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February 9, 2015

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

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

Dear Ms. Drogos:

Enclosed please find a copy of the February 6, 2015 *Fourth 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

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FOURTH QUARTER 2014  
GROUNDWATER MONITORING AND  
REMEDICATION STATUS REPORT

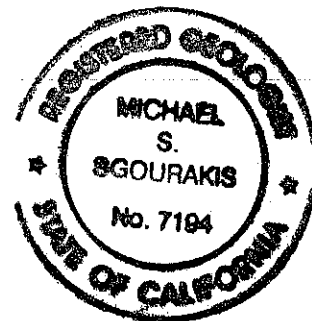
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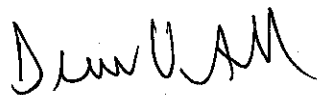
SHORE ACRES GAS  
403 EAST 12<sup>TH</sup> STREET  
OAKLAND, CALIFORNIA

Prepared for: Rashid Ghafoor

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

February 6, 2015





Drew Van Allen  
Senior Project Manager



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

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## INTRODUCTION

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

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

Site Location:	403 East 12 <sup>th</sup> Street Oakland, California
Geotracker Global ID:	T0600174667

## LIMITATIONS

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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

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### SITE DESCRIPTION

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The site occupies a parcel on the southeast corner of 4<sup>th</sup> Avenue and East 12<sup>th</sup> 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

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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 8- to 14-feet bgs and groundwater appears to be at historic lows. The groundwater flow direction appears to be generally toward the south or southwest.

## CLEANUP CRITERIA

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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

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### INVESTIGATIONS

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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

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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

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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 6,816 pounds of TPHg, 33 pounds of benzene, and 3 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. The system was restarted on August 15, 2014.

## FOURTH QUARTER 2014 MONITORING EVENT

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### WORK PERFORMED AND PROPOSED

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

### WORK PERFORMED FOURTH QUARTER 2014

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1. The fourth quarter 2014 groundwater monitoring event was performed on December 15, 2014.
2. ECG performed DPE system startup, troubleshooting, and maintenance to the O&M unit.

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### WORK SCHEDULED FOR FIRST QUARTER 2015

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1. Prepare and finalize the fourth quarter 2014 monitoring report.
2. Continue to operate the remediation system.
3. Perform first quarter 2015 monitoring event.

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### DISCUSSION OF RECENT MONITORING ACTIVITIES

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ECG performed the fourth quarter 2014 groundwater monitoring and sampling event at the site on December 15, 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:	No

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

Average Depth to Groundwater	8.23-feet below ground surface (bgs)
Average Groundwater Elevation	22.98 -feet above mean sea level
Groundwater Gradient Direction	East
Groundwater Gradient	0.013 feet/foot
TPHg Detected Range	85 ug/L (MW-2) to 26,000 ug/L (EW-3)
Benzene Detected Range	14 ug/L (MW-2) to 1,200 ug/L (EW-3)
MTBE Detected	7.3 ug/L (MW-2) to 370 (MW-5)

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.

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### DISCUSSION OF RECENT REMEDIATION ACTIVITIES

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The system was shut down on October 5, 2014 for repairs by the manufacturer to the oil/water separator and restarted on October 15, 2014. The system was shut down on October 28, 2014 for repairs to the air stripper transfer pump and restarted on November 10, 2014. ECG performed remediation system monitoring and operations and maintenance activities on October 3, 13, and 28, November 10 and 25, and December 1, 9, and 24, 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. 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 fourth quarter 2014 remediation results at the site:

SVE System Operating Hours	606.7 hours, 25 days
Active SVE Extraction Points	Varied
Average Influent Flowrate	150 scfm
TPHg Detected Range in SVE Influent	130 parts per million by volume (ppmv) to 610 ppmv
Benzene Detected Range in SVE Influent	2.4 ppmv to 2.6 ppmv
MTBE Detected in SVE Influent	0.23 ppmv to 0.44 ppmv
SVE Destruction Efficiency	>97% or less than 0.109 pounds of benzene per day emission
Average Groundwater Extraction Rate	1.2 gallons per minute (gpm)
Average TPHg Detected in Groundwater Influent	12,175 ug/L
Average Benzene Detected in Groundwater Influent	710 ug/L
Average MTBE Detected in Groundwater Influent	131 ug/L

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

## RESULTS AND CONCLUSIONS

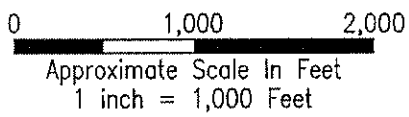
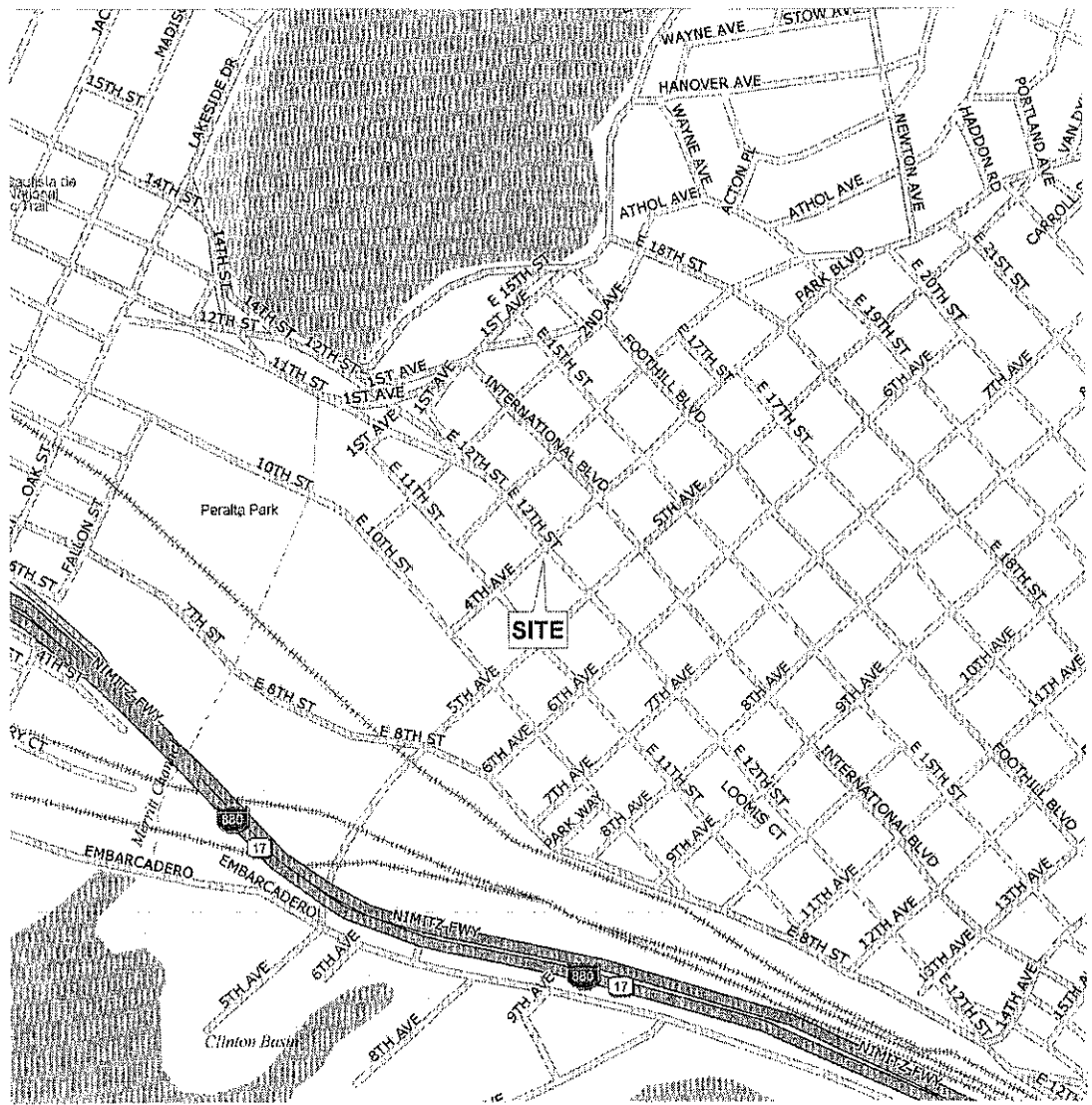
Water levels and the gradient data were consistent with historical data. Tables 2a, 2b, 3a, 3b, 4a, and 4b tabulate the analytical data for soil and monitoring well sampling data.

