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October 15, 2016

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

Subject:

First Quarter 2016 Groundwater Monitoring Report

Shore Acres Gas

403 East 12th Street, Oakland, Alameda County, California

RO #0002931

ECG # GHA.19009

Dear Ms. Drogos:

Enclosed please find a copy of the October 8, 2016 First Quarter 2016 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

12-5 /s



270 Vintage Drive Turlock, CA 95382 P: 209.664.1035 F: 209.664.1040

FIRST QUARTER 2016 GROUNDWATER MONITORING AND REMEDIATION REPORT

SHORE ACRES GAS 403 EAST 12TH STREET OAKLAND, CALIFORNIA

Prepared for: Rashid Ghafoor

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

October 8, 2016

MICHAEL S. GGOURAKS No. 7194 OF CALFORN

Drew Van Allen Senior Project Manager

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

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First Quarter 2016 Groundwater Monitoring and Remediation Report Shore Acres Gas 403 East 12th Street, Oakland, California

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INTRODUCTION

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

This report describes activities conducted during First Quarter 2016 groundwater monitoring event. Site information is as follows:

Site Location:

403 East 12th Street

Oakland, California

Geotracker Global ID:

T0600174667

LIMITATIONS

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

SITE DESCRIPTION AND HYDROGEOLOGIC CONDITIONS

SITE DESCRIPTION

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

HYDROGEOLOGIC CONDITIONS

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

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

First Quarter 2016 Groundwater Monitoring and Remediation Report Shore Acres Gas 403 East $12^{\rm th}$ Street, Oakland, California

Depth to groundwater is shallow, ranging between 8- to 14-feet bgs. The groundwater flow direction appears to be generally toward the south.

PROJECT BACKGROUND

INVESTIGATIONS

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

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

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

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

RISK ASSESSMENTS

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

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

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

CORRECTIVE ACTIONS

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

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

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

First Quarter 2016 Groundwater Monitoring and Remediation Report Shore Acres Gas 403 East 12th Street, Oakland, California

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 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. The remediation system was shut down on February 18, 2015 due to complaints from neighbors regarding the propane tank onsite providing supplemental fuel to the remediation equipment. ECG supervised the installation of natural gas provided by PG&E to the site and the system was restarted on August 11, 2015. The system was shut down on December 16, 2015 due to contaminant breakthrough of the first carbon vessel and scheduled carbon change out. The system was restarted January 21, 2016 and shut down on April 11, 2016 due to decreasing contaminant extraction rates and pending regulatory review of ECG's Fourth Quarter 2015 Monitoring and Remediation System Evaluation Report, dated August 1, 2016.

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 8,434 pounds of TPHg, 39 pounds of benzene, and 2. pounds of MTBE from the subsurface.

FIRST QUARTER 2016 MONITORING EVENT

WORK PERFORMED AND PROPOSED

The following is a summary of work performed during the first quarter 2016 and work proposed for next quarter at the site.

WORK PERFORMED FIRST QUARTER 2016

- 1. ECG restarted the remediation system after carbon change out on January 21, 2016.
- 2. The first quarter 2016 groundwater monitoring event was performed on March 22, 2016.
- 3. ECG performed DPE system startup, troubleshooting, and maintenance to the O&M unit.
- 4. The remediation system was shut down April 11, 2016 due to decreasing contaminant extraction rates and pending regulatory review of remediation system evaluation report.

WORK SCHEDULED FOR THIRD QUARTER 2016

- 1. Prepare and finalize fourth quarter 2015 monitoring and remediation system evaluation report.
- 2. Prepare and finalize the first quarter 2016 monitoring report.
- 3. Perform third quarter 2016 monitoring event which will be a post remediation/rebound monitoring event after the remediation system has been down for more than 5 months.

DISCUSSION OF RECENT MONITORING ACTIVITIES

ECG performed the first quarter 2016 groundwater monitoring and sampling event at the site on March 22, 2015. Gauging, development, purging, and sampling were conducted in accordance with ECG's SOPs included in Appendix B. The collected groundwater samples were submitted to California Agricultural and Environmental Labs located in Ceres, California for laboratory analysis under COC protocols (Appendix C).

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

First Quarter 2016 Groundwater Monitoring and Remediation Report Shore Acres Gas 403 East 12th Street, Oakland, California

Current Phase of Project:

Groundwater Sampling Schedule:

Remediation 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 Average Groundwater Elevation

Groundwater Gradient Direction

Groundwater Gradient TPHg Detected Range Benzene Detected Range

MTBE Detected

12.40-feet below ground surface (bgs) 19.46 -feet above mean sea level

Radially inward Not Calculated

900 ug/L (MW-2) to 22,000 ug/L (EW-2) 7.3 ug/L (MW-2) to 920 ug/L (EW-4)

8.7 ug/L (MW-6) to 81 (EW-4)

Laboratory analytical reports and COCs are provided in Appendix C. Field notes are located in Appendix D. Summaries of groundwater monitoring and analytical data are presented in Tables 4a.

DISCUSSION OF RECENT REMEDIATION ACTIVITIES

ECG performed remediation system monitoring and operations and maintenance activities on January 27, March 1 and 21, and April 11, 2016. Based on the low concentrations from influent vapor results from March 1, 2016 an additional March sample was collected on March 21, 2016 to confirm results. These influent samples also contained low concentrations of contaminant vapors and the remediation system was shut down on April 11, 2016.

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 D. 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 Pace Analytical, LLC, located in Davis, California for laboratory analysis under COC protocols.

The following is a summary of the first quarter 2016 remediation results at the site:

SVE System Operating Hours Active SVE Extraction Points Average Influent Flowrate

TPHg Detected Range in SVE Influent

1,665.6 hours, 69.4days

Varied 140 scfm

20 parts per million by volume (ppmv) to 43

ppmv

Benzene Detected Range in SVE Influent

SVE Destruction Efficiency

0.73 ppmv to 0.86 ppmv

>97% or less than 0.109 pounds of benzene

per day emission

Average Groundwater Extraction Rate

1.8 gallons per minute (gpm)

Average TPHg Detected in Groundwater Influent

9,750 ug/L

First Quarter 2016 Groundwater Monitoring and Remediation Report Shore Acres Gas 403 East 12th Street, Oakland, California

> Average Benzene Detected in Groundwater Influent 515 ug/L Average MTBE Detected in Groundwater Influent 52 ug/L

The remediation system was shut down April 11, 2016 due to decreasing contaminant extraction rates and pending regulatory review of remediation system evaluation report. 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. ECG will keep the remediation system shut down pending regulatory review of remediation system evaluation report. The next groundwater monitoring event will be in third quarter 2016 and will be a rebound monitoring event performed five months after the system was shut down.

The DPE system operated for 69 days during the first quarter of 2016 from January 21, 2016, when the system was restarted to April 11, 2016, when the system was shut down. Approximately 108 pounds of TPHg, 1.7 pounds of benzene, and 0.3 pounds of MTBE were removed from the soil beneath the site during this quarter (Table 5a). Approximately 20 pounds of TPHg, 1.1 pounds of benzene, and 0.11 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.

RECOMENDATIONS

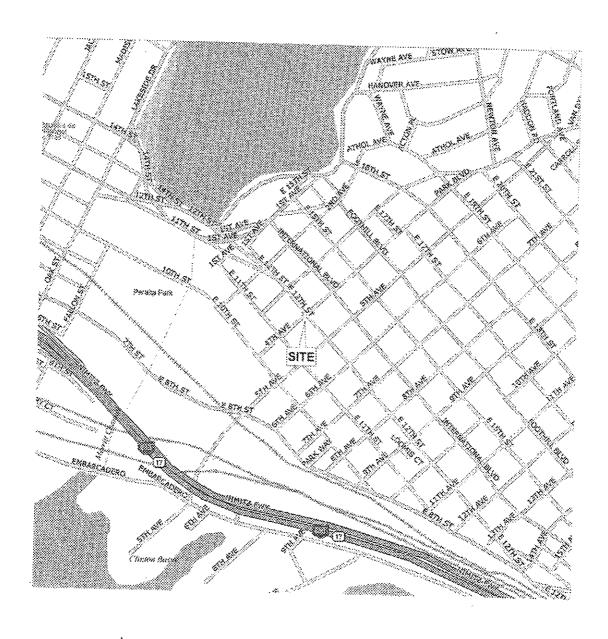
Based on the above findings and the results of ECG's Fourth Quarter 2015 Monitoring and Remediation System Evaluation Report, dated August 1, 2016, ECG recommends the following.

Based on the decreasing trends and rebound observed during times of prolonged operation, ECG recommends continued operation of the DPE system after the rebound samples are collected from the monitoring well network.

Based on the data that approximately 3,000 pounds of TPHg remains in the subsurface, most likely around approximately 15-feet bgs but lower extraction rates show difficulty removing the contamination with the current DPE configuration, 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 in concentrations, if any, is observed during low water conditions. It has been documented during operation and maintenance 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 ACEHS, ECG will prepare a workplan report detailing the activities suggested above.

 ${\sf ECG}$ will make further conclusions and recommendations after the rebound samples and pilot test are concluded.

FIGURES



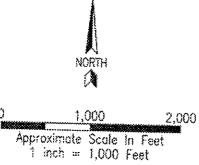


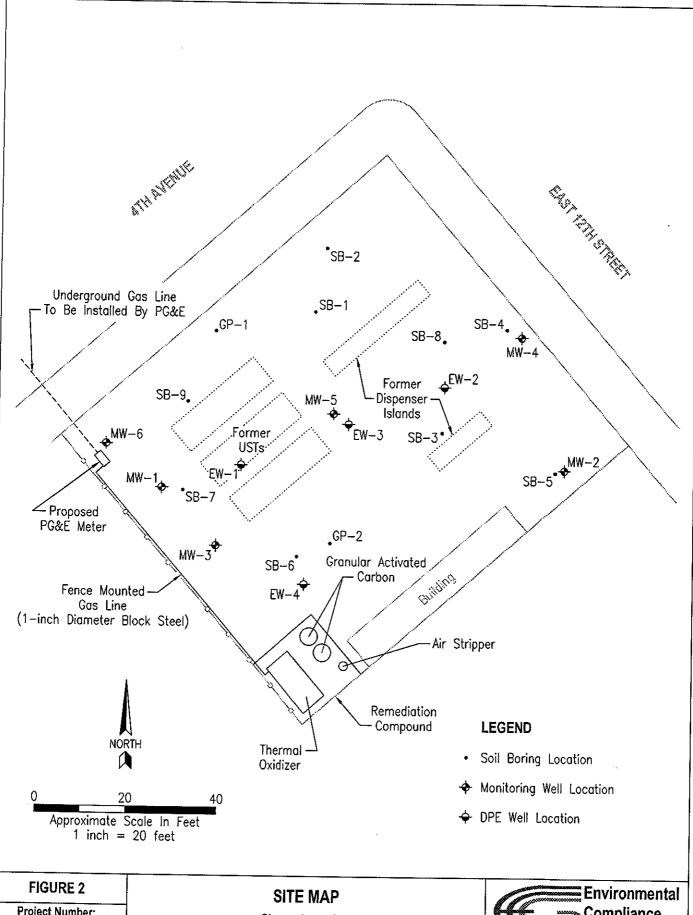
FIGURE 1

Project Number: GHA 19009

Date: February 9, 2011

SITE LOCATION MAP





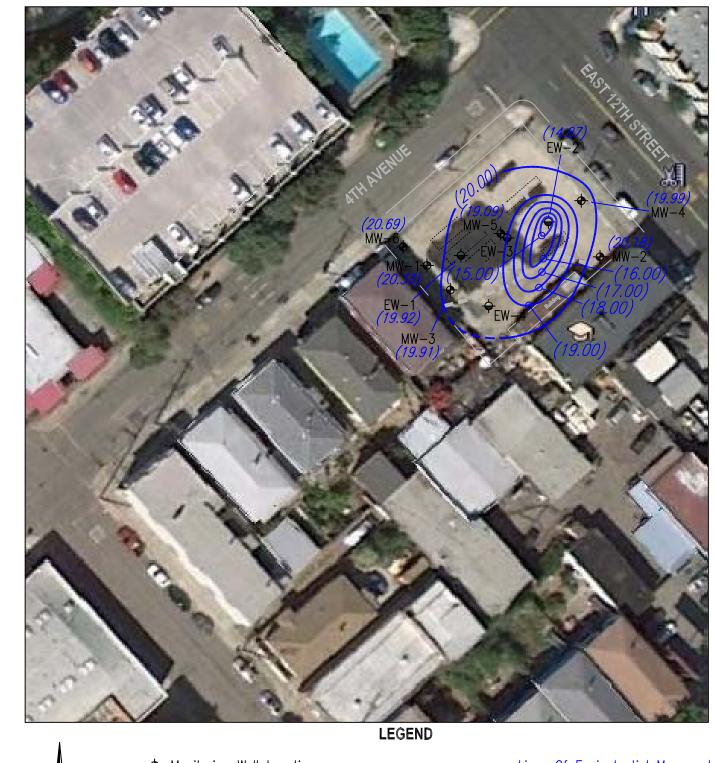
Project Number: GHA.19009

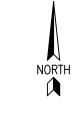
Date: February 26, 2015

Shore Acre Gas 403 East 12th Street Oakland, California



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





♦ Monitoring Well Location

100

→ Vapor Extraction Well Location

Elevation Of Groundwater Measured In Feet Above Mean Sea Level

Approximate Scale In Feet
1 inch = 50 feet

50

(20.69)

