568			
1138							sample

FIELD TECHNICIAN: AUA
 DATE: 6/27/14