The DPE system operated for 25 days during the fourth quarter of 2014 from September 25 to December 9, 2014. The system removed approximately 718 pounds of TPHg, 3.0 pounds of benzene, and 0.4 pound of MTBE from the vapor phase during this reporting period (Table 5a). Approximately 15 pounds of TPHg, 0.89 pounds of benzene, and 0.16 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.

ECG will continue DPE remediation activities. ECG is continuing permitting with PG&E to install natural gas service and remove the propane tank. The propane provider to the site has proven to be inconsistent. The next groundwater monitoring event will be in first quarter 2015.

ECG proposes conducting a pilot test consisting of installing submersible pumps into two extraction wells, EW-3 and EW-4, and extracting additional water while the current DPE system operates. The purpose of this pilot test is to determine what groundwater flow rates are required to further dewater the shallow zone aquifer and what increase, if any, is observed during low water conditions. It has been documented during O and M of the system that higher PID readings coincide with lower water levels. This pilot test will quantify all the parameters to determine the feasibility of implementing full time groundwater pumping. During the test, groundwater from the submersible pumps will be stored in a poly tank for disposal through the system at a very low, controlled flow rate so the current air stripper and transfer pumps are not inundated during the test. Upon concurrence from the CVWQCB, ECG will prepare a workplan report detailing the activities suggested above.

# FIGURES



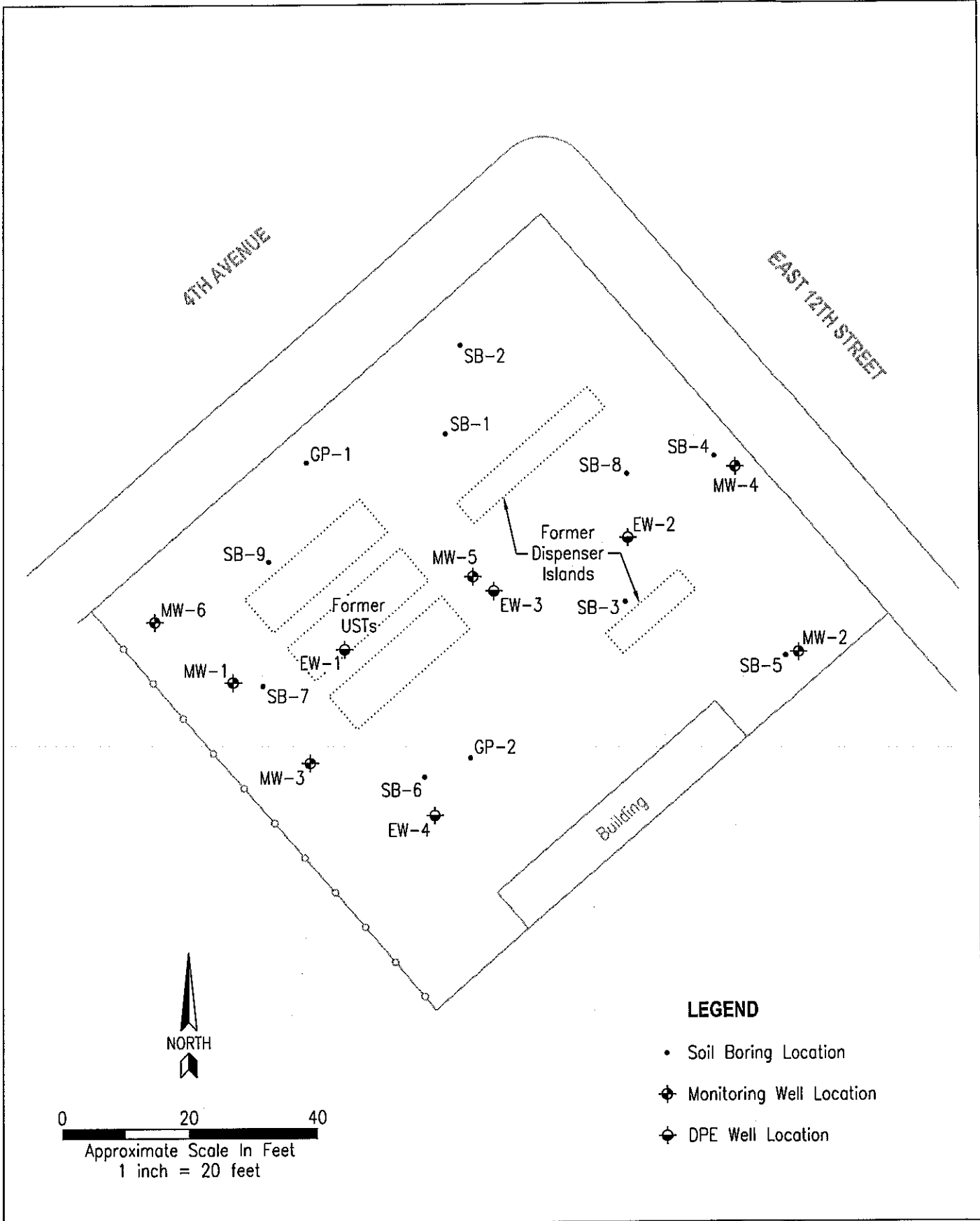
**FIGURE 1**

**SITE LOCATION MAP**

Project Number:  
GHA.19009  
Date:  
February 9, 2011

Shore Acre Gas  
403 East 12th Street  
Oakland, California

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



**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

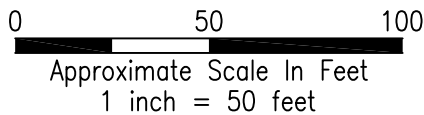
(23.26) Elevation Of Groundwater Measured In Feet Above Mean Sea Level

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

---> Flow Lines

$i = 0.02$  General Gradient

(NM) Not Measured



<b>FIGURE 3</b>	<b>POTENTIOMETRIC SURFACE MAP</b> <b>DECEMBER 15, 2014</b> Shore Acre Gas 403 East 12th Street Oakland, California	 <b>Environmental Compliance Group, LLC</b> 270 Vintage Drive, Turlock, CA 95382 Phone: (209) 664-1035
Project Number: GHA.19009		
Date: February 23, 2015		



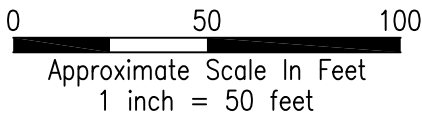
**LEGEND**



- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

(26,000) 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)



<p><b>FIGURE 4</b></p>	<p><b>TPHg IN GROUNDWATER ISOCONCENTRATION MAP</b>  <b>DECEMBER 15, 2014</b>          Shore Acre Gas          403 East 12th Street          Oakland, California</p>	 <p><b>Environmental Compliance Group, LLC</b>          270 Vintage Drive, Turlock, CA 95382          Phone: (209) 664-1035</p>
<p>Project Number: GHA.19009</p>		
<p>Date: February 23, 2015</p>		