-(20.00)

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

Flow Lines

General Gradient Flows Radially Inward

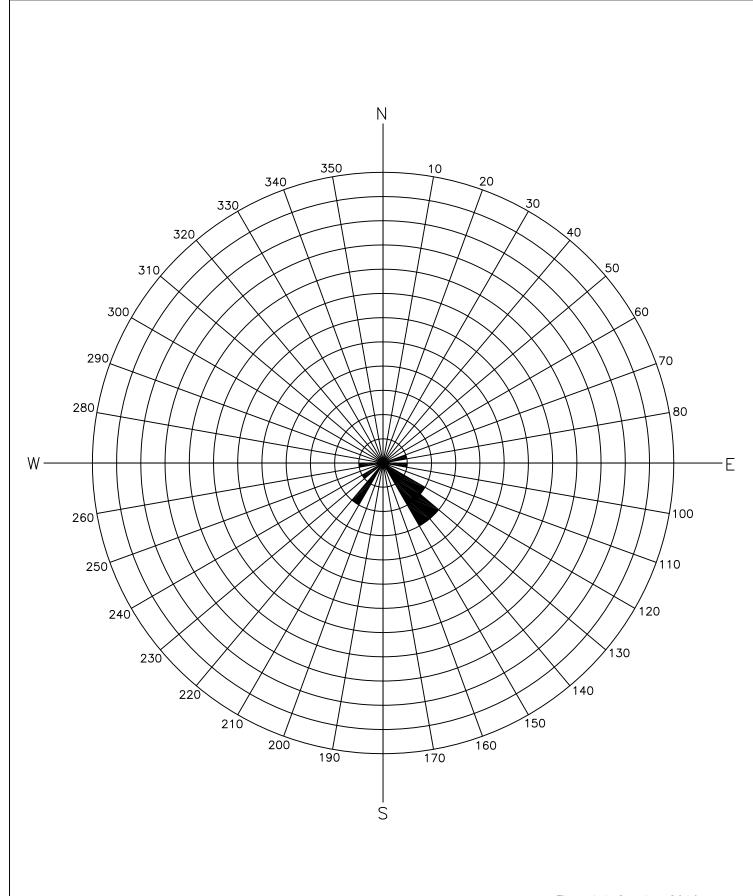
FIGURE 3

Project Number: GHA.19009

Date: November 17, 2016

POTENTIOMETRIC SURFACE MAP MARCH 22, 2016





Thru 1st Quarter 2016

FIGURE 4

Project Number: GHA.19009

Date: November 17, 2016

ROSE DIAGRAM







♦ Monitoring Well Location

→ Vapor Extraction Well Location

(22,000) Concentration Of TPHg In Groundwater Measured In ug/L

<u>(5,000)</u>

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

* Active Extraction From This Well

0 50 100 Approximate Scale In Feet

1 inch = 50 feet

FIGURE 5

Project Number: GHA.19009

Date: November 17, 2016

TPHg IN GROUNDWATER ISOCONCENTRATION MAP MARCH 22, 2016

Shore Acre Gas 403 East 12th Street Oakland, California



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



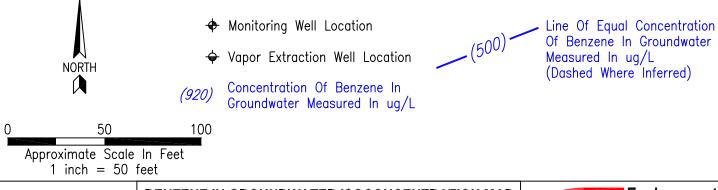


FIGURE 6

Project Number: GHA.19009

Date: November 17, 2016

BENZENE IN GROUNDWATER ISOCONCENTRATION MAP MARCH 22, 2016





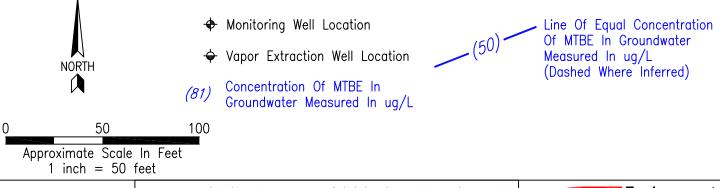


FIGURE 7

Project Number: GHA.19009

Date: November 17, 2016

MTBE IN GROUNDWATER ISOCONCENTRATION MAP MARCH 22, 2016



TABLES

Table 1 Well Construction Details

Shore Acres Gas 403 East 12th Street Oakland, California

Well ID	Date Installed	TOC Elevation (ft amsl)	Well Depth (ft bgs)	Casing Diameter (inches)	Casing Material	Screen/ Filter	Screen Interval (ft bgs)
Monitoring	Wells				<u> </u>		[(it bgs)
MW-1		30.81	20	2	PVC	0.020/#3	10-20
MW-2		31.29	20	2	PVC	0.020/#3	10-20
MW-3	June 2011	31.30	18	2	PVC	0.020/#3	8-18
MW-4		31.21	19	2	PVC	0.020/#3	9-19
MW-5		31.35	20	2	PVC	0.020/#3	10-20
MW-6		30.79	20	2	PVC	0.020/#3	10-20
Dual Phase I	Extraction We	lls					
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

amsi - denotes above mean sea level

bgs - denotes below ground surface

PVC - denotes polyvinyl chloride

Table 2a Historical Soil Analytical Data TPH and BTEX

Boring ID	Sample	Collection	TPHd	TPHg	Benzene	Toluene	Ethyl-	Total
	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	benzene	xylene
LICTO	(feet)					1	(mg/kg)	(mg/kg
UST Removal Sar							1 (11.87.481	T Trug/K
SS-D1	2		1,800*	3,000	<0.25	0.34	39	180
SS-D2	2		900*	2,400	<0.25	<0.25	36	
SS-D3	2		460*	1,000	<0.15	<0.15	12	120
SS-D4	2	}	540*	640	<0.090	1.0	6.1	14
SS-D5	2	7	320	140	<0.025	<0.025		51
SS-D6	2.0		320*	260	<0.025	0.054	1.3	3.2
SS-J1	2.0	7	39*	160	<0.025	<0.025	1.0	8.0
SS-Isle	4.0	August	560* -	100	<0.025		0.71	0.94
SS-7	18.0	2009	310*	1,600	6.9	<0.025	0.30	0.084
Tank 1-SS-1	14.0	1	830*	2,500	4.2	76	39	200
Tank 1-SS-2	14.0	1	62*	480	1.8	100	69	360
Tank 2-SS-1	14.0	1	120*	290	0.37	5.3	14	62
Tank 2-SS-2	14.0	1 1	330*	80		2.4	6.3	31
Tank 3-SS-1	14.0	1 }	. 480*	2,100	0.074 2.4	0.051	1.2	5.8
Tank 3-SS-2	14.0	1	75*	130		41	62	320
oil Borings				130	0.23	0.26	3.1	15
GP-1-15.5	15.5		13.0	18.0	0.62			
P-1-18.0	18.0	 	<1.0	<1.0	0.63	0.052	0.69	0.13
P-2-12.0	12.0	July 2006 -	600		0.0056	0.0082	<0.005	0.019
P-2-20.0	20.0	<u> </u>	79	3,600	17	180	98	440
B-1-9.5	9.5			1,100	3.2	41	25	130
B-1-24.5	24.5	! -		1,600	5.1	43	30	180
B-1-29.5	29.5	-		<1.0	<0.005	<0.005	<0.005	<0.010
B-2-9.5	9.5	-		<1.0	<0.005	<0.005	<0.005	<0.010
B-2-24.5	24.5	_		2.2	0.26	<0.010	0.066	<0.020
3-2-29.5	29.5			<1.0	<0.005	<0.005	<0.005	< 0.010
3-3-14.5	14.5	<u> -</u>		<1.0	<0.005	<0.005	<0.005	<0.010
3-3-24.5	24.5	-		17	17	100	42	240
3-3-29.5	29.5	<u> </u>		<1.0	<0.005	0.005	<0.005	0.013
3-4-14.5	14.5	-		<1.0	<0.005	<0.005	<0.005	<0.010
3-4-19.5		Anril 2010 -		1,700	13	79	28	170
3-4-29.5	29.5	April 2010		<1.0	<0.005	0.009	<0.005	0.026
3-5-14.5	14.5	<u> </u>		<1.0	<0.005	<0.005	<0.005	<0.010
-5-24.5		<u> </u>		470	<0.20	0.45	6.2	37
-5-29.5	24.5	L		<1.0	<0.005	<0.005	<0.005	<0.010
-6-9.5	29.5	_		<1.0	<0.005	<0.005	<0.005	<0.010
-6-29.5	9.5	<u> </u>		6,100	21	170	95	580
-6-32	29.5	<u> </u>		<1.0	<0.005	<0.005	<0.005	<0.010
-7-9.5	32.0	<u> </u>		<1.0	<0.005	<0.005	<0.005	<0.010
-7-9.5 -7-29.5	9.5	<u> </u>		4,000	12	46	55	360
	29.5			<1.0	<0.005	<0.005	<0.005	<0.010
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	Collection	TPHd	TPHg	Benzene	Toluene	Ethyl-	Tota
	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	benzene	xylene
	(feet)				1 0, 0,	(6,6,	(mg/kg)	1
SB-8-9.5	9.5			2,500	16	110	63	(mg/k
SB-8-24.5	24.5			<1.0	<0.005	<0.005	<0.005	370
SB-8-29.5	29.5	April 2010		<1.0	<0.005	<0.005	<0.005	<0.01
SB-9-14.5	14.5	April 2010		390	3.0	3.0	9.1	<0.01
SB-9-29.5	29.5]		<1.0	<0.005	<0.005	<0.005	41
SB-9-32	32.0			<1.0	<0.005	<0.005	<0.005	<0.01
Groundwater We			_		1 10,003	10.003	1 <0.005	<0.01
MW-1-5	5		<5.0	<1.0	<0.005	<0.005	<0.005	0.04
MW-1-15	15	1 1	<5.0	18	0.55	<0.050	<0.005	<0.010
MW-1-20	20	1	<5.0	<1.0	<0.005	<0.005	0.87	1.2
MW-2-5	5	1	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
MW-2-10	10]	<5.0	69	<0.005		<0.005	<0.010
MW-2-15	15]	<5.0	50	<0.050	<0.005	<0.005	<0.010
MW-2-20	20	!	<5.0	<1.0	<0.005	0.48	3.1	19
ИW-3 - 5	5	<u> </u>	<5.0	<1.0	<0.003	<0.005	<0.005	<0.010
ЛW-3-10	10		<15	840	3.4	<0.010	<0.010	<0.020
/W-3-15	15		<5.0	380	3.0	33	20	140
/W-3-20	20	-	<5.0	<1.0	0.019	4.5	7.3	41
1W-4-5	5	-	<5.0	<1.0	<0.005	<0.005	0.006	<0.010
1W-4-10	10	<u> </u>	<15	420	1.7	<0.005	<0.005	<0.010
1W-4-15	15	<u> </u>	<5.0	3.1	0.036	2.6	9.2	51
1W-4-20	20		<5.0	<1.0	0.038	0.20	0.15	0.95
IW-5-5	5	June 2011 –	<5.0	76	<0.10	0.017	0.010	0.039
IW-5-10	10	<u> </u> -	<15	3,200		<0.10	1.3	0.76
W-5-15	15	-	<5.0	600	1.3	6.5	72	410
W-6-5	5	-	<5.0	<1.0		13	15	110
W-6-10	10]	<5.0	5.1	<0.005	<0.005	<0.005	<0.010
W-6-15	15	 -	<5.0	<1.0	0.015	<0.010	3.4	1.0
W-6-20	20	 	<5.0		<0.005	<0.005	<0.005	<0.010
V-1-5	5	<u> </u> -	<5.0	<1.0	<0.005	<0.005	<0.005	<0.010
V-1-10	10	 	<15	34	<0.005	<0.005	0.16	0.31
V-1-15	15		<15	85	<0.10	<0.10	2.2	0.89
V-1-20	20	 	<5.0	420	2.1	4.1	9.4	55
V-2-5	5	-		<1.0	<0.005	<0.005	<0.005	<0.010
V-2-10	10		<5.0	<1.0	<0.005	<0.005	<0.005	< 0.010
V-2-15	15	ļ. <u></u>	<5.0	130	<0.10	<0.10	2.9	15
V-2-20	20	ļ	<15	5,500	29	430	120	910
			<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

Boring ID	Sample	Collection	DIPE	ETBE	MTBE	TAME	ТВА	1,2-DCA	FDE
	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	1	EDB
	(feet)			3,3,		(***5/ **6)	(mg/kg)	(mg/kg)	(mg/kg
UST Removal San	nples					<u></u>	<u> </u>	<u> </u>	<u> </u>
SS-D1	2		<0.25	<0.25	<0.25	<0.25	-1 F	T	
SS-D2	2		<0.25	<0.25	<0.25	<0.25	<1.5		
SS-D3	2		<0.15	<0.15	<0.15	<0.15	<1.5		
SS-D4	2	7	<0.090	<0.090	<0.090	<0.090	<0.70 <0.50		
SS-D5	2	7	<0.025	<0.025	<0.025	<0.030			
SS-D6	2	1	<0.025	<0.025	<0.025	<0.025	<0.15		
SS-J1	2	1	<0.025	<0.025	<0.025	<0.025	<0.15		
SS-Isle	4	August	<0.025	<0.025	<0.025	<0.025	<0.15		
SS-7	18	2009	<0.25	<0.25	<0.25	<0.25	<0.15		
Tank 1-SS-1	14	1	<0.50	<0.50	<0.50		<1.5	<0.25	<0.25
Tank 1-SS-2	14	1 1	<0.040	<0.040	0.37	<0.50	<2.5	<0.50	<0.50
Tank 2-SS-1	14	1	<0.050	<0.050	0.18	<0.040 <0.050	0.51	<0.040	<0.040
Tank 2-SS-2	14	[]	<0.025	<0.025	0.090		0.35	<0.050	<0.050
Tank 3-SS-1	14		<0.50	<0.50	<0.50	<0.025	0.16	<0.025	<0.025
ank 3-SS-2	14		<0.025	<0.025	0.19	<0.50	<2.5	<0.50	<0.50
oil Borings	· · · · · · · · · · · · · · · · · · ·	·	10.023	10.023	0.19	<0.025	0.15	<0.025	<0.025
SP-1-15.5	15.5		<0.005	<0.005	0.020	+0.00F	· 		
SP-1-18.0	18.0	 	<0.005	<0.005	0.029 0.54	<0.005	0.27		
P-2-12.0	12.0	July 2006	<0.50	<0.50		<0.005	0.33		
P-2-20.0	20.0	ŀ	<0.025	<0.025	<0.50	<0.50	<2.5		
B-1-9.5	9.5		<0.80	<0.80	0.041	<0.025	<0.15		
B -1 -24.5	24.5	<u> </u>	<0.005	<0.005	<0.80	<0.80	<8.0	<0.80	<0.80
B-1-29.5	29.5	ļ-	<0.005	<0.005	0.11	<0.005	<0.050	<0.005	<0.005
B-2-9.5	9.5	<u> </u> -	<0.003	<0.003	<0.005	<0.005	<0.050	<0.005	<0.005
B-2-24.5	24.5	-	<0.005		<0.010	<0.010	<0.10	<0.010	<0.010
B-2-29.5	29.5	F	<0.005	<0.005	0.053	<0.005	<0.050	<0.005	<0.005
3-3-14.5	14.5	+	<2.0	<0.005 <2.0	<0.005	<0.005	<0.050	<0.005	<0.005
3-3-24.5	24.5	-	<0.005		<2.0	<2.0	<20	<2.0	<2.0
3-3-29.5	29.5	-	<0.005	<0.005	0.10	<0.005	<0.050	<0.005	<0.005
3-4-14.5	14.5	-	<1.0	<0.005	0.010	<0.005	<0.050	<0.005	<0.005
3-4-19.5		April 2010	<0.005	<1.0	<1.0	<1.0	<10	<1.0	<1.0
3-4-29.5	29.5		<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
3-5-14.5	14.5	-		<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
3-5-24.5	24.5	-	<0.20	<0.20	<0.20	<0.20	<2.0	<0.20	<0.20
-5-29.5	29.5	<u> </u>	<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
-6-9.5	9.5	-	<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
-6-29.5	29.5	<u> </u>	<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0
-6-32	32.0	<u> </u>	<0.005	<0.005	0.20	<0.005	<0.050	<0.005	<0.005
-7-9.5	9.5	<u> </u>	<0.005	<0.005	0.18	<0.005	<0.050	<0.005	<0.005
-7-29.5	29.5		<1.0	<1.0	4.0	<1.0	<10	<1.0	<1.0
-7-32	32.0	<u> </u>	<0.005	<0.005	0.18	<0.005	<0.050	<0.005	<0.005
	32.0		<0.005	<0.005	0.11	<0.005	<0.050	<0.005	<0.005

Table 2b Historical Soil Analytical Data Oxygenates and Lead Scavengers

Shore Acres Gas 403 East 12th Street Oakland, California

Boring ID	Sample	Collection	DIPE	ETBE	MTBE	TAME	ТВА	1,2-DCA	EDB
	Depth	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	1
	(feet)				,	(6,6)	(110) (8)	(1116/ 116)	(mg/kg
SB-8-9.5	9.5		<2.0	<2.0	<2.0	<2.0	<20	-20	1 00
SB-8-24.5	24.5		<0.005	<0.005	0.033	<0.005	<0.050	<2.0	<2.0
SB-8-29.5	29.5	April 2010	<0.005	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
SB-9-14.5	14.5	April 2010	<0.20	<0.20	5.5	<0.20	<2.0	<0.005	<0.005
SB-9-29.5	29.5	7	<0.005	<0.005	0.090	<0.005		<0.20	<0.20
SB-9-32	32.0] .	<0.005	<0.005	0.11	<0.005	0.15 <0.050	<0.005	<0.005
Groundwater Wel	ls			1 10.000	1 0.11	1 (0.003	<0.050	<0.005	<0.005
MW-1-5	5		<0.005	<0.005	0.35	<0.005	0.002	.0.00=	
MW-1-15	15	1	<0.050	<0.050	1.1	<0.003	0.093	<0.005	<0.005
MW-1-20	20		<0.005	<0.005	0.31		<0.50	<0.050	<0.050
ИW-2-5	5		<0.005	<0.005	<0.005	<0.005	0.58	<0.005	<0.005
ЛW-2-10	10	!	<0.050	<0.050	<0.050	<0.005	<0.050	<0.005	<0.005
/IW-2-15	15	ļ	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050
/W-2-20	20		< 0.005	<0.005	0.006	<0.050	<0.50	<0.050	<0.050
/W-3-5	5	1	<0.010	<0.010		<0.005	<0.050	<0.005	<0.005
1W-3-10	10	ŀ	<0.80	<0.80	1.5 1.3	<0.010	0.37	<0.010	<0.010
1W-3-15	15		<0.20	<0.20	3.0	<0.80	<8.0	<0.80	<0.80
1W-3-20	20	}-	<0.005	<0.005		<0.20	<2.0	<0.20	<0.20
IW-4-5	5	L	<0.005	<0.005	0.036	<0.005	0.16	<0.005	<0.005
IW-4-10	10	}	<0.40	<0.40	<0.005	<0.005	<0.050	<0.005	<0.005
IW-4-15	15	F	<0.010	<0.010	<0.40	<0.40	<4.0	<0.40	<0.40
W-4-20	20	<u> </u>	<0.005	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010
W-5-5	5	June 2011 -	<0.10	<0.10	<0.005	<0.005	<0.050	<0.005	<0.005
W-5-10	10	-	<4.0	<4.0	<0.10	<0.10	<1.0	<0.10	<0.10
W-5-15	15	 -	<0.40		<4.0	<4.0	<40	<4.0	<4.0
W-6-5	5	-	<0.005	<0.40	<0.40	<0.40	<4.0	<0.40	<0.40
W-6-10	10	<u> </u>	<0.003	<0.005	<0.005	<0.005	<0.050	<0.005	<0.005
W-6-15	15	<u> </u>	<0.010	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010
W-6-20	20	-	<0.005	<0.005	0.026	<0.005	0.088	<0.005	<0.005
V-1-5	5	 	<0.005	<0.005	0.010	<0.005	0.37	<0.005	<0.005
V-1-10	10	-	<0.10	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050
V-1-15	15	<u></u>		<0.10	<0.10	<0.10	<1.0	<0.10	<0.10
V-1-20	20		<0.40	<0.40	0.59	<0.40	<4.0	<0.40	<0.40
V-2-5	5	-	<0.005	<0.005	0.009	<0.005	0.16	<0.005	<0.005
V-2-10	10	<u></u>	<0.005	<0.005	0.25	<0.005	0.14	<0.005	<0.005
V-2-15	15		<0.10	<0.10	0.33	<0.10	<1.0	<0.10	<0.10
/-2-20	20	 	<4.0	<4.0	<4.0	<4.0	<40	<4.0	<4.0
	- 20	<u> </u>	<0.005	<0.005	0.008	<0.005	0.26	<0.005	<0.005

Notes:

mg/kg - denotes milligrams per kilogram

MTBE -

denotes methyl tertiary butyl ether

< - denotes less than the detection limi DIPE ---- - denotes not analyzed/applicable

denotes di-isopropyl ether ETBE -

DCA - denotes dichloroethane

denotes ethyl tertiary butyl ether

TAME -

EDB - denotes ethylene dibromide

TBA -

denotes tertiary amyl ether 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					Ethyl-	Total
	Date	TPHd	TPHg	Benzene	Toluene	benzene	Xylene
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Excavation					<u> </u>	(-0,-,	1-81-1
	August						-
Pit Sample 1	2009	21,000	21,000	3,800	1,000	1,200	3,700
Direct Push Gr	ab Groundwa	ater Sampl	es	<u> </u>	<u> </u>		,, -,
SB-1			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	April 2010		<50	<0.5	<0.5	<0.5	<1.0
SB-6			440	<20	<20	<20	<40
SB-7	<u> </u>		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] [<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
B-13			400	51	2.4	4.2	9.7
B-14	December		<50	1.7	<0.5	2.1	<1.0
B-15	2011		320	32	0.7	33	25
B-16			4,800	1,600	10	49	<20
B-17			990	290	7.2	27	4.3
B-18	ſ		560	8.7	4.9	23	83
B-19	ſ		260	7.1	<0.5	16	7.0
B-21			<50	<0.5	<0.5	<0.5	<1.0
						10.5	

Notes:

TPHd - denotes total petroleum hydrocarbons as diesel

TPHg - denotes total petroleum hydrocarbons as gasoline

ug/L - denotes micrograms per liter

< - denotes less than the detection limit

--- - denotes not analyzed/applicable

Table 3b Grab Groundwater Sample Results Oxygenates and Lead Scavengers

Shore Acres Gas 403 East 12th Street Oakland, California

Sample ID	Collection Date	DIPE (ug/L)	ETBE (ug/L)	MTBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)
Excavation		<u> </u>	1					
Water	February 2000	<10	<10	15,000	39	17,000	<10	<10
Direct Push Gra	ab Groundwa	ter Sampl	es	<u>-L., , , , , , , , , , , , , , , , , , , </u>	<u> </u>		L	
SB-1		<0.5	<0.5	14	<0.5	<5.0	<0.5	<0.5
SB-2	<u>.</u>	<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	April 2010	<0.5	<0.5	0.6	<0.5	<5.0	<0.5	<0.5
SB-6		<20	<20	4,000	<20	<200	<20	~0.3 <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	- <0.5 <10
SB-10] [<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	December -	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
B-15	2011	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	
B-16	2011	<10	<10	<10	<10	<100	<10	<10
B-17		<2.0	<2.0	<2.0	<2.0	<20	<2.0	<2.0
B-18		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
B-19		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
B-21		<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
							10.5	~0.5

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

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	Groundwater Elevation	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylene
TOC		(ft bgs)	(ft amsl)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Monitorin					_			<u> </u>	1 ("0,"-)
MW-1	6/23/2011	10.46	20.35	<250	23,000	4,500	820	1,700	3,800
	9/22/2011	12.13	18.68	<50	21,000	4,000	1,500	980	3,000
	12/11/2011	11.69	19.12		23,000	2,900	1,000	720	3,000
· · · · · · · · · · · · · · · · · · ·	3/30/2012				Inaccessibl	e			
	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	749	11,000	530	190	460	950
	12/15/2014	7.66	23.15		11,000	1,100	140	310	420
	3/31/2015	8.81	22.00		38,000	1,200	230	810	2,600
	9/18/2015	12.23	18.58		7,600	890	38	240	360
	12/16/2015	12.02	18.79		8,900	580	16	110	110
MW-2	6/23/2011	10.70	20.59	<250	13,000	1,000	160	370	1,600
	9/22/2011	12.42	18.87	<50	12,000	300	130	470	1,400
	12/11/2011	11.98	19.31		8,300	170	120	450	1,500
	3/30/2012	8.55	22.74	<250	17,000	850	700	710	2,900
	6/1/2012	11.26	20.03		5,300	830	260	630	1,700
	9/14/2012	13.11	18.18	<50	10,000	260	190	600	1,900
	3/27/2013	9.43	21.86	<50	12,000	440	98	320	810
	5/20/2013	9.41	21.88	<100	6,600	300	74	190	500
	9/4/2013	10.11	21.18	<100	5,300	300	50	180	280
	12/6/2013	9.93	21.36	<50	4,300	280	39	140	160
	6/27/2014	9.93	21.36	<50	1,300	200	22	85	160
	9/19/2014	12.49	18.80		990	42	12	97	110
	12/15/2014	8.65	22.64		85	14	3.3	5.2	13
	3/31/2015	9.83	21.46						72
	9/18/2015	12.45	18.84		1,300	29	8.9	44	120
	12/16/2015	12.57	18.72		880	8.2	2.9	16	30