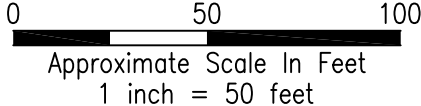
**LEGEND**



- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

(1,200) Concentration Of Benzene In Groundwater Measured In ug/L

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



<p><b>FIGURE 5</b></p>	<p><b>BENZENE IN GROUNDWATER ISOCONCENTRATION MAP DECEMBER 15, 2014</b></p>	 <p><b>Environmental Compliance Group, LLC</b> 270 Vintage Drive, Turlock, CA 95382 Phone: (209) 664-1035</p>
<p>Project Number: GHA.19009</p>	<p>Shore Acre Gas 403 East 12th Street Oakland, California</p>	
<p>Date: February 23, 2015</p>		





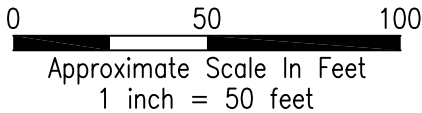
**LEGEND**



- ⊕ Monitoring Well Location
- ⊖ Vapor Extraction Well Location

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

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



<p><b>FIGURE 6</b></p>	<p><b>MTBE IN GROUNDWATER ISOCONCENTRATION MAP</b>  <b>DECEMBER 15, 2014</b>          Shore Acre Gas          403 East 12th Street          Oakland, California</p>	 <p><b>Environmental Compliance Group, LLC</b>          270 Vintage Drive, Turlock, CA 95382          Phone: (209) 664-1035</p>
<p>Project Number: GHA.19009</p>		
<p>Date: February 25, 2015</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)
<b>Monitoring Wells</b>							
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
<b>Dual Phase Extraction Wells</b>							
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)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)
<b>UST Removal Samples</b>								
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
<b>Soil Borings</b>								
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
<b>Groundwater Wells</b>								
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)
<b>UST Removal Samples</b>									
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	<b>0.37</b>	<0.040	<b>0.51</b>	<0.040	<0.040
Tank 2-SS-1	14		<0.050	<0.050	<b>0.18</b>	<0.050	<b>0.35</b>	<0.050	<0.050
Tank 2-SS-2	14		<0.025	<0.025	<b>0.090</b>	<0.025	<b>0.16</b>	<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	<b>0.19</b>	<0.025	<b>0.15</b>	<0.025	<0.025	
<b>Soil Borings</b>									
GP-1-15.5	15.5	July 2006	<0.005	<0.005	<b>0.029</b>	<0.005	<b>0.27</b>	---	---
GP-1-18.0	18.0		<0.005	<0.005	<b>0.54</b>	<0.005	<b>0.33</b>	---	---
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	<b>0.041</b>	<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	<b>0.11</b>	<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	<b>0.053</b>	<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	<b>0.10</b>	<0.005	<0.050	<0.005	<0.005
SB-3-29.5	29.5		<0.005	<0.005	<b>0.010</b>	<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	<b>0.20</b>	<0.005	<0.050	<0.005	<0.005
SB-6-32	32.0		<0.005	<0.005	<b>0.18</b>	<0.005	<0.050	<0.005	<0.005
SB-7-9.5	9.5		<1.0	<1.0	<b>4.0</b>	<1.0	<10	<1.0	<1.0
SB-7-29.5	29.5		<0.005	<0.005	<b>0.18</b>	<0.005	<0.050	<0.005	<0.005
SB-7-32	32.0	<0.005	<0.005	<b>0.11</b>	<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	<2.0	<2.0	<2.0
SB-8-24.5	24.5		<0.005	<0.005	<b>0.033</b>	<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	<b>5.5</b>	<0.20	<2.0	<0.20	<0.20
SB-9-29.5	29.5		<0.005	<0.005	<b>0.090</b>	<0.005	<b>0.15</b>	<0.005	<0.005
SB-9-32	32.0		<0.005	<0.005	<b>0.11</b>	<0.005	<0.050	<0.005	<0.005
<b>Groundwater Wells</b>									
MW-1-5	5	June 2011	<0.005	<0.005	<b>0.35</b>	<0.005	<b>0.093</b>	<0.005	<0.005
MW-1-15	15		<0.050	<0.050	<b>1.1</b>	<0.050	<0.50	<0.050	<0.050
MW-1-20	20		<0.005	<0.005	<b>0.31</b>	<0.005	<b>0.58</b>	<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	<b>0.006</b>	<0.005	<0.050	<0.005	<0.005
MW-3-5	5		<0.010	<0.010	<b>1.5</b>	<0.010	<b>0.37</b>	<0.010	<0.010
MW-3-10	10		<0.80	<0.80	<b>1.3</b>	<0.80	<8.0	<0.80	<0.80
MW-3-15	15		<0.20	<0.20	<b>3.0</b>	<0.20	<2.0	<0.20	<0.20
MW-3-20	20		<0.005	<0.005	<b>0.036</b>	<0.005	<b>0.16</b>	<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	<b>0.026</b>	<0.005	<b>0.088</b>	<0.005	<0.005
MW-6-20	20		<0.005	<0.005	<b>0.010</b>	<0.005	<b>0.37</b>	<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	<b>0.59</b>	<0.40	<4.0	<0.40	<0.40
VW-1-20	20		<0.005	<0.005	<b>0.009</b>	<0.005	<b>0.16</b>	<0.005	<0.005
VW-2-5	5		<0.005	<0.005	<b>0.25</b>	<0.005	<b>0.14</b>	<0.005	<0.005
VW-2-10	10		<0.10	<0.10	<b>0.33</b>	<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	<b>0.008</b>	<0.005	<b>0.26</b>	<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)
<b>Excavation</b>							
Pit Sample 1	August 2009	21,000	21,000	3,800	1,000	1,200	3,700
<b>Direct Push Grab Groundwater Samples</b>							
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)
<b>Excavation</b>								
Water	February 2000	<10	<10	15,000	39	17,000	<10	<10
<b>Direct Push Grab Groundwater Samples</b>								
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)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
<b>Monitoring Wells</b>									
<b>MW-1</b>	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
	9/19/2014	10.98	19.83	---	11,000	530	190	460	950
	12/15/2014	7.66	23.15	---	<b>11,000</b>	<b>1,100</b>	<b>140</b>	<b>310</b>	<b>420</b>
	<b>MW-2</b>	6/23/2011	10.70	20.59	<250	13,000	1,000	160	370
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
9/19/2014		12.49	18.80	---	990	42	12	97	110
12/15/2014		8.65	22.64	---	<b>85</b>	<b>14</b>	<b>3.3</b>	<b>5.2</b>	<b>13</b>
<b>MW-3</b>		6/23/2011	10.79	20.51	<250	55,000	15,000	3,600	2,000
	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
	9/19/2014	11.62	19.68	---	9,500	610	160	220	400
12/15/2014	8.10	23.20	---	<b>1,300</b>	<b>260</b>	<b>69</b>	<b>39</b>	<b>120</b>	

**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)		
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		
	9/19/2014	11.61	19.60	---	2,100	110	54	92	210		
	12/15/2014	8.45	22.76	---	720	58	32	29	33		
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							
	9/19/2014	12.91	18.44	---	56,000	1,000	270	1,000	4,100		
	12/15/2014	---	---	---	13,000	840	530	450	1,700		
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		
	9/19/2014	10.68	20.11	---	6,500	240	21	490	110		
	12/15/2014	7.62	23.17	---	4,700	520	25	110	43		

**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)
<b>DPE Wells</b>									
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
	9/19/2014	12.41	19.05	---	28,000	1,000	450	1,400	3,900
	12/15/2014	8.20	23.26	---	<b>4,000</b>	<b>560</b>	<b>29</b>	<b>150</b>	<b>150</b>
EW-2	6/28/2011	---	---	---	33,000	3,100	2,000	790	3,500
	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
	9/19/2014	16.80	14.63	---	18,000	690	1,300	360	2,400
	12/15/2014	8.73	22.70	---	<b>11,000</b>	<b>510</b>	<b>500</b>	<b>160</b>	<b>1,100</b>
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
	9/19/2014	13.00	---	---	15,000	670	650	530	2,400
	12/15/2014	8.20	---	---	<b>26,000</b>	<b>1,200</b>	<b>1,100</b>	<b>350</b>	<b>2,000</b>
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
	9/19/2014	12.48	---	---	9,000	680	1,600	450	3,000
	12/15/2014	8.50	---	---	<b>7,700</b>	<b>570</b>	<b>170</b>	<b>320</b>	<b>1,000</b>