Table 4a Monitoring Well Data Water Level, TPH, and BTEX

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-3	6/23/2011	10.79	20.51	<250	55,000	15,000	3,600	2,000	4,300
	9/22/2011	12.60	18.70	<250	77,000	15,000	3,900	1,700	4,900
	12/11/2011	12.13	19.17		64,000	12,000	3,100	1,600	4,500
··	3/30/2012	7.90	23.40	<120	100,000	17,000	10,000	2,000	8,400
·	6/1/2012	11.47	19.83		83,000	15,000	6,000	2,900	10,000
	9/14/2012	13.42	17.88	<200	. 69,000	10,000	1,500	1,800	5,900
	3/27/2013	9.15	22.15	<200	63,000	7,100	2,100	1,900	7,700
	5/20/2013	9.16	22.14	<250	80,000	9,700	2,900	2,400	8,600
	9/4/2013	9.87	21.43	<250	47,000	7,200	470	1,200	5,000
	12/6/2013	9.69	21.61	<50	19,000	5,600	240	520	1,600
	6/27/2014	9.49	21.81	<50	12,000	5,800	240	860	760
······································	9/19/2014	11.62	19.68		9,500	610	160	220	400
	12/15/2014	.8.10	23.20	***	1,300	260	69	39	120
	3/31/2015	9.37	21.93		13,000	1,300	270	230	
	9/18/2015	13.13	18.17		8,300	1,000	150	150	700
	12/16/2015	13.09	18.21		11,000	1,100	130	290	440
				-	22,000	1,100		250	350
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	11,000
	12/11/2011	11.89	19.32		46,000	2,100	3,400	1,800	5,300
~~~	3/30/2012	8.51	22.70	<250	60,000	6,800	8,200	1,200	7,000
	6/1/2012	11.14	20.07		72,000	9,700	8,500	2,300	5,700
	9/14/2012	12.97	18.24	<50	15,000	940	880	450	9,000
	3/27/2013	9.05	22.16	<50	25,000	1,800	2,200	660	1,700
	5/20/2013	9.03	22.18	<250	18,000	1,600	1,700	470	2,500
	9/4/2013	9.68	21.53	<50	15,000	510	410	260	1,900
	12/6/2013	9.54	21.67	<50	9,600	630	650		820
	6/27/2014	9.58	21.63	<50	3,300	550	2,900	240	970
	9/19/2014	11.61	19.60		2,100	110	2, <del>9</del> 00	200	420
	12/15/2014	8.45	22.76		720	58		92	210
	3/31/2015	9.46	21.75		720		32	29	33
	9/18/2015	12.03	19.18		17,000	120	32	70	
	12/16/2015	12.41	18.80		8,200	130	33	70	200
		,			0,400	160	44	88	130

### Table 4a Monitoring Well Data Water Level, TPH, and BTEX

Well ID TOC	Date Measured	Depth to Groundwater (ft bgs)	Groundwater Elevation (ft amsi)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
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		***************************************		ot sampled		
,	6/1/2012	11.38	19.97		···		ot sampled		
	9/14/2012	13.61	17.74		Fi	ee product	- not sample	ed	<del></del>
	3/27/2013	9.21	22.14		Fr	ee product	- not sample	d	
	5/20/2013	9.17	22.18				- not sample		
·····	9/4/2013	9.70	21.65		Fr	ee product	- not sample	:d	· · · · · · · · · · · · · · · · · · ·
	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		Fr	ee product	- not sample		
	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
	3/31/2015	9.36	21.99		34,000	1,100	570	500	2,000
	9/18/2015		_		9,800	290	23	140	270
	12/16/2015				6,100	220	5.8	92	35
		į							<u></u>
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					Inacce	ssible		
	5/20/2013					Inacce	ssible		•
	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	08,8	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
	3/31/2015	8.75	22.04		10,000	330	12	80	73
	9/18/2015	11.61	19.18		7,000	430	24	120	110
	12/16/2015	11.58	19.21		8,200	460	12	17	26

## Table 4a Monitoring Well Data Water Level, TPH, and BTEX Shore Acres Gas

403 East 12th Street Oakland, California

TOC	Measured	Groundwater (ft bgs)	Groundwater Elevation (ft amsl)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylene
DPE Well:	s			1 1.0/-/	1 (-8/-/	(46/4)	<u> </u>	[ (ug/r)	(ug/L)
EW-1	6/28/2011				20,000	2.000		1	Γ
	9/22/2011	12.55	18.71	<120		2,000	490	1,000	2,400
	12/11/2011	12.09	19.17	-120	39,000	3,900	610	1,400	4,600
	3/30/2012	8.06	23.20	<120	27,000	2,600	270	1,400	4,400
	6/1/2012	11.42	19.84		21,000	3,100	160	910	2,300
	9/14/2012	13.37	17.89	<50	21,000	2,800	100	1,200	3,100
	3/27/2013	9.06	22.20	<50	22,000	1,900	50	1,000	2,600
	5/20/2013	9.06	22.20	<100	15,000	630	36	360	590
	9/4/2013	9.77	21.49	<50	11,000	600	28	210	350
	12/6/2013	9.63	21.83	<100	9,300	610	19	170	250
	6/27/2014	9.55	21.91	<100	11,000	740	17	260	340
	9/19/2014	12.41	19.05		12,000	1,400	210	1,900	2,400
	12/15/2014	8.20	23.26		28,000	1,000	450	1,400	3,900
	3/31/2015	9.30	22.16		4,000	560	29	150	150
	9/18/2015	13.25	18.21		6,000	270			
	12/16/2015	13.22	18.24		6,900	370	5.5	190	210
			20.24		6,000	250	5.3	31	31
EW-2	6/28/2011				33,000	2 100	2 000		
	9/22/2011	12.50	18.90	<250	**	3,100	2,000	790	3,500
	12/11/2011	12.12	19.28	~230	66,000 70,000	2,400	4,500	2,000	11,000
	3/30/2012	8.48	22.92	<250		2,800	6,900	2,700	13,000
	6/1/2012	11.40	20.00	~250	57,000	5,800	5,500	1,200	5,400
	9/14/2012	13.27	18.13	<100	82,000	8,800	8,600	3,300	13,000
	3/27/2013	9.24	22.16	<100	32,000	2,600	2,400	1,000	4,500
	5/20/2013	9.21	22.19	<50	18,000	940	790	390	1,700
	9/4/2013	9.88	21.52	<250		540	430	220	790
	12/6/2013	9.96	21.47	<50	10,000	680	580	480	1,700
	6/27/2014	9.85	21.58	<50 <50	13,000	620	380	350	1,600
	9/19/2014	16.80	14.63		27,000	3,200	5,600	1,200	8,000
	12/15/2014	8.73	22.70		18,000	690	1,300	360	2,400
	3/31/2015	9.90	21.53		11,000	510	500	160	1,100
	9/18/2015	15.10	16.33		16,000	1 400			
	12/16/2015	16.57	14.86		16,000 29,000	1,400 1,400	2,400 3, <b>300</b>	520 400	3,400 <b>2,500</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 amsi)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
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
<u></u>	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			26,000	1,200	1,100	350	2,000
	3/31/2015	9.31			8,000	170	18	130	560
	9/18/2015	13.98			12,000	340	110	180	1,900
	12/16/2015	14,31			11,000	360	75	110	. 920
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
<del></del>	9/19/2014	12,48			9,000	680	1,600	450	3,000
	12/15/2014	8.50	auu		7,700	570	170	320	1,000
	3/31/2015	9.78	***		23,000	1,000	1,200	420	1.700
	9/18/2015	15.45			7,200	860	62	55	130
	12/16/2015	16.08			5,200	1,200	35	40	81

#### 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

Well	Date	DIPE	ETBE	MTBE	TAME	TBA	1,2-DCA	EDB
ID TOC	Measured	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L
TOC	_ \			<u> </u>				<u> </u>
Monitorin		T	T	1	т		1	
MW-1	6/23/2011	<25	<25	3,000	<25	3,900	<25	<25
· · · · · · · · · · · · · · · · · · ·	9/22/2011	<50	<50	2,600	<50	2,500	<50	<50
	12/11/2011	<20	<20	1,800	<20	1,600	<20	<20
· · · · · · · · · · · · · · · · · · ·	3/30/2012	Inaccessible	2	······································		·		
	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	310	<0.5	98	<0.5	<0.5
	3/31/2015	<5.0	<5.0	330	<5.0	<50	<5.0	<5.0
	9/18/2015	<5.0	<5.0	150	<5.0	<50	<5.0	<5.0
	12/16/2015	<5.0	<5.0	57	<5.0	<50	<5.0	<5.0
MW-2	6/23/2011	<10	<10	240	<10	640	<10	<10
	9/22/2011	<5.0	<5.0	110	<5.0	260	<5.0	<5.0
	12/11/2011	<2.5	<2.5	45	<2.5	110	<2.5	<2.5
	3/30/2012	<5.0	<5.0	140	<5.0	490	<5.0	<5.0
	6/1/2012	<5.0	<5.0	180	<5.0	490	<5.0	<5.0
	9/14/2012	<5.0	<5.0	65	<5.0	190	<5,0	<5.0
	3/27/2013	<0.5	<0,5	120	<0.5	930	<0.5	<0.5
	5/20/2013	<2.5	<2.5	120	<2.5	1,800	<2.5	<2.5
	9/4/2013	<5.0	<5.0	100	<5.0	780	<5.0	<5.0
	12/6/2013	<5.0	<5.0	63	<5.0	230	<5.0	<5.0
	6/27/2014	<5.0	<5.0	21	<5.0	<50	<5.0	<5.0
	9/19/2014	<5.0	<5.0	16	<5.0	<50	<5.0	<5.0
	12/15/2014	<0.5	<0,5	7.3	<0.5	23	<0.5	<0.5
	3/31/2015							
T	9/18/2015	<0.5	<0.5	4.1	<0.5	<5.0	<0.5	<0.5
	12/16/2015	<0.5	<0.5	1.0	<0.5	<5.0	<0.5	<0.5
							-975	C'0'

Well	Date	DIPE	ETBE	МТВЕ	TAME	TBA	1,2-DCA	EDB
ID	Measured	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
TOC				, - ,	` - '	1.0,.,	1-01-1	(-6/~)
MW-3	6/23/2011	<100	<100	8,200	<100	6,400	<100	<100
	9/22/2011	<100	<100	11,000	<100	2,800	<100	<100
	12/11/2011	<100	<100	7,400	<100	1,800	<100	<100
	3/30/2012	<100	<100	13,000	<100	<1,000	<100	<100
	6/1/2012	<50	<50	12,000	<50	<500	<50	<50
	9/14/2012	<50	<50	9,400	<50	<500	<50	<50
	3/27/2013	<0.5	<0.5	7,900	<0.5	3,800	<0.5	<0.5
	5/20/2013	<25	<25	10,000	<25	5,000	<25	<25
	9/4/2013	<25	<25	5,300	<25	2,100	<25	<25
	12/6/2013	<25	<25	1,400	<25	640	<25	<25
<del></del> ,	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	110	<0.5	140	<0.5	<0.5
	3/31/2015	<5.0	<5.0	980	<5.0	610	<5.0	<5.0
	9/18/2015	<5.0	<5.0	410	<5.0	410	<5.0	<5.0
	12/16/2015	<5.0	<5.0	290	<5.0	<50	<5.0 ·	<5.0
								<del></del>
MW-4	6/23/2011	<50	<50	<50	<50	<500	<50	<50
-	9/22/2011	<25	<25	<25	<25	<250	<25	<25
	12/11/2011	<25	<25	<25	<25	<250	<25	<25
	3/30/2012	<50	<50	56	<50	<500	<50	<50
	6/1/2012	<50	<50	180	<50	<500	<50	<50
	9/14/2012	<20	<20	<20	<20	<200	<20	<20
	3/27/2013	<0.5	<0.5	77	<0.5	450	<0.5	<0.5
	5/20/2013	<10	<10	61	<10	360	<10	<10
	9/4/2013	<2.5	<2.5	17	<2.5	64	<2.5	<2.5
	12/6/2013	<2.5	<2.5	6.6	<2.5	<25	<2.5	<2.5
	6/27/2014	<2.5	<2.5	<2.5	<2.5	<25	<2.5	<2.5
	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
	3/31/2015							
	9/18/2015	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
	12/16/2015	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<5.0
						İ		

Well	Date	DIPE	ETBE	MTBE	TAME	ТВА	1,2-DCA	EDB					
(ID	Measured	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)					
тос		<u> </u>					, , ,	(0,,					
MW-5	6/23/2011	<120	<120	440	<120	<1,200	<120	<120					
ļ	9/22/2011	<50	<50	670	<50	1,500	<50	<50					
ļ	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 pr	oduct - 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					
·	3/31/2015	<5.0	<5.0	71	<5.0	280	<5.0	<5.0					
·	9/18/2015	<5.0	<5.0	15	<5.0	<50	<5.0	<5.0					
	12/16/2015	<5.0	<5.0	17	<5.0	<50	<5.0	<5.0					
								· .					
MW-6	6/23/2011	<25	<25	1,100	<25	4,000	<25	<25					
	9/22/2011	<12	<12	600	<12	2,800	<12	<12					
	12/11/2011	<10	<10	290	<10	1,300	<10	<10					
	3/30/2012	<10	<10	990	<10	3,500	<10	<10					
	6/1/2012	<10	<10	1,400	<10	2,200	<10	<10					
	9/14/2012	<10	<10	580	<10	2,000	<10	<10					
	3/27/2013				Inaccessible								
	5/20/2013				Inaccessible								
	9/4/2013	<5.0	<5.0	29	<5.0	140	<5.0	<5.0					
	12/6/2013	<2.5	<2.5	12	<2.5	<25	<2.5	<2.5					
	6/27/2014	<2.5	<2.5	4.9	<2.5	<25	<2.5	<2.5					
	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					
	3/31/2015	<5.0	<5.0	12	<5.0	<50	<5.0	<5.0					
	9/18/2015	<2.5	<2.5	9.6	<2.5	<25	<2.5	<2.5					
	12/16/2015	<5.0	<5.0	10	<5.0	<50	<5.0	<5.0					

Well ID	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
TOC					\-0,-,	(4,61,41	(48/2)	լ լաց/ւ
DPE Wel	ls							
EW-1	6/28/2011	<25	<25	1,500	<25	5,300	<25	<25
	9/22/2011	<50	<50	640	<50	1,800	<50	<50
	12/11/2011	<25	<25	490	<25	1,000	<25	<25
	3/30/2012	<20	<20	370	<20	1,100	<20	<20
	6/1/2012	<25	<25	500	<25	1,700	<25	<25
	9/14/2012	<10	<10	370	<10	1,400	<10	<10
	3/27/2013	<0.5	<0.5	270	<0.5	560	<0.5	<0.5
·····	5/20/2013	<5.0	<5.0	250	<5.0	560	<5.0	<5.0
	9/4/2013	<2.5	<2.5	220	<2.5	590	<2.5	<2.5
	12/6/2013	<2.5	<2.5	130	<2.5	270	<2.5	<2.5
	6/27/2014	<10	<10	40	<10	<100	<10	<10
	9/19/2014	<20	<20	300	<20	<200	<20	<20
	12/15/2014	<0.5	<0.5	170	<0.5	110	<0.5	
	3/31/2015	**-				110	70.5	<0.5
	9/18/2015	<2.5	<2.5	100	<2.5 ·	<25	<2.5	
	12/16/2015	<5.0	<5.0	24	<5.0	<50	<5.0	<2.5
				<del> </del>		- 150	٧٠.٥	<5.0
EW-2	6/28/2011	<25	<25	670	<25	4,100	<25	
	9/22/2011	<50	<50	740	<50	1,600	<50	<25
	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 <50
	9/14/2012	<20	<20	1,100	<20	2,400	<20	<50
	3/27/2013	<0.5	<0.5	360	<0.5	1,800	<0.5	<20
	5/20/2013	<2.5	<2.5	390	<2.5	2,600	<2.5	<0.5
	9/4/2013	<5.0	<5.0	460	<5.0	1,400	<5.0	<2.5
	12/6/2013	<10	<10	210	<10	560	<10	<5.0
	6/27/2014	<10	<10	110	<10	<100	<10	<10
	9/19/2014	<25	<25	96	<25	<250	<25	<10
	12/15/2014	<0.5	<0.5	94	<0.5	66	<0.5	<25
	3/31/2015				70.5			<0.5
	9/18/2015	<10	<10	50	<10	<100	<10	
	12/16/2015	<50	<50	58	<50	<500	<50	<10 <50
								<b>\30</b>

## 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)
EW-3	5/20/2013	<2.5	<2.5	140	<2.5	1,100	<2.5	<2.5
	9/4/2013	<2.5	<2.5	120	<2.5	650	<2.5	<2.5
	12/6/2013	<2.5	<2.5	96	<2.5	690	<2.5	<2.5
<u> </u>	6/27/2014	<5.0	<5.0	150	<5.0	360	<5.0	<5.0
<b> </b>	9/19/2014	<25	<25	75	<25	<250	<25	<25
	12/15/2014	<0.5	<0.5	160	<0.5	700	<0.5	<0.5
	3/31/2015	<5.0	<5.0	38	<5.0	68	<5.0	<5.0
	9/18/2015	<5.0	<5.0	120	<5.0	<50	<5.0	<5.0
	12/16/2015	<5.0	<5.0	81.	<5.0	<50	<5.0	<5.0
EW-4	5/20/2013	<5.0	<5.0	480	<5.0	1,900	<5.0	<5.0
	9/4/2013	<5.0	<5.0	220	<5.0	1,300	<5.0	<5.0
	12/6/2013	<5.0	<5.0	58	<5.0	430	<5.0	<5.0
	6/27/2014	<2.5	<2.5	82	<2.5	65	<2.5	<2.5
<u> </u>	9/19/2014	<20	<20	120	<20	520	<20	<20
	12/15/2014	<0.5	<0.5	100	<0.5	110	<0.5	<0.5
	3/31/2015	<5.0	<5.0	140	<5.0	310	<5.0	<5.0
	9/18/2015	<5.0	<5.0	140	<5.0	420	<5.0	<5.0
	12/16/2015	<5.0	<5.0	87	<5.0	390	<5.0	<5.0

#### 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

		Influent	Influent Sample Results			Extrac	tion Rates (	lb/day)	Cumulative Extraction (lb)		
Date	Meter* (hours)	Flow Poto	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	TPHg (lb/day)	Benzene (lb/day)	MTBE (lb/day)	TPHg (lb)	Benzene (lb)	MTBE
05/27/14	590.3	106.0	2,500	14	0.73	112	0.5	0.0	0.745	44.4	
06/17/14	961.5	125.0	40	1.4	0.18	2.1	0.05	0.0	2,745	11.4	0.7
06/27/14	988.2			<del></del>	Unit shi		Carbon Char		2,778	12.3	0.8
08/15/14	988.2			·			rt Unit	ige Out	<del></del>	. <u> </u>	<u> </u>
08/19/14	992.6	125.0	33	0.79	0.13	1.7	0.03	0.0	0.700	1	
09/25/14	1,535.7	163.0	2,100	15	< 0.1	144	0.03		2,780	12.3	8.0
10/28/14	1,750.4	146.0	130	2.4	0.44	8.0	0.77	0.0	6,042	29.7	0.9
12/09/14	2,142.4	154.0	610	2.6	0.23	40		0.0	6,114	30.6	1.1
02/18/15	2,708.3						0.13	0.0	6,760	32.7	1.3
08/11/15	2,708.9				stem shat a	System i	ne tank remo	ved from s	ite		
08/25/15	2,864.4	125.0	344	2.7	< 0.1	18	0.11	00			
09/29/15	3,428.0	128.0	91	1.4	< 0.1	5		0.0	7,305	32.6	1.3
10/26/15	3,742.1	122.0	225	0.97	< 0.1	12	0.06	0.0	7,420	33.9	1.4
11/23/15	4,175.9	150.0	407	1.2	< 0.1	26	0.04	0.0	7,571	34.4	1.5
12/16/15	4,613.3	148.0	102	0.84	< 0.1		0.06	0.0	8,036	35.4	1.6
12/16/15	4,613.3		102	0.04		6	0.04	0.0	8,152	36.1	1.6
01/27/16	4,761.0	146.0	23	0.73	< 0.1		arbon Chan		<del></del>		
03/21/16	5,797.5	138.0	20	0.73		1.4	0.03	0.0	8,161	36.1	1.6
04/11/16	6,279.7	135.0	43	0.86	< 0.1	1.2	0.04	0.0	8,211	37.7	1.8
	5,2.0.7	100.0	3	0.00	< 0.1	2.4	0.04	0.0	8,260	38.4	1.9

MW TPHg = Molecular Weight of TPHg = 105

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

MW_{Benzene} = Molecular Weight of Benzene = 78.11

days of operation during quarter 69.4

ft3 = cubic feet

min = minutes

lb/day = pounds per day

ppmv = parts per million by volume =  $ft^3 / 1x10^6 ft^3$  scfm = standard cubic feet per minute

NS = not sampled

NA = not analyzed

NC = not calculated

Extraction rate = (flow rate(ft³/min) x concentration (ft³ / 1x10 6  ft³) x MW_{TPHg}(lb/lb-mol) x 1440 min/day)/(359 ft³/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

	Stack		mple Resul	ts (ppmv)	Emiss	ion Rates	(lb/day)	Destru	ction Efficie	ncv (%)			
Date	Flow Rate (scfm)	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE			
05/27/14	400.0												
	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				
10/28/14	146.0	< 5.0	< 0.050	< 0.10	< 0.3	< 0.002	< 0.005	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			
02/18/15	154.0		System shutdown and propane tank removed from site										
08/11/15	121.0			- ) - 1 - 1 - 1		System resta		i from site					
08/25/15	125.0	< 5.0	< 0.050	< 0.10	< 0.2	< 0.002		400.0	· · · · ·				
10/26/15	122.0	< 5.0	< 0.050	< 0.10	< 0.2		< 0.004	100.0	100.0	100.0			
11/23/15	150.0	< 5.0	< 0.050	< 0.10		< 0.002	< 0.004	100.0	100.0	100.0			
12/16/15	148.0	< 5.0		*	< 0.3	< 0.002	< 0.005	100.0	100.0	100.0			
12/16/15	170.0	` 5.0	< 0.050	< 0.10	< 0.3	< 0.002	< 0.005	100.0	100.0	100.0			
01/27/16	146.0	4.5.0	0.050	System sh		propane ta	nk removed	from site					
	146.0	< 5.0	< 0.050	< 0.10	< 0.3	< 0.002	< 0.005	100.0	100.0	100.0			
03/21/16	138.0	< 5.0	< 0.050	< 0.10	< 0.2	< 0.002	< 0.005	100.0	100.0	100.0			
)4/11/16	135.0	< 5.0	< 0.050	< 0.10	< 0.2	< 0.002	< 0.005	100.0	100.0	100.0			
	cates analytic												

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

#### Sample Calculations

Emission rate = flow rate(ft³/min) x concentration ( ft³ / 1x10 6  ft³) x MW (lb/lb-mole)/359 (ft³/lb-mole*) x 1440 min/day

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

Stack flow = Catox Influent + Natural Gas flow rate

lb/day = pounds per day

ft3 = cubic feet

ppmv = parts per million by volume =  $ft^3 / 1 \times 10^6 ft^3$ 

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	AVG. PERIOD	***************************************	Water Analytica	l Results	Estir	nated Removal	Rates	Fstim	ated Removal (	Poriod)		~	
04/30/14	(gallons) 189,810	FLOW RATE (gallons/min)	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
06/27/14								Unit Start Up		<del></del>	( (	(poditos)	(podilus)	(pounds)
	358,850	2.02	18,600	2,600	96	0.45	0.063	0.002	26.21	3.66	0.40	<del></del>		
08/19/14	360,060						Unit Stut Do	wn for Carbon		3.00	0.13	26.21	3.66	0.13
09/25/14	463,050	1.93	17,500	760	148	0.41	0.018	0.003			······································			
12/15/14	613,230	1.29	12,175	710	131	0.19	0.011		15.03	0.65	0.13	41.24	4.32	0.26
02/18/15	766,392	1.64	15,500	585	89	0.30		0.002	15.24	0.89	0.16	56.48	5.21	0.43
02/18/15	766,392	· · · · · · · · · · · · · · · · · · ·				<del>''</del>	0.011	0.002	19.79	0.75	0.11	76.27	5.95	0.54
08/11/15	766,392			<del></del>	<del></del>	Unit	Stut Down for C			al Gas				0.04
09/18/15	849,579	1.52	10,525	743		H		Unit Restarted		<u></u>				
12/16/15	1.082.639	1.82			103	0.19	0.014	0.002	40.72	2.87	0.40	117.00	8.83	0.94
12/16/15	1,082,639	1.02	12,800	803	63	0.28	0.018	0.001	35,49	2,23	0.17	152.49	11.05	
01/21/16	. ,						Unit Stut Do	wn for Carbon	Change Out		- V.II	102.45	11.05	1.11
	1,082,639							Unit Restarted					<del></del>	
03/22/16	1,239,526	1.79	9,750	515	52	0.21	0.011	0.001	20.28	1.07	0.44	450.00		
<u></u>						i			20.20	1.07	0.11	172.77	12.13	1.22

156,887 total gallons pumped during current reporting period 2615 average gallons per day during current reporting period

1.8 average gallons per minute during current reporting period

#### 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

MTBE - Methyl tertiary butyl ether

NS - Not Sampled

TPHg - Total Petroleum Hydrocarbons as gasoline

--- - Not Analyzed

TBA -Tertiary butyl ether

lb/day - pounds per day

ug/L - micrograms per liter

20.28

1.07

0.11

## **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 rinseate water 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 rinseate water 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 rinseate water 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, 1/4-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 Suma 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.



2905 Railroad Avenue, Ceres, CA 95367 Phone: (209) 581-9280 Fax: (209) 581-9282

12 April 2016

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

RE: Shore Acres Gas Project Data

Enclosed are the results for sample(s) received on 03/25/16 15:40 by California Agriculture & Environmental Laboratory. 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 LANGH

Lab Manager

Argon Analytical Services, Inc.

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Project No:	GHA.19009			***************************************	Cons	dtant:	Environment	Report 1	<del></del> 0:	***************************************	**************					Samples Submitted To:	<del>~</del> }
Project Title:	Shore Acres	Gas			Addre	ss:	270 Vintage I	ai compagn	ce Group	a, LLC			Labor	ratory:	***************************************	Argon Labs	)C000000000
Location:	403 East 12th				<b>}</b>	-	Turlock, CA S	72385 71106					Addre	ess:		2905 Railroad Avenue	
Sampler's Name:	Oakland, CA				Conta	ct:	Mike Sgoural	ik								Ceres, CA 95307	
(			. r Ába		Phone	\$	916.600.4580	)					Conta				
(print)			\ 1 &UV\	١.	Fax:		209.664,1040						Phone	<b>2</b> 4		(209) 581-9280	