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

Well ID	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)
TOC									

**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)	
<b>Monitoring Wells</b>									
<b>MW-1</b>	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	
	9/19/2014	<10	<10	150	<10	<100	<10	<10	
	12/15/2014	<0.5	<0.5	<b>310</b>	<0.5	<b>98</b>	<0.5	<0.5	
	<b>MW-2</b>	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	
9/19/2014		<5.0	<5.0	16	<5.0	<50	<5.0	<5.0	
12/15/2014		<0.5	<0.5	<b>7.3</b>	<0.5	<b>23</b>	<0.5	<0.5	
<b>MW-3</b>		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	
	9/19/2014	<25	<25	390	<25	370	<25	<25	
	12/15/2014	<0.5	<0.5	<b>110</b>	<0.5	<b>140</b>	<0.5	<0.5	

**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)	
<b>MW-4</b>	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	
	9/19/2014	<2.5	<2.5	<2.5	<2.5	<25	<2.5	<2.5	
	12/15/2014	<0.5	<0.5	<0.5	<0.5	13	<0.5	<0.5	
<b>MW-5</b>	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							
	9/19/2014	<25	<25	75	<25	<250	<25	<25	
	12/15/2014	<0.5	<0.5	370	<0.5	340	<0.5	<0.5	
<b>MW-6</b>	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	
	9/19/2014	<2.5	<2.5	7.1	<2.5	<25	<2.5	<2.5	
	12/15/2014	<0.5	<0.5	33	<0.5	88	<0.5	<0.5	

**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)
<b>DPE Wells</b>								
<b>EW-1</b>	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
	9/19/2014	<20	<20	300	<20	<200	<20	<20
	12/15/2014	<0.5	<0.5	<b>170</b>	<0.5	<b>110</b>	<0.5	<0.5
<b>EW-2</b>	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
	9/19/2014	<25	<25	96	<25	<250	<25	<25
	12/15/2014	<0.5	<0.5	<b>94</b>	<0.5	<b>66</b>	<0.5	<0.5
<b>EW-3</b>	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
	9/19/2014	<25	<25	75	<25	<250	<25	<25
	12/15/2014	<0.5	<0.5	<b>160</b>	<0.5	<b>700</b>	<0.5	<0.5
<b>EW-4</b>	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
	9/19/2014	<20	<20	120	<20	520	<20	<20
	12/15/2014	<0.5	<0.5	<b>100</b>	<0.5	<b>110</b>	<0.5	<0.5

**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)
-------------	---------------	-------------	-------------	-------------	-------------	------------	----------------	------------

**Notes:**

ug/L - denotes micrograms per liter

< - denotes less than the detection limit

DCA - denotes dichloroethane

EDB - denotes ethylene dibromide

MTBE - denotes methyl tertiary butyl ether

DIPE - denotes di-isopropyl ether

ETBE - denotes ethyl tertiary butyl ether

TAME - denotes tertiary amyl ether

TBA - denotes tertiary butyl alcohol

--- 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	2.1	0.05	0.0	2,778	12.3	0.8
06/27/14	988.2	Unit shut down for Carbon Change Out									
08/15/14	988.2	Restart Unit									
08/19/14	992.6	125.0	33	0.79	0.13	1.7	0.03	0.0	2,780	12.3	0.8
09/25/14	1,535.7	163.0	2,100	15	< 1.0	144	0.77	0.1	6,042	29.7	2.1
10/28/14	1,750.4	146.0	130	2.4	0.44	8	0.11	0.0	6,114	30.6	2.3
12/09/14	2,142.4	154.0	610	2.6	0.23	40	0.13	0.0	6,760	32.7	2.5

MW<sub>TPHg</sub> = Molecular Weight of TPHg = 105

MW<sub>MTBE</sub> = Molecular Weight of Methyl tert-butyl ether = 88.15

MW<sub>Benzene</sub> = Molecular Weight of Benzene = 78.11

days of operation during quarter 25.3

ft<sup>3</sup> = cubic feet

min = minutes

lb/day = pounds per day

ppmv = parts per million by volume = ft<sup>3</sup> / 1x10<sup>6</sup> ft<sup>3</sup>

scfm = standard cubic feet per minute

NS = not sampled

NA = not analyzed

NC = not calculated

Extraction rate = (flow rate(ft<sup>3</sup>/min) x concentration (ft<sup>3</sup> / 1x10<sup>6</sup> ft<sup>3</sup>) x MW<sub>TPHg</sub>(lb/lb-mol) x 1440 min/day)/(359 ft<sup>3</sup>/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
08/19/14	125.0	< 5.0	< 0.050	< 0.10	< 0.2	< 0.002	< 0.004	100.0	100.0	100.0
09/25/14	163.0	< 5.0	< 0.050	< 0.10	< 0.3	< 0.003	< 0.006	100.0	100.0	100.0
10/28/14	146.0	< 5.0	< 0.050	< 0.10	< 0.3	< 0.002	< 0.005	100.0	100.0	100.0
12/09/14	154.0	< 5.0	< 0.050	< 0.10	< 0.3	< 0.002	< 0.005	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(ft<sup>3</sup>/min) x concentration ( ft<sup>3</sup> / 1x10<sup>6</sup> ft<sup>3</sup>) x MW (lb/lb-mole)/359 (ft<sup>3</sup>/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

ft<sup>3</sup> = cubic feet

ppmv = parts per million by volume = ft<sup>3</sup> / 1x10<sup>6</sup> ft<sup>3</sup>

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	18,600	2,600	96	0.45	0.063	0.002	26.21	3.66	0.13	26.21	3.66	0.13
08/19/14	360,060													
09/25/14	463,050	1.93	17,500	760	148	0.41	0.018	0.003	15.03	0.65	0.13	41.24	4.32	0.26
12/15/14	613,230	1.29	12,175	710	131	0.19	0.011	0.002	15.24	0.89	0.16	56.48	5.21	0.43

104,200 total gallons pumped during current reporting period  
 1737 average gallons per day during current reporting period  
 1.2 average gallons per minute during current reporting period

15.24      0.89      0.16

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:

Extraction/ disposal rate = flow rate(gallons/min) \* concentration (ug/L) \* 3.785 L/gallon \* lb/454,000,000 ug \* 1440 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.



CALIFORNIA  
AGRICULTURE & ENVIRONMENTAL  
LABORATORY

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01 January 2015

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 12/16/14 15:30 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,

Wayne Scott  
Lab Manager

## Argon Analytical Services, Inc. CHAIN OF CUSTODY

Project Information:					Report To:					Samples Submitted To:														
Project No: GHA.19009 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 Sgourakis Phone: 916.600.4580 Fax: 209.664.1040					Laboratory: Argon Labs Address: 2905 Railroad Avenue Ceres, CA 95307 Contact: Phone: (209) 581-9280 Fax: (209) 581-9282														
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																			
RUSH	24 Hour	48 Hour	Standard (5 days)	Special (10-14 days)	TPHg by EPA Method 8015M	BTEX, 5 oxygenates, 1,2-DCA, EDB by EPA Method 8260B														EDF Reports	COMMENTS			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																				
Sample ID.	Date	Time	# Containers	Matrix																Preservative				
MW-1	12/17/14	1100	3	water	X	X																		
MW-2		1200																						
MW-3		1135																						
MW-4		1055																						
MW-5		1235																						
MW-6		1200																						
EW-1		1250																						
EW-2		1300																						
EW-3		1255																						
EW-4		1305																						
Relinquished By: <i>Drum VM</i>					Date: 12/16/14 Time: 1530					Received By: <i>[Signature]</i>					Date: 12/16/14 Time: 1530					SPECIAL INSTRUCTIONS: Global ID# <b>T0600174667</b>				
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 Group Date & Time Received: 12/16/14 15:30