Sampler's Signatu	ret	N 41 A.	Viva		-	**************		Bill To:				····	Fax:	·····		(209) 581-9282	
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Argon Laboratories Sample Receipt Checklist

Client Name:	Environmental	Com	pliance (Group, I	LLC			Date	& Time i	Receive	d: {	3/25/16		15:40
Project Name:	Shore Acres G	as	·····	***************************************				-	t Project				A.1900	
Received 8y:	MC			Mai	trix:	Water	\Box	Soil			Siuc			
Sample Carrier:	Client 🗸	Lal	ooratory		Fed Ex		UPS		Other				i	
Argon Labs Project	Number:	<u>S60</u>	3027/160	032501	<u>24</u>									
Shipper Container in	good condition?					Sample	s received	l in prope	er contain	ers?	Yes	V	No	
	N/A	Yes	V	No		Sample	s received	Intact?			Yes	V	No	
Samples received und	ier refrigeration?	Yes	Ø	No		Sufficier	nt sample	volume f	ar reques	ted tests	? Yes	J	No	
Chain of custody pres	ent?	Yes	\Box	No		Samples	received	within h	olding tim	e?	Yes	V	No	
Chain of Custody sign	ed by all parties?	Yes	V	No		Do sam;	oles conta	in propei	r preserva N/A	itive?	Yes	V	No	П
Chain of Custody mate	thes all sample la	oels?				Do VOA v	rials contain	n zero hea	adspace?			_		
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2905 Railroad Avenue, Ceres, CA 95507 Phone: (209) 581-0280 Fax: (209) 581-0282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
4W-1	\$603027-01	Water	03/22/16 12:30	03/25/16 15:40
4₩-2	S603027-02	Water	03/22/16 11:53	03/25/16 15:40
1W-3	S603027-03	Water	03/22/16 12:48	03/25/16 15:40
1W-4	\$603027-04	Water	03/22/16 12:06	03/25/16 15:40
1W-5	\$603027-05	Water	03/22/16 13:20	03/25/16 15:40
IW-6	S603027-06	Water	03/22/16 13:08	03/25/16 15:40
W-1	S603027-07	Water	03/22/16 13:30	03/25/16 15:40
W-2	S603027-08	Water	03/22/16 13:35	03/25/16 15:40
W-3	\$603027-09	Water	03/22/16 13:40	03/25/16 15:40
W-4	S603027-10	Water	03/22/16 13:45	03/25/16 15:40

Wayn & And Approved By



2905 Railmad Avenue, Ceres, CA 95307 Phone: (209) 581-9286 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Total Petroleum Hydrocarbons @ Gasoline

Analyte	Result	Reporting Limit	Units	Dilution	Analyzod	Method	Note
MW-1 (S603027-01) Water Samp	led: 22-Mar-16 12:30	Received	: 25-Ma	r-16 15:40		·····	
Total Petroleum Hydrocarbons @ Gasoline	18000	500	ng/L	10	29-Mar-16	8015M	······································
Surr. Reca		113 %	**********			4	Calal Control of the Art down and Angel
MW-2 (\$603027-02) Water Sampl	ed: 22-Mar-16 11:53	Received	: 25-Mar	-16 15:40			
Total Petroleum Hydrocarbons @ Gasoline	900	500	ug/L	10	29-Mar-16	8015M	
Suir. Rec.;		76 %		· · · · · · · · · · · · · · · · · · ·	n	0	
MW-3 (S603027-03) Water Sample	d: 22-Mar-16 12:48	Received:	25-Mar	-16 15:40			
Total Petroleum Hydrocarbons @ Gasoline	1500	50	સંદુ∕ી.	ı	30-Mar-16	8015M	***************************************
Surr. Rec.:		117%	************		<i>y</i>		
MW-4 (S603027-04) Water Sample	d: 22-Mar-16 12:06	Received:	25-Mar	-16 E5:40			
l'otal Petroleum Hydrocarbons @ -	1900	50	ug/L	,	30-Mar-16	8015M	
Surt. Rec.;		120 %			Ħ	h	************
MW-5 (S603027-05) Water Sample	d: 22-Mar-16 13:20	Received:	25-Mar-	16 15:40			
Fotal Petroleum Hydrocarbous @ Jasoline	6300	500	ug/L	TO.	29-Mar-16	8015M	·····
Surr. Rec.:		101%					(1111-1111)
MW-6 (S603027-06) Water Sample	l: 22-Mar-16 13:08	Received:	25-Mar-	16 15:40			
otal Petroleum Hydrocarbons @ Jasaline	5900	500	ug/L.	10	29-Mar-16	8015M	
Surr. Rec.:		125 %		**************************	9		*************
W-I (S603027-07) Water Sampled	: 22-Mar-16 13:30 F	teceiveď: 2	5-Mar-1	6 15:40			
otal Petroleum Hydrocarbous @ asoline	3900	500	ug/L	10	30-Mar-16	8015M	***********
Surr. Rec.:		111%	************	***************************************	78	4	
Wayne & Suet	<u> </u>						

Approved By



2905 Railroad Avenue, Ceres, CA. 95307

Phone: (209) 581-9280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA,19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Total Petroleum Hydrocarbons @ Gasoline

Analyte Ducuit	Reporting		and the state of t		***************************************	
l contraction (ACSUIT	Limit	Units	Dilution	Analyzed	Method	Note
EW-2 (S603027-08) Water Sampled: 22-Mar-16 13:35	Received:	25-Mar	-16 15:40		***************************************	
Total Petroleum Hydrocarbons @ 22000 Gasoline	500	ug/L	10	30-Mar-16	8015M	
Surr. Rec.:	114%	***************************************	emininterior proprieta de manera e activada e deposição, por estabal e de ser proprieta de proprieta de propri	and a successive and a	te en constitue de la constitu	
EW-3 (S603627-09) Water Sampled: 22-Mar-16 13:40	Received:	25-Mar-	·16 15:40			
Total Petroleum Hydrocarbons @ 5700 Gasoline	500	ug/L	10	30-Mar-16	8015M	····
Surr. Rec.:	112 %	en en en en en en en en en en en en en e		······································	lk.	
EW-4 (S603027-10) Water Sampled: 27-Mar-16 13:45	Received:	25-Mar-	16 15:40			
Total Petroleum Hydrocarbons @ 7400 Gasoline	500	ng/L	01	30-Mar-16	8015M	***************************************
Surr. Rec.:	124 %			σ	<i>t</i> r	

Approved By

Wayne & Au



2905 Bailroad Avenue, Ceres, CA 95307 Phone: (209) 581-9280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Tudock, CA 95382

Project Manager: Mike Sgourakis

Volatile Organic Compounds by EPA Method 8260B

MW-1 (S603027-01) Water Benzene Toluene Xylenes, total Ethylbenzene t-Butanol Methyl tert-Butyl Ether	Sampled: 22-Mar-16 12:30 690 66 1900 540 ND	50 50 50 50 50	: 25-Mar ug/I.	-16-15:40 100	Analyzed 0S-Apr-16	Method 8260B	Notes
Toluene Xylenes, total Ethyibenzene t-Butanoi	690 66 1900 540	50 50 50	ug∕l.	100	9S-Apr-16	QARID	
Xylenes, total Ethylbenzene t-Butanol	1900 540	50	12		resextu-ru		
Ethylbenzene t-Butanol	540				i)	020015	
t-Butanol		50	14	•	14		
	ND	J. ()	4	ж	v		
Whillied front Beated Park		200	¢ı	o	h		
	ND	50	12	æ	• *		
Di-Isopropyl Ether	ND	50	ts		ri.		
Ethyl tert-Butyl Ether	ND	50	н	6			
tert-Amyl Methyl Ether	ND	50	19	ţ¢	,,	78	
1,2-Dichloroethune	ND	50	ti.	15			
1.2-Dibromoethane (EDB)	ND	50	rt	je	,,	.*	
Surr. Rec.:	·	98 %	······································	and the second s		** ***********************************	
Surr. Rec.:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	90 %	***************************************		н		**
MW-2 (\$603027-02) Water	Sampled: 22-Mar-16 11:53		25-Mar-	16 15:40			
3cnzene	7.3	0.5	ug/L	1	(iř. 3 1 ř	The state	
Colniene	2.4	0.5		13	06-Apr-16	\$260B	
Cylenes, total	34	0.5	×	þ			
Ethylbenzene	16	0.5	o	y.		.14	
-Bulanol	3.7	2.0	×	¢ı			
Active terr-Butyl Ether	ND	0.5	40	*	•		
i-Isopropyl Ether	ND	0.5		¥	*	19	
thyl tert-Butyl Ether	ND	0.5	11	a		·Ħ	
ert-Amyl Methyl Ether	ND	0.5	ä	ų	*	и	
2-Dichloroethane	ND	0.5	36	b		h	
2-Dibromoethane (EDB)	ND	0.5	d	н	¥.	ıt tı	
Surr. Rec.:	***************************************	93.%	*******		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Surr. Rec.:		88 %	*************		,,	9	*******

Approved By



2903 Ruhmad Avenue, Ceres, CA 95307 Phone: (209) 581-9280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

\$603027

Turiock, CA 95382

Project Manager: Mike Sgourakis

Volatile Organic Compounds by EPA Method 8260B

Ansiyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Note
MW-3 (S603027-03) Water	Sampled: 22-Mar-16 12:48	Received	: 25-Mar	-16 15:40	***************************************	·	***************************************
Benzene	230	5.0	ug/L	.10	95-Apr-16	82608	
Tolucae	23	5.0	4.	р	45.5451.20	05000	
Xylenes, total	53	5.0	ù	h	(f	30	
Ethylbenzene	14	5.0	'n	4	it		
t-Bulanol	5 6	20	0	**	, ()	16	
Methyl tert-Butyl Ether	71	5.0	30	l•	ķ		
Di-Isopropyl Ether	ND	5.0	cy.	×	ti ti	. <u>.</u>	
Ethyl tert-Butyl Ether	NO	5.8	¥-	V	к	p.	
ert-Amyl Methyl Ether	ND	5.0	ų	н	 u		
1,2-Dichloroothane	ND	5.0	a	Si .	ď		
,2-Dibromoethane (EDB)	ND	5.0	μ	á	10		
Surr. Rec.:		97 %			on the second construction of the second constru	я	•••••
Surr. Rec.:		90%			andrian and and anticolor and an and an and an and an another and an another and an another an an an an an and an an an an an an an an an an an an an 	78	
MW-4 (S603027-04) Water	Sampled: 22-Mar-16 12:06	Received:	25-Mar-	16 15:40			
Benzene	88	5.0	ยฐ/ไ	10	OF Aug I		······
oluene	71	5.0	h h	ä	05-Apr-16	8260B	
Cylenes, total	91	5.0	ķi	a	ý		
litylbenzene	43	5.0	19	1(
Bulanot	MD	20	t)	49	*	 M	
fethyl ten-Butyl Ether	ND	5.0	19	tr	n	9	
i-Isopropyl Ether	ND	5.0	u-	O.		-44	
thyl tert-Butyl Ether	ND	5.0	>7	75	,.	•	
rt-Amyl Methyl Ether	ND	5.0	£+	Q	in the	.19	
2-Dichloroethane	ND	5.0	n	ts	19	0	
2-Dibromoethane (EDB)	ND	5.0	43	14	i*	n n	
Surr. Rec.:		99 %	••••••		н	**************************************	

Muyru F Aurilla



LABORATORY

2905 Radioad Avenue, Ceres, CA 95307 Phone: (209) 581-9280 Fax: (200) 581-0282

Environmental Compliance Group, LLC

Project Number: GHA,19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

\$603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Note
MW-5 (S603027-05) Water	Sampled: 22-Mar-16 13:20	Received	: 25-Mar	-16 15:40		**************************************	
Benzene	320	5.0	ug/L	10	06-Apr-16	\$260(3	~~~~
l'oluene	58	5.0		ţt	# 11ja-4(i	020VL>	
Xylenes, total	480	5.0	ä	ø.	'n	A	
Ethylbenzene	196	5.0	12	u	n	. 4	
-Butanol	110	20	(r	n)	n,	ď	
Methyl tort-Butyl Ether	26	5.0	12	K	3*	76	
Di-Isopropyl Ether	ND	5.0	4	p	I)	0	
Ethyl tert-Butyl Ether	ND	5.0	N	ş,	U	н	
ert-Amyl Methyl Ether	ND	5.0	11	tr	9	' o	
,2-Dichlorocthane	ND	5.0	ŧŧ	Ħ	ħ	tı	
,2-Dibromoethane (EDB)	ND	5.0	18	r.	н	9	
Surr. Rec.;		104%	·····	***************************************	н	#	£ = = . = = = £ = = +,+,+,+,+,+,+,+,+,+,+,+,+,+,+,+,+,+
Surr. Rec.;		105 %			¥.	*	
IW-6 (S603027-96) Water	Sampled: 22-Mar-16 13:08	Received:	25-Mar-	-16 15:40			
enzene	380	5.0	ug/L	10	96-Apr-16	8260B	
oluene	15	5.0		H	o 113/1-10	0200 <u>0</u>	
ylenes, total	83	5.0	70	Q	к	ń	
thylbenzene	87	5:0	ni	н,	ų	w	
Butanol	28	20	×	to	4	ti	