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

Received By: DP Matrix: Water  Soil  Sludge

Sample Carrier: Client  Laboratory  Fed Ex  UPS  Other

Argon Labs Project Number: P412036 / 1A12160039

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

N/A  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? Yes  No

N/A  Do VOA vials contain zero headspace? Yes  No

Chain of Custody matches all sample labels? Yes  No  (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:*





CALIFORNIA  
AGRICULTURE & ENVIRONMENTAL  
LABORATORY

2905 Railroad Avenue, Ceres, CA 95307

Phone: (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.:  
P412036

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	P412036-01	Water	12/15/14 11:00	12/16/14 15:30
MW-2	P412036-02	Water	12/15/14 10:00	12/16/14 15:30
MW-3	P412036-03	Water	12/15/14 11:35	12/16/14 15:30
MW-4	P412036-04	Water	12/15/14 10:35	12/16/14 15:30
MW-5	P412036-05	Water	12/15/14 12:35	12/16/14 15:30
MW-6	P412036-06	Water	12/15/14 12:00	12/16/14 15:30
EW-1	P412036-07	Water	12/15/14 12:50	12/16/14 15:30
EW-2	P412036-08	Water	12/15/14 13:00	12/16/14 15:30
EW-3	P412036-09	Water	12/15/14 12:55	12/16/14 15:30
EW-4	P412036-10	Water	12/15/14 13:05	12/16/14 15:30

Approved By

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2005 Railroad Avenue, Ceres, CA 95307

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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.: P412036
---	---	----------------------------

**Total Petroleum Hydrocarbons @ Gasoline**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>MW-1 (P412036-01) Water</b> Sampled: 15-Dec-14 11:00 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	11000	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		114 %			"	"	
<b>MW-2 (P412036-02) Water</b> Sampled: 15-Dec-14 10:00 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	85	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		89 %			"	"	
<b>MW-3 (P412036-03) Water</b> Sampled: 15-Dec-14 11:35 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	1300	50	ug/L	1	21-Dec-14	8015M	
Surr. Rec.:		109 %			"	"	
<b>MW-4 (P412036-04) Water</b> Sampled: 15-Dec-14 10:35 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	720	50	ug/L	1	21-Dec-14	8015M	
Surr. Rec.:		112 %			"	"	
<b>MW-5 (P412036-05) Water</b> Sampled: 15-Dec-14 12:35 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	13000	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		123 %			"	"	
<b>MW-6 (P412036-06) Water</b> Sampled: 15-Dec-14 12:00 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	4700	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		122 %			"	"	
<b>EW-1 (P412036-07) Water</b> Sampled: 15-Dec-14 12:50 Received: 16-Dec-14 15:30							
Total Petroleum Hydrocarbons @ Gasoline	4000	50	ug/L	1	21-Dec-14	8015M	
Surr. Rec.:		98 %			"	"	

*Wayne E. Smith*

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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.: P412036
---	---	----------------------------

**Total Petroleum Hydrocarbons @ Gasoline**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>EW-2 (P412036-08) Water Sampled: 15-Dec-14 13:00 Received: 16-Dec-14 15:30</b>							
<b>Total Petroleum Hydrocarbons @ Gasoline</b>	<b>11000</b>	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		115 %			"	"	
<b>EW-3 (P412036-09) Water Sampled: 15-Dec-14 12:55 Received: 16-Dec-14 15:30</b>							
<b>Total Petroleum Hydrocarbons @ Gasoline</b>	<b>26000</b>	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		108 %			"	"	
<b>EW-4 (P412036-10) Water Sampled: 15-Dec-14 13:05 Received: 16-Dec-14 15:30</b>							
<b>Total Petroleum Hydrocarbons @ Gasoline</b>	<b>7700</b>	50	ug/L	1	20-Dec-14	8015M	
Surr. Rec.:		108 %			"	"	

*Wayne E. Smith*

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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.: P412036
---	---	----------------------------

**TPH-gas & Volatile Organic Compounds by GC/MS**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>MW-1 (P412036-01) Water    Sampled: 15-Dec-14 11:00    Received: 16-Dec-14 15:30</b>							
Benzene	1100	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	140	0.5	"	"	"	"	
Xylenes, total	420	1.0	"	"	"	"	
Ethyl Benzene	310	0.5	"	"	"	"	
t-Butanol	98	5.0	"	"	"	"	
Methyl tert-Butyl Ether	310	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	"	"	"	"	
Surr. Rec.:		97 %			"	"	
<b>MW-2 (P412036-02) Water    Sampled: 15-Dec-14 10:00    Received: 16-Dec-14 15:30</b>							
Benzene	14	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	3.3	0.5	"	"	"	"	
Xylenes, total	13	1.0	"	"	"	"	
Ethyl Benzene	5.2	0.5	"	"	"	"	
t-Butanol	23	5.0	"	"	"	"	
Methyl tert-Butyl Ether	7.3	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	"	"	"	"	
Surr. Rec.:		98 %			"	"	

*Wayne E. Scott*

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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.:  
P412036

**TPH-gas & Volatile Organic Compounds by GC/MS**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>MW-3 (P412036-03) Water    Sampled: 15-Dec-14 11:35    Received: 16-Dec-14 15:30</b>							
Benzene	260	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	69	0.5	"	"	"	"	
Xylenes, total	120	1.0	"	"	"	"	
Ethyl Benzene	39	0.5	"	"	"	"	
t-Butanol	140	5.0	"	"	"	"	
Methyl tert-Butyl Ether	110	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	"	"	"	"	
Surr. Rec.:		96 %			"	"	
<b>MW-4 (P412036-04) Water    Sampled: 15-Dec-14 10:35    Received: 16-Dec-14 15:30</b>							
Benzene	58	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	32	0.5	"	"	"	"	
Xylenes, total	33	1.0	"	"	"	"	
Ethyl Benzene	29	0.5	"	"	"	"	
t-Butanol	13	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	"	"	"	"	
Surr. Rec.:		115 %			"	"	

*Wayne E. Scott*

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270 Vintage Drive  
Turlock, CA 95382

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

Work Order No.:  
P412036

**TPH-gas & Volatile Organic Compounds by GC/MS**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
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**MW-5 (P412036-05) Water**    Sampled: 15-Dec-14 12:35    Received: 16-Dec-14 15:30

Benzene	840	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	530	0.5	"	"	"	"	
Xylenes, total	1700	1.0	"	"	"	"	
Ethyl Benzene	450	0.5	"	"	"	"	
t-Butanol	340	5.0	"	"	"	"	
Methyl tert-Butyl Ether	370	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	"	"	"	"	
Surr. Rec.:		91 %			"	"	

**MW-6 (P412036-06) Water**    Sampled: 15-Dec-14 12:00    Received: 16-Dec-14 15:30

Benzene	520	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	25	0.5	"	"	"	"	
Xylenes, total	43	1.0	"	"	"	"	
Ethyl Benzene	110	0.5	"	"	"	"	
t-Butanol	88	5.0	"	"	"	"	
Methyl tert-Butyl Ether	33	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	"	"	"	"	
Surr. Rec.:		97 %			"	"	

*Wayne E. Scott*

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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 Sgurakis	Work Order No.: P412036
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**TPH-gas & Volatile Organic Compounds by GC/MS**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>EW-1 (P412036-07) Water    Sampled: 15-Dec-14 12:50    Received: 16-Dec-14 15:30</b>							
Benzene	560	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	29	0.5	"	"	"	"	
Xylenes, total	150	1.0	"	"	"	"	
Ethyl Benzene	150	0.5	"	"	"	"	
t-Butanol	110	5.0	"	"	"	"	
Methyl tert-Butyl Ether	170	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	"	"	"	"	
Surr. Rec.:		97 %			"	"	