lethyl tert-Butyl Ether	8.7	5.0	u	н	11	H	
i-Isopropyl Ether	ND	5.0	К	11	d	•	
thyl tert-Butyl Ether	ОИ	5.0	*	9	и	н	
rt-Amyl Methyl Ether	ND	5.0	r)	źf	•	o	
2-Dichlorcethane	ИŊ	5.0	u	9	ж	я	
2-Dibromoethane (EDB)	ND	5.0	н	16	0	30	
2. INDICATION (DIAL)	**						
Sur. Rec.:	The second secon	109 %		~	*	'н	

Wayn & Sew Approved By



2905 Railroad Avenue, Ceres, CA 95307

Phone: (209) 581-0280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA 19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

\$603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Volatile Organic Compounds by EPA Method 8260B

Analyic	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Note
EW-1 (S603027-07) Water	Sampled: 22-Mar-16 13:30	Received:	25-Mar-	16 15:40	***************************************		
Benzene	200	5,0	11g/1.	10	06-Apr-16	74.200	
Toluene	ND	5.0	14	9	00-Mht-10	\$260B	
Xylenes, total	53	5.0	11	к	И	i.	
Ethylbenzene	46	5.0	ŧs.	,,	17	9	
t-Butanol	46	20	к	ie	*	и	
Methyl tert-Butyl Ether	40	5.0	÷.	N	it		
Di-Isopropyl Ether	ND	5.0	*	i)	0	16	
Ethyl tert-Butyl Ether	ND	5.0	Ħ	ø	ж	u	
tert-Amyl Methyl Ether	ND	5,0	ń	ıt	· ·	, to	
1,2-Dichloroethane	ND	5.0	×	n	*	и	
1,2-Dibromocthane (EDB)	ND	5.0	۰	ж	11	n	
Surr. Rec.;		108.%			a.	SF	
Surr. Rec.;		108%	*************		······································	41,	**********
EW-2 (8603027-08) Water	Sampled: 22-Mar-16 13:35	Received:	25-Mar-)	16 15:40			
Benzene	820	250	11g/[,	500	06-Apr-16	8260B	
Coluene	2100	250	a	Э	4	02000	
Cylenes, total	2800	250	#	\$¢	W	3t	
Ethylbenzene	420	250	0	11	yt	v	
-Butanol	ND	1000	36	(*	u	71	
Aethyl tert-Butyl Ether	ND	250	16	μ	j š	*	
li-Isopropyl Ether	ND	250	и	by	a	h	
thyl tert-Butyl Ether	ND	250	sr	N	н	,	
ert-Amyl Methyl Ether	ND	250	e;	æ	oʻ	**	
,2-Dichloroethane	NID	250	н	q.	Ж	H	
,2-Dibromoethane (EDB)	ND	250	ú	ж	и	**	
Surr. Rec.:		106%	··		и	34	
Surr. Rec.:		107 %		*******************************	······	N	

Wayne I Aug Approved By



LABORATORY
2905 Railroad Avenne, Ceres, CA. 95807

Phone: (209) 581-0280 Fax: (209) 581-0282

Environmental Compliance Group, LLC

Project Number: GHA 19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

\$603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Keporting Limit	Units	Dilution	Analyzed	Method	Note
EW-3 (S603027-09) Water	Sampled: 22-Mar-16 13:40	Received:	25-Mar-	16 15:40			·····
Benzene	120	2.5	112/1	5	06-Apr-16	8260B	
Toluene	6.7	2.5	n	•	#	N N	
Xylenes, total	170	2,5	×	16	я	9	
Ethylbenzene	90	2.5	•	**	ų.	ĸ	
t-Butanol	84	10	R	ķ	ø,	12	
Methyl tert-Butyl Ether	33	2.5	v	R	ġ'	a a	
Di-Isopropyl Ether	NO	2.5	at	şı	n	ır	
Ethyl tert-Butyl Ether	ND	2.5	Ħ	u	¥	0	
tert-Amyl Methyl Ether	ND	2.5	n	ij	ņ	ó	
1,2-Dichlomethane	ND	2.5	×	ţı	ж	185	
1,2-Dibromoethane (EDB)	ND	2.5	ej.	и	o	49	
Surr. Rec.:		106 %	(Peretorielandenea gry g 4 e	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ff'	n,	
Surr. Rec.:		104%			η	·#	
EW-4 (S603027-10) Water	Sampled: 22-Mar-16 13:45	Received:	25-Mar-	16.15:40			
Benzene	920	25	ug/£	50	06-Apr-16	8260B	····
Foluene	83	25	u	. 0	n i spe i se	02000	
Cylenes, total	350	25	ig	я	9	{r	
Ethylbenzene	120	25	ţa .	٥	×	ж	
-Butanol	250	100	ni	н	Ä	śir	
dethyl tert-Butyl Ether	81	25	ţ:	' 9	ì	ia.	
i-Isopropyl Ether	ND	25	N	•	17	×	
thyl tert-Butyl Ether	ND	25	19	44	n	9	
ert-Amyl Methyl Ether	ND	25	μ	q	к	м	
,2-Dichloroethane	ND	25	ы	R	п	•	
,2-Dibromoethane (EDB)	ND	25	n	4	и	- *	
Surr. Rec.;		98 %			4	w	***********
Surt. Rec.:		89 %			g	···	

<u> Wayus I Aust</u> Approved By



LABORATORY
2905 Radroad Avanue, Ceres, CA 95307

Phone: (209) 584-9280 Fax: (209) 584-9282

Environmental Compliance Group, LLC

Project Number: GHA, 19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Total Petroleum Hydrocarbons @ Gasoline - Quality Control

California Agriculture & Environmental Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Lunit	Notes											
Batch S600281 - EPA 5030B			***************************************	·····	·····																
Blank (\$600281-BLK1)				Prepared	& Analyze	d: 03/30/	16														
Surrogaie: a,a,a-Trifluorosoluene	44.0	***************************************	ઘષ્ટ/દે	50	***************************************	88	70-130		The The Street Control of the Contro	Addition of the section	Total Petroleum Hydrocarbons @ Gasoline	ND	50	11	•		377	3.14-1.70			
LCS (S600281-BS1)				Prepared	& Analyze	16															
Surragate: a,a,a-Criftnorotolnene	62.5		ug/l,	50		125	70-130			**************************************											
Total Petroleum Hydrocarbons @ Gasoline	1080		1)	1000		1.08	80-120														
ACS Dup (\$600281-BSD1)				Prepared	& Analyze	d: 03/30/1	16														
inrrogate: 0,0,0-Trifluorotoluene	61.5		ng/L	50		[23	70-130		***************************************	**************************************											
Total Petroleum Hydrocarbons @ Gasoline	1100		d d	1000		110	80-120	2	20												
datrix Spike (S600281-MSI)	Son	irce: S603021	7-63	Prepared & Analyzed: 03/30/16																	
urrogate: a,a,s-Trifluorotoluene	63,5		ug/L	50		127	70-130														
otal Petroleum Hydrocarbons @ Gasoline	2460		21	1000	1510	95	70-130														
Hatrix Spike Dup (S600281-MSD1)	Sou	rce: \$603027	7-83	Prepared a	& Analyze	d: 03/30/J	16	•													
urrogate: a,a,a-Triffuorotoluene	60.0		ug/L	50	***************************************	120	70-130		111111111111111111111111111111111111111												
otal Petroleum Hydrocarbons @ Gasoline	2540		"	1000	1510	103	70-130	3	20												
Batch S600283 - EPA 5030B																					
Sunk (S600283-BLK1)				Prepared &	& Analyze	đ: 03/29/1	6	*************	***************************************	************											
urrozate: a,a,a-Trifluorotoluene	44.5		ug/L	50	*****************	::::::::::::::::::::::::::::::::::::::	70-130			***************************************											
otal Petroleum Hydrocarbons @ Gasoline	ND	50	į,			= 1															
CS (\$600283-BS1)				Prepared &	k Analyze	d: 03/29/1	6														
urrogate; a.a.a-Triftwormotwene	61.0	***************************************	ug/L	50		122	70-130														
otal Petroleum Hydrocurbons @ Gasoline	1020		15	1000		102	80-120														
CS Dap (\$600283-BSD1)				Prepared &	analyzec	i: 03/29/1	6														
rrogate: a,a,a-Trifluorotoluene	59.0		ugli,	50		118	70-130		andita career												
otal Petroleum Hydrocarbons @ Gasoline	1040		11	1000		104	80-120	2	20												
latrix Spike (S600283-MS1)	Sou	rce: S603026	-05	Prepared 8	k. Analyzec	1: 03/29/1	6														

Approved By Wayne & Auth



LABORATORY

2905 Railmad Avenue, Ceres, CA 95307 Phone: (209) 581-9280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Total Petroleum Hydrocarbons @ Gasoline - Quality Control

California Agriculture & Environmental Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch S600283 - EPA 5030B					7					
Matrix Spike (S600283-MSI)	Sou	rce: \$60302	6-05	Prepared &	& Analyze	d: 03/29/	16		***************************************	······································
Surrogate: a.a.a-Trifluorotoluene	60.5		ug/L	50		121	70-130			
Potal Petroleum Hydrocarbous @ Gasoline	1010		ii	1000	ND	101	70-130			
Matrix Spike Dup (\$600283-MSD1)	Som	rce: S6030Z0	5-05	Prepared &	& Analyze	d: 03/29/1	6			
lurrogate: a,a,a-Trifluorotoluene	37.0		ug/l	50			70-130	*************		
otal Petroleum Hydrocarbons @ Gasoline	1000		0	1000	ND	100	70-130	1	20	

<u> Mayra I Aur TO</u> Approved By



2905 Railroad Avenue, Ceres, CA 95307 Phone: (209) 581-9280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

S603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

Volatile Organic Compounds by EPA Method 8260B - Quality Control

California Agriculture & Environmental Laboratory

Analyto	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch S600308 - EPA 5030B										
Blank (\$600308-BLK1)				Prepared:	04/05/16	Analyzed	: 04/11/16			***************************************
Surrogute: Dibromofluoromediane	49,5		ng/L	50	****	99	70-130			
Surrogate: Toluene-d8	44,5		и	50		.89	70-130			
Sinvogate: 4-Bromofluorobenzene	43.5		"	50		87	70-130			
Benzene	ND	0.5	*							
Toluene	ND	0.5	×							
Xylenes, total	ND	0.5	ы							
Ethylbenzene	ND	0.5	ĸ							
t-Butanol	ND	2.0	fe-							
Methyl tert-Buryl Ether	ND	0.5	st							
Di-Isopropyl Ether	ND	0.5	se:							
Ethyl tert-Butyl Ether	ND	0.5	Ä							
tert-Amyl Methyl Ether	ND	0.5	p.							
1,2-Dichloroethane	УD	0.5	ò							
1,2-Dibromoethane (EDB)	ND	0.5	n							
LCS (S600368-BS1)				Prepared:	04/05/16	Analyzed	:04/31/16			
Surragate: Dibromofluoromethane	49.5		ug/L	30		99	70-130		***************************************	
Surrogate: Toluene-d8	44.5		H	50		89	70-130			
Benzene	24.2		1¢	25		97	80-120			
l'oluene	24.2		11	25		97	80-120			

Mayry L Auth Approved By



2905 Radroad Avenue, Ceres, CA 95307

Phone: (209) 581-9280 Fax: (209) 581-9282

Environmental Compliance Group, LLC

Project Number: GHA.19009

Work Order No.:

270 Vintage Drive

Project Name: Shore Acres Gas

\$603027

Turlock, CA 95382

Project Manager: Mike Sgourakis

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

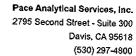
RPD

Relative Percent Difference

Approved By

California Agriculture & Environmental Laboratory, California D.O.H.S. Cert. #2359

Wayn I Swift





February 03, 2016

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

RE: Project: Shore Acres Gas

Pace Project No.: 1260377

Dear Drew Van Allen:

Enclosed are the analytical results for sample(s) received by the laboratory on January 29, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott M Forbes

scott.forbes@pacelabs.com

Project Manager

Enclosures





Pace Analytical Services, Inc. 2795 Second Street - Suite 300 Davis, CA 95618 (530) 297-4800

CERTIFICATIONS

Project:

Shore Acres Gas

Pace Project No.:

1260377