<b>EW-2 (P412036-08) Water    Sampled: 15-Dec-14 13:00    Received: 16-Dec-14 15:30</b>							
Benzene	510	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	500	0.5	"	"	"	"	
Xylenes, total	1100	1.0	"	"	"	"	
Ethyl Benzene	160	0.5	"	"	"	"	
t-Butanol	66	5.0	"	"	"	"	
Methyl tert-Butyl Ether	94	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	"	"	"	"	
Surr. Rec.:		95 %			"	"	

*Wayne E. Scott*

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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.:  
P412036

**TPH-gas & Volatile Organic Compounds by GC/MS**

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
<b>EW-3 (P412036-09) Water    Sampled: 15-Dec-14 12:55    Received: 16-Dec-14 15:30</b>							
Benzene	1200	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	1100	0.5	"	"	"	"	
Xylenes, total	2000	1.0	"	"	"	"	
Ethyl Benzene	350	0.5	"	"	"	"	
t-Butanol	700	5.0	"	"	"	"	
Methyl tert-Butyl Ether	160	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	"	"	"	"	
Surr. Rec.:		97 %			"	"	
<b>EW-4 (P412036-10) Water    Sampled: 15-Dec-14 13:05    Received: 16-Dec-14 15:30</b>							
Benzene	570	0.5	ug/L	1	26-Dec-14	EPA 8260B	
Toluene	170	0.5	"	"	"	"	
Xylenes, total	1000	1.0	"	"	"	"	
Ethyl Benzene	320	0.5	"	"	"	"	
t-Butanol	110	5.0	"	"	"	"	
Methyl tert-Butyl Ether	100	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	"	"	"	"	
Surr. Rec.:		100 %			"	"	

*Wayne E. Scott*

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

Work Order No.:  
P412036

**Total Petroleum Hydrocarbons @ Gasoline - 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 P401462 - Default Prep GC-Semi**

**Blank (P401462-BLK1)** Prepared & Analyzed: 12/20/14

Surrogate: a,a,a-Trifluorotoluene	49.5		ug/L	50		99	70-130			
Total Petroleum Hydrocarbons @ Gasoline	ND	50	"							

**Blank (P401462-BLK2)** Prepared & Analyzed: 12/21/14

Surrogate: a,a,a-Trifluorotoluene	0.00		ug/L	50			70-130			
Total Petroleum Hydrocarbons @ Gasoline	ND	50	"							

**LCS (P401462-BS1)** Prepared & Analyzed: 12/20/14

Surrogate: a,a,a-Trifluorotoluene	62.5		ug/L	50		125	70-130			
Total Petroleum Hydrocarbons @ Gasoline	896		"	1000		90	80-120			

**LCS (P401462-BS2)** Prepared & Analyzed: 12/21/14

Surrogate: a,a,a-Trifluorotoluene	58.5		ug/L	50		117	70-130			
Total Petroleum Hydrocarbons @ Gasoline	910		"	1000		91	80-120			

**LCS Dup (P401462-BSD1)** Prepared & Analyzed: 12/20/14

Surrogate: a,a,a-Trifluorotoluene	61.0		ug/L	50		122	70-130			
Total Petroleum Hydrocarbons @ Gasoline	912		"	1000		91	80-120	2	20	

**LCS Dup (P401462-BSD2)** Prepared: 12/21/14 Analyzed: 01/01/15

Surrogate: a,a,a-Trifluorotoluene	58.5		ug/L	50		117	70-130			
Total Petroleum Hydrocarbons @ Gasoline	910		"	1000		91	80-120	0	20	

**Matrix Spike (P401462-MS1)** Source: P412036-02 Prepared & Analyzed: 12/20/14

Surrogate: a,a,a-Trifluorotoluene	64.5		ug/L	50		129	70-130			
Total Petroleum Hydrocarbons @ Gasoline	1040		"	1000	85.0	95	70-130			

**Matrix Spike Dup (P401462-MSD1)** Source: P412036-02 Prepared & Analyzed: 12/20/14

Surrogate: a,a,a-Trifluorotoluene	68.5		ug/L	50		137	70-130			
Total Petroleum Hydrocarbons @ Gasoline	1040		"	1000	85.0	95	70-130	0	20	

*Wayne E. Scott*

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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.:  
P412036

**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



Report Number : 89532

Date : 11/03/2014

## 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 number 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 A. Turpen". The signature is written in a cursive, flowing style.

Troy Turpen



Report Number : 89532

Date : 11/03/2014

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

Sample : **Effluent**

Matrix : Air

Lab Number : 89532-01

Sample Date :10/28/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.050	0.050	ppmv	EPA 8260B	10/31/14 12:01
Toluene	< 0.050	0.050	ppmv	EPA 8260B	10/31/14 12:01
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	10/31/14 12:01
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	10/31/14 12:01
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	10/31/14 12:01
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	10/31/14 12:01
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	10/31/14 12:01
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	10/31/14 12:01

Sample : **Influent**

Matrix : Air

Lab Number : 89532-02

Sample Date :10/28/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
<b>Benzene</b>	<b>2.4</b>	0.050	ppmv	EPA 8260B	10/31/14 11:58
<b>Toluene</b>	<b>2.9</b>	0.050	ppmv	EPA 8260B	10/31/14 11:58
<b>Ethylbenzene</b>	<b>1.1</b>	0.050	ppmv	EPA 8260B	10/31/14 11:58
<b>Total Xylenes</b>	<b>9.6</b>	0.050	ppmv	EPA 8260B	10/31/14 11:58
<b>Methyl-t-butyl ether (MTBE)</b>	<b>0.44</b>	0.10	ppmv	EPA 8260B	10/31/14 11:58
<b>TPH as Gasoline</b>	<b>130</b>	5.0	ppmv	EPA 8260B	10/31/14 11:58
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	10/31/14 11:58
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	10/31/14 11:58



Report Number : 89532

Date : 11/03/2014

**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	10/31/2014
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Toluene	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	10/31/2014
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	10/31/2014
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	10/31/2014
Toluene - d8 (Surr)	100		%	EPA 8260B	10/31/2014
Benzene	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Toluene	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	10/31/2014
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	10/31/2014
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	10/31/2014
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	10/31/2014
Toluene - d8 (Surr)	100		%	EPA 8260B	10/31/2014

<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. 89532

Project Contact (Hardcopy or PDF To): Drew Van Allen			California EDF Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Chain-of-Custody Record and Analysis Request																																				
Company / Address: 270 Vintage Drive, Turlock, CA 95382			Sampling Company Log Code: ECGT			Analysis Request																																				
Phone Number: 209.664.1035			Global ID: T0600174667			PLEASE CIRCLE METHOD																																				
Fax Number: 209.664.1040			EDF Deliverable To (Email Address): ecg.ust@gmail.com			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 824.2 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 / 7471)		Total Lead (EPA 200.7 / 6010)		W.E.T. Lead (STLC)		TPH, BTEX, and MTBE by EPA 8260B		TAT					
Project #: GHA.19009		P.O. #:	Bill to: ECG LLC			MTBE @ 0.5 ppb (EPA 8260B)					BTEX (EPA 8260B)		TPH Gas (EPA 8260B)																								12 hr <input type="checkbox"/>	24 hr <input type="checkbox"/>	48hr <input type="checkbox"/>	72hr <input type="checkbox"/>	1 wk <input checked="" type="checkbox"/>	For Lab Use Only
Project Name: Shore Acres Gas			Sampler Print Name: Drew Van Allen			Preservative			Matrix																																	
Project Address: 403 East 12th Street Oakland, CA			Sampling		Container			Preservative			Matrix																															
Sample Designation		Date	Time	40 ml VOA	Sleeve	Poly	Glass	Teflar	HCl	HNO <sub>3</sub>	None	Water	Soil	Air																												
Effluent		10/28/2014	1215					X							X																							01				
Influent		10/28/2014	1220				X								X																					02						
Relinquished by: Drew Van Allen			Date 10/30/14	Time 1:30	Received by: Pedro			Remarks:																																		
Relinquished by: [Signature]			Date	Time	Received by:																																					
Relinquished by: [Signature]			Date	Time	Received by Laboratory:																																					
			Date	Time	Received by Laboratory:			For Lab Use Only: Sample Receipt																																		
		Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present																																			
																	Yes / No																									

**SAMPLE RECEIPT CHECKLIST**

SRG #: 891532

<b>Sample Receipt</b>	Initials/Date: <i>MAS 103114</i>	Storage Time: <i>0759</i>	Sample Login	Initials/Date: <i>MAS 103114</i>
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: <i>MAS 103114 0759</i>	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"/>	<i>see comments</i>
Sample Time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Does COC match project history?	<input type="checkbox"/> N/A <input checked="" 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:** \*COC sample dates are 102814. Label Sample dates are 102714. IF COC is correct the samples will expire today. They are out of hold if labels are correct. SR will log in per the COC pending confirmation.

Receipt Details:		
Matrix	Container Type	# of Containers
<i>AR</i>	<i>Tedlar</i>	<i>2</i>

CS Required:

Proceed With Analysis:  YES  NO      Init/Date:

Client Communication:



Report Number : 89870

Date : 12/18/2014

## 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 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 Pace Analytical Services, Inc.

Pace Analytical Services, Inc. is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.

If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in cursive script that reads "Troy A. Turpen".

Troy Turpen



Report Number : 89870

Date : 12/18/2014

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

Sample : **Effluent**

Matrix : Air

Lab Number : 89870-01

Sample Date :12/09/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.050	0.050	ppmv	EPA 8260B	12/11/14 14:35
Toluene	< 0.050	0.050	ppmv	EPA 8260B	12/11/14 14:35
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	12/11/14 14:35
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	12/11/14 14:35
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	12/11/14 14:35
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	12/11/14 14:35
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	12/11/14 14:35
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	12/11/14 14:35

Sample : **Influent**

Matrix : Air

Lab Number : 89870-02

Sample Date :12/09/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
<b>Benzene</b>	<b>2.6</b>	0.15	ppmv	EPA 8260B	12/11/14 14:28
<b>Toluene</b>	<b>4.3</b>	0.10	ppmv	EPA 8260B	12/11/14 14:28
<b>Ethylbenzene</b>	<b>1.1</b>	0.10	ppmv	EPA 8260B	12/11/14 14:28
<b>Total Xylenes</b>	<b>32</b>	0.10	ppmv	EPA 8260B	12/11/14 14:28
<b>Methyl-t-butyl ether (MTBE)</b>	<b>0.23</b>	0.15	ppmv	EPA 8260B	12/11/14 14:28
<b>TPH as Gasoline</b>	<b>610</b>	10	ppmv	EPA 8260B	12/11/14 14:28
1,2-Dichloroethane-d4 (Surr)	97.7		% Recovery	EPA 8260B	12/11/14 14:28
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	12/11/14 14:28

Report Number : 89870

Date : 12/18/2014

**QC Report : Method Blank Data**

Project Name : **Shore Acres Gas**

Project Number : **GHA.19009**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Toluene	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	12/11/2014
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	12/11/2014
1,2-Dichloroethane-d4 (Surr)	98.3		%	EPA 8260B	12/11/2014
Toluene - d8 (Surr)	102		%	EPA 8260B	12/11/2014
Benzene	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Ethylbenzene	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Toluene	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Total Xylenes	< 0.050	0.050	ppmv	EPA 8260B	12/11/2014
Methyl-t-butyl ether (MTBE)	< 0.10	0.10	ppmv	EPA 8260B	12/11/2014
TPH as Gasoline	< 5.0	5.0	ppmv	EPA 8260B	12/11/2014
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	12/11/2014
Toluene - d8 (Surr)	108		%	EPA 8260B	12/11/2014

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

SRG # / Lab No. 89870

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																							
Analysis Request													TAT										
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"/> 48hr	<input type="checkbox"/> 72hr	<input checked="" type="checkbox"/> 1 wk	For Lab Use Only	
Effluent	12/9/2014	0955																					01
Influent	12/9/2014	1000																					02

Relinquished by: Drew Van Allen Date: 12/19/14 Time: 1500 Received by: FRD

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 12/11/14 Time: 1033 Received by Laboratory: ECG Analytical

Remarks:

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



## SAMPLE RECEIPT CHECKLIST

SRG #: 89870

Sample Receipt	Initials/Date: <i>guy 12/11/14</i>	Storage Time: 1033	Sample Login	Initials/Date: <i>guy 12/11/14</i>
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: <i>guy 12/11/14 1020</i>		Custody Seals: <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Intact <input type="checkbox"/> Broken	

Chain-of-Custody:	Yes	No
Is COC present?	/	
Is COC signed by relinquisher?	/	
Is COC dated by relinquisher?	/	
Is the sampler's name on the COC?	/	
Are there analyses or hold for all samples?	/	

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

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

**Comments:**

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Receipt Details:		
Matrix	Container Type	# of Containers
<i>AR</i>	<i>Tadlar</i>	<i>02</i>

**Requires client:** Clarification  Approval  Notification

Proceed With Analysis:  YES  NO      Init/Date: \_\_\_\_\_

Client Communication: \_\_\_\_\_

Page 5 of 5



# GROUNDWATER LEVEL DATA FORM

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

PROJECT NUMBER: GHA.19009  
 TASK NUMBER: \_\_\_\_\_

WELL ID	TIME	DEPTH TO BOTTOM	DEPTH TO WATER	DEPTH TO PRODUCT	PRODUCT THICKNESS	PRODUCT THICKNESS X 0.8	COMMENTS
MW-1	0932	19.89	7.66				
MW-2	0928	19.91	8.65				
MW-3	0934	17.81	8.10				
MW-4	0930	18.80	8.45				
MW-5	<del>0938</del>						sketch
MW-6	0936	11.63	7.62				
EW-1	0926	19.62	8.20				
EW-2	0924	19.81	8.73				
EW-3	0940	19.87	8.20				
EW-4	0942	19.88	8.90				

FIELD TECHNICIAN: 12/15/14  
 DATE: AM

# PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres Gas PROJECT NUMBER: GHA.19009  
 PROJECT MANAGER: MSS TASK NUMBER: \_\_\_\_\_  
 SITE ADDRESS: 403 East 12th Street, Oakland, Ca

WELL ID: MW-1 TYPE OF WELL: Monitoring

WATER COLUMN DATA: (feet)  
 Well Total Depth: 19.89  
 Depth to Water: 7.66  
 Water Column Length: 12.23

WELL DIAMETER:  
 2-inch:   
 4-inch: \_\_\_\_\_  
 6-inch: \_\_\_\_\_

**PURGE VOLUME CALCULATION:**  
 Water Column Length x Multiplier x No. Volumes = Purge Volume

$$\frac{12.23}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{6.25}{\text{Purge Volume}}$$

**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
1050	2.25	7.13	20.9	710			
1054	4.25	7.10	20.8	701			
1058	6.25	7.12	20.7	688			
1100							sample

FIELD TECHNICIAN: DWA  
 DATE: 12/15/14

## PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres Gas PROJECT NUMBER: GHA.19009  
 PROJECT MANAGER: MSS TASK NUMBER: \_\_\_\_\_  
 SITE ADDRESS: 403 East 12th Street, Oakland, Ca

WELL ID: MW-2 TYPE OF WELL: Monitoring

WATER COLUMN DATA: (feet)  
 Well Total Depth: 19.91  
 Depth to Water: 8.65  
 Water Column Length: 11.26

WELL DIAMETER:  
 2-inch:   
 4-inch: \_\_\_\_\_  
 6-inch: \_\_\_\_\_

PURGE VOLUME CALCULATION:  
 Water Column Length x Multiplier x No. Volumes = Purge Volume

$$\frac{11.26}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{6}{\text{Purge Volume}}$$

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
0950	2	6.91	20.7	913			
0954	4	6.87	20.5	000			
0958	6	6.85	20.5	0091			
1000							

FIELD TECHNICIAN: DWT  
 DATE: 12/15/14

# PURGE/DEVELOPMENT FORM

**PROJECT NAME:** Shore Acres Gas                      **PROJECT NUMBER:** GHA.19009  
**PROJECT MANAGER:** MSS                                      **TASK NUMBER:** \_\_\_\_\_  
**SITE ADDRESS:** 403 East 12th Street, Oakland, Ca

**WELL ID:** MW-3    **TYPE OF WELL:** Monitoring

**WATER COLUMN DATA:**                                      **WELL DIAMETER:**  
 Well Total Depth: 17.81 (feet)                      2-inch:  \_\_\_\_\_  
 Depth to Water: 8.10                                      4-inch: \_\_\_\_\_  
 Water Column Length: 9.71                                      6-inch: \_\_\_\_\_

**PURGE VOLUME CALCULATION:**  
 Water Column Length x Multiplier x No. Volumes = Purge Volume  

$$\frac{9.71}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{5}{\text{Purge Volume}}$$

**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:**                                      **SAMPLE METHOD:**  
 Disposable Bailer  \_\_\_\_\_                      Disposable Bailer  \_\_\_\_\_  
 PVC Bailer \_\_\_\_\_                                      Pump: \_\_\_\_\_  
 Submersible Pump \_\_\_\_\_                                      Other: \_\_\_\_\_  
 Other \_\_\_\_\_

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1125	2	6.99	20.8	798			
1129	4	6.89	20.6	791			
1133	5	6.91	20.3	777			
1135							sample

**FIELD TECHNICIAN:** DW  
**DATE:** 12/15/14

# PURGE/DEVELOPMENT FORM

PROJECT NAME: Shore Acres Gas PROJECT NUMBER: GHA.19009  
PROJECT MANAGER: MSS TASK NUMBER: \_\_\_\_\_  
SITE ADDRESS: 403 East 12th Street, Oakland, Ca

WELL ID: MW-4 TYPE OF WELL: Monitoring

WATER COLUMN DATA: Well Total Depth: 18.80 (feet)  
Depth to Water: 8.45  
Water Column Length: 10.35  
WELL DIAMETER: 2-inch:   
4-inch: \_\_\_\_\_  
6-inch: \_\_\_\_\_

PURGE VOLUME CALCULATION:  
Water Column Length x Multiplier x No. Volumes = Purge Volume  
10.35 x 0.17 x 3 = 5.5  
Water Column Length Multiplier No. Volumes 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
<del>1025</del>	<del>2.25</del>	<del>6.98</del>	<del>21.3</del>	<del>631</del>			
<del>1027</del>	<del>4.5</del>	<del>6.91</del>	<del>21.6</del>	<del>622</del>			
<del>1033</del>	<del>5.5</del>	<del>6.84</del>	<del>21.9</del>	<del>620</del>			
1035							sample

FIELD TECHNICIAN: JWA  
DATE: 12/15/14

# PURGE/DEVELOPMENT FORM

**PROJECT NAME:** Shore Acres Gas                      **PROJECT NUMBER:** GHA.19009  
**PROJECT MANAGER:** MSS                                      **TASK NUMBER:** \_\_\_\_\_  
**SITE ADDRESS:** 403 East 12th Street, Oakland, Ca

**WELL ID:** MW-5    **TYPE OF WELL:** Monitoring

**WATER COLUMN DATA:** (feet)                              **WELL DIAMETER:**  
 Well Total Depth: \_\_\_\_\_                              2-inch:  \_\_\_\_\_  
 Depth to Water: \_\_\_\_\_                                  4-inch: \_\_\_\_\_  
 Water Column Length: \_\_\_\_\_                              6-inch: \_\_\_\_\_

**PURGE VOLUME CALCULATION:**  
 Water Column Length x Multiplier x No. Volumes = Purge Volume  
 \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ = 6  
 Water Column Length                      Multiplier                      No. Volumes                      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:**    **SAMPLE METHOD:**  
 Disposable Bailer  \_\_\_\_\_                      Disposable Bailer  \_\_\_\_\_  
                                  PVC Bailer \_\_\_\_\_    Pump: \_\_\_\_\_  
 Submersible Pump \_\_\_\_\_    Other: \_\_\_\_\_  
                                  Other \_\_\_\_\_

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
							<u>Screen</u>
<u>1235</u>							<u>sample</u>

**FIELD TECHNICIAN:** DW  
**DATE:** 12/15/14

# PURGE/DEVELOPMENT FORM

**PROJECT NAME:** Shore Acres Gas                      **PROJECT NUMBER:** GHA.19009  
**PROJECT MANAGER:** MSS                                      **TASK NUMBER:** \_\_\_\_\_  
**SITE ADDRESS:** 403 East 12th Street, Oakland, Ca

**WELL ID:** MW-6    **TYPE OF WELL:** Monitoring

**WATER COLUMN DATA:**                                      **WELL DIAMETER:**  
 Well Total Depth: 19.63 (feet)                      2-inch:   
 Depth to Water: 7.62                                      4-inch: \_\_\_\_\_  
 Water Column Length: 12.01                              6-inch: \_\_\_\_\_

**PURGE VOLUME CALCULATION:**  
 Water Column Length x Multiplier x No. Volumes = Purge Volume  

$$\frac{12.01}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} = \frac{6.1}{\text{Purge Volume}}$$

**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:**    **SAMPLE METHOD:**  
 Disposable Bailer                       Disposable Bailer   
 PVC Bailer \_\_\_\_\_                                      Pump: \_\_\_\_\_  
 Submersible Pump \_\_\_\_\_                              Other: \_\_\_\_\_  
 Other \_\_\_\_\_

TIME	VOLUME PURGED (gal)	pH	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1100	2	7.11	20.6	617			
1159	4	7.09	20.7	601			
1158	6.1	7.00	20.3	598			
1200							sample

**FIELD TECHNICIAN:** DJA  
**DATE:** 12/15/14

# Argon Analytical Services, Inc.

## CHAIN OF CUSTODY

Project Information:					Report To:					Samples Submitted To:									
Project No: GHA.19009					Consultant: Environmental Compliance Group, LLC					Laboratory: Argon Labs									
Project Title: Shore Acres Gas					Address: 270 Vintage Drive					Address: 2905 Railroad Avenue									
Location: 403 East 12th Street Oakland, CA					Turlock, CA 95382					Ceres, CA 95307									
Sampler's Name: (print)					Contact: Mike Sgourakis					Contact:									
Sampler's Signature:					Phone: 916.600.4580					Phone: (209) 581-9280									
					Fax: 209.664.1040					Fax: (209) 581-9282									
					Bill To:					Date Results Required:									
					Client: Environmental Compliance Group, LLC					Date Report Required:									
					Address: 270 Vintage Drive Turlock, CA														
TURN AROUND TIME					ANALYSIS														
RUSH	24 Hour	48 Hour	Standard (5 days)	Special (10-14 days)	TP-Hg by EPA Method 8015M	BTEX, 5 oxygenates, 1,2-DCA, EDB by EPA Method 8260B													
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>															
Sample ID.	Date	Time	# Containers	Matrix															COMMENTS
																			Preservative
MW-1	12/17/14	1100	3	water	X	X													X
MW-2		1200																	
MW-3		1135																	
MW-4		1055																	
MW-5		1235																	
MW-6		1200																	
EW-1		1250																	
EW-2		1300																	
EW-3		1255																	
EW-4		1305																	
Relinquished By: <i>[Signature]</i>					Date: 12/16/14 Time: 15:30					Received By: <i>[Signature]</i>					SPECIAL INSTRUCTIONS: Global ID# <b>T0600174667</b>				
Relinquished By:					Date: Time:					Received By:									
Relinquished By:					Date: Time:					Received By:									