Davis Cerification IDs 2795 Second Street Suite 300 Davis, CA 95618 North Dakota Certification #: R-214 Oregon Certification #: CA300002

Washington Certification #: C926-15a California Certification #: 08263CA

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project:

Shore Acres Gas

Pace Project No.:

1260377

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1260377001	Effluent	Air	01/27/16 10:00	01/29/16 10:00
1260377002	Influent	Air	01/27/16 10:05	01/29/16 10:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project:

Shore Acres Gas

Pace Project No.:

1260377

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1260377001	Effluent	EPA 8260B	LM	6	PASI-DAV
1260377002	Influent	EPA 8260B	LM	6	PASI-DAV

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project:

Shore Acres Gas

Pace Project No.: 1260377

Date: 02/03/2016 02:58 PM

Sample: Effluent	Lab ID: 120	60377001	Collected: 01/27/	16 10:00	Received: 0	1/29/16 10:00	Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV AIR	Analytical Met	hod: EPA 8	260B			-		
Benzene	ND	ppbv	50.0	1		01/29/16 19:5:	71 42 0	
Ethylbenzene	ND	ppbv	50.0	1		01/29/16 19:5:		
Methyl-tert-butyl ether	ND	ppbv	100	1				
Toluene	ND	ppbv	50.0	1		01/29/16 19:5:		
TPH as Gas	ND	ppbv		1		01/29/16 19:53		
Xylene (Total)	ND ND		5000	1		01/29/16 19:53	≓	
, ,		ppbv	100	1		01/29/16 19:53	3 1330-20-7	
Sample: Influent	Lab ID: 126	0377002	Collected: 01/27/1	6 10:05	Received: 01	1/29/16 10:00	Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
3260B MSV AIR	Analytical Met	10d: EPA 82	60B					
Benzene	733	ppbv	50.0	1		01/29/16 16:49	71 42 0	
Ethylbenzene	168	ppbv	50.0	1				
Methyl-tert-butyl ether	ND	ppby	100	1		01/29/16 16:49		
Toluene	740	ppbv		1		01/29/16 16:49		
	. 70		50.0	1		01/29/16 16:49		
	23100	nnhv						
rPH as Gas (ylene (Total)	23100 1570	ppbv ppbv	5000 100	1		01/29/16 16:49 01/29/16 16:49		



QUALITY CONTROL DATA

Project:

Shore Acres Gas

Pace Project No.:

1260377

QC Batch:

DAVM/2988

QC Batch Method:

EPA 8260B

Analysis Method:

EPA 8260B

Analysis Description:

8260 MSV AIR

Associated Lab Samples:

Date: 02/03/2016 02:58 PM

1260377001, 1260377002

ppbv

METHOD BLANK: 284618

Matrix: Air

Associated Lab Samples: 1260377001, 1260377002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	vdqq	ND	50.0	01/29/16 16:21	
Ethylbenzene	ppbv	ND	50.0	01/29/16 16:21	
Methyl-tert-butyl ether	ppbv .	ND	100	01/29/16 16:21	
foluene	ppbv	ND	50.0	01/29/16 16:21	
PH as Gas	ppbv	ND	5000	01/29/16 16:21	
(Vlene (Total)	ppbv	, ND	100	01/29/16 16:21	

LABORATORY CONTROL SAMP	PLE: 284619					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ppbv	520	523	101	75-125	
Ethylbenzene	ppbv	515	485	94	70-135	
Methyl-tert-butyl ether	ppbv	5 15	520	101	75-125	
Toluene	ppbv	515	518	101	75-125	
Xylene (Total)	vdaa	768	733	06	72 122	

733

95

73-133

SAMPLE DUPLICATE: 284625						
Parameter	Units	1260377002 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	vdqq	733	753	3	30	
Ethylbenzene	ppby	168	171	2	30	
fethyl-tert-butyl ether	ppbv	ND	64J	-	30	
oluene	ppbv	740	766	3	30	
PH as Gas	ppbv	23100	21000	10	30	
(ylene (Total)	ppbv	1570	1630	4	30	

768

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Pace Analytical Services, Inc. 2795 Second Street - Suite 300 Davis, CA 95618 (530) 297-4800

QUALIFIERS

Project:

Shore Acres Gas

Pace Project No.:

1260377

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

Date: 02/03/2016 02:58 PM

PASI-DAV Pace Analytical Services - Davis





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

Shore Acres Gas

Pace Project No.: 1260377

Date: 02/03/2016 02:58 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1260377001 1260377002	Effluent Influent	EPA 8260B EPA 8260B	DAVM/2988 DAVM/2988		

PACE 2795 2nd Street, Suite 300 Davis, CA 95618 ANALYTICAL 1260377 Lab: 530,297,4800 SRG#/Lab No. Fax: 530,297,4802 Page of 1 Project Contact (Hardcopy or PDF To): California EDF Report? Yes No Orew Van Allen Chain-of-Custody Record and Analysis Request Company / Address: Sampling Company Log Code: 270 Vintage Drive, Turlock, CA 95382 Analysis Request TAT ECGT Phone Number: PLEASE CIRCLE Global ID: 209.664.1035 METHOD T0600174667 12hr Fax Number: 5 Oxygenates (MTBE, CAPE, ETBE, TAME, TBA) (EPA 8260B) EDF Deliverable To (Email Address): 7 Oxygenates (5 oxy + EIOH, MeOH) (EPA 8260B) 209,664,1040 ecq.ust@gmail.com Lead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B) 200.7 / 6010) Project #: P.O.#: Bill to: Volatile Organics (EPA 524.2 Drinking Water) Onit GHA 19009 24 hr ECG LLC Project Name: Volable Organics Full List (EPA 82608) IPHg, BTEX, and MTBE by EPA 82608 Sampler Print Name: For Lab Use Shore Acres Gas 5 Waste Oil Metals (Cd. Cr, Nr. Ph, Zn.) (EPA Volatile Halocarbons (EPA 8260B) CAM 17 Metals (EPA 200.7 / 8010) Drew Van Allen Mercury (EPA 245:11747017471) ☐ 48hr Sampler Signature: TPH as Motor Oil (EPA 8015M) Total Lead (EPA 200.7 / 6010) PH as Diesel (EPA 8015M) Project Address: Sampling MTSE @ 0.5 ppb (EPA Container Preservative Matrix TPH Gas (EPA 8260B) 403 East 12th Street N.E.T. Lead (STLC) BTEX (EPA 8260B) Oakland, CA 72h 40 ml VOA Sleeve Poly Glass Tedlar 9 HNO₃ Water S F Sample Designation Date 1 vac Time Effluent 1/27/2016 1000 Ø0 influent X 1/27/2016 1005 130 Time Received by: Remarks: (Caple (500) Relinquished by: Date Time Received by: 1000 ONTHO

For Lab Use Only:

Date

Temp °C

Initials

Sample Receipt

Time.

Therm, ID#

Cooters Present

Distribution, White Lab, Pink Onginator Rev 061705 Date

Received by Laboratory:

Relinquished by:

Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.: F-DAV-C-002-rev.02 Page 1 of 1
Issuing Authority:
Page Davis, CA Quality Office

Sample Condition Client Name: Upon Receipt G C C			Project #:		IДШ .	100	1977	
					NU# .	1260	JS11	
Courier: Fed Ex UPS	USPS	Псі	lient	/ 🐃			11111	
Commercial Pace OnTr.								
Tracking Number: 7255 2669 6	5569				260377			
Custody Seal on Cooler/Box Present? Yes	Z No	Seals Inta	ct? []Ye	s Z	No Opt	ional: Proj.	Due Date:	Prój. Name
Packing Material: Bubble Wrap Bubb	le Bags ZNor	e 🔲o	ther:		********	Temp	Blank?	Yes 🖄
hermom. Used: DA1434 DA228	5 Type of 1	ce: Wet	Blue			*	rice, cooling or	
Cooler Temp Read("C): N/A Cooler Tel	mp Corrected(*C):			ш,		Tissue Frozen		
emp should be above freezing to 6°C Correction	Factor:		Date a	nd initia	is of Person	Examinine C	r Yes ontents:	□No Z
	··					Comme		W/W/1
Chain of Custody Present?	Z) Yes	□No	□ N/A	2.				
Chain of Custody Filled Out?	Zyes	□No	□N/A	2.			**********	•
Chain of Custody Relinquished?	Yes	□No	N/a	3.		.,,,,,		
Sampler Name and/or Signature on COC?	Z Yes	□No	□n/a	4,				
Samples Arrived within Hold Time?	Zyes		□N/A	5.				
Short Hold Time Analysis (<72 hr)?	Z Yes	□No	□N/A	6.	~			
Rush Turn Around Time Requested?	□Yes	ZNo	□N/A	7.	***************	·		*************
Sufficient Volume?	Øyes	□No	□N/A	8.		~ ~ ~,,,,		
Correct Containers Used?	Z √ves	□No					************	
Pace Containers Used?	Z Yes	⊟No □No	□N/A	9.				57
Containers Intact?	Yes		□N/A	<u> </u>		***	***************************************	~~~
Filtered Volume Received for Dissolved Tests?	***************************************	No	N/A	10			······	······
Sample Labels Match COC?	Yes	□No	ZN/A	11.	Note if sedin	ent is visible i	n the dissolved	container.
	AR Zives	∏No	□n/a	12.				
All containers needing acid/base preservation have	heen		·	<u> </u>				
checked?	L.JYes	□No	ZIN/A	13.	HNO3	∐H₂SO₄	□NaOH	[]]нсі
All containers needing preservation are found to be compliance with EPA recommendation?				Sample	e.#			
(HNOs, H2SOs, HCK2; NaOH>9 Sulfide, NaOH>12 CV	□Yes anide)	□No	ZNA					
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DDC	Yes	Ø Nø		Initial	when	lat	# of added	
Headspace in VOA Vials (>6mm)?		فداري		comple	ited:		servative:	_
Trip Blank Present?		No	ØN/A	14.	***			
Trip Blank Custody Seals Present?	□yes	□No	ØN/A	15.				
Pace Trip Blank Lot # (if purchased):	Yes	□No	ØN/A					
(333440000	20000			·	·····	· · ·		
ENT NOTIFICATION/RESOLUTION					Fiel	ld Data Requi	red? []Yes	[]Na
Person Contacted:			Date/Ti	me:				140
Comments/Resolution:			•	-				
							 :	
			******************		******		***************************************	*************

ect Manager Review:	··········		***************************************	***************************************	······	ſ		
CEL MADAPET Review					7			





March 07, 2016

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

RE: Project: Shore Acres Gas

Pace Project No.: 1261849

Dear Drew Van Allen:

Enclosed are the analytical results for sample(s) received by the laboratory on March 02, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott M Forbes

scott.forbes@pacelabs.com

Project Manager

Enclosures







CERTIFICATIONS

Project:

Shore Acres Gas

Pace Project No.:

1261849

Davis Cerification IDs

2795 Second Street Suite 300 Davis, CA 95618 North Dakota Certification #: R-214 Oregon Certification #: CA300002

Washington Certification #: C926-15a California Certification #: 08263CA

REPORT OF LABORATORY ANALYSIS





SAMPLE SUMMARY

Project:

Shore Acres Gas

Pace Project No.: 1261849

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1261849001	Influent	Air	03/01/16 10:15	03/02/16 10:25

REPORT OF LABORATORY ANALYSIS



SAMPLE ANALYTE COUNT

Project:

Shore Acres Gas

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1261849001	Influent	EPA 8260B	LM	6	PASI-DAV



ANALYTICAL RESULTS

Project:

Shore Acres Gas

Pace Project No.: 1261849

Date: 03/07/2016 10:52 AM

Sample: Influent	Lab ID:	1261849001	Collected: 03/01/	16 10:15	Received:	03/02/16 10:25	Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV AIR	Analytical	Method: EPA 82	60B				· · · · · · · · · · · · · · · · · · ·	
Benzene	27	7 ppbv	50.0	1 .		03/02/16 17:50	74 40 0	
Ethylbenzene	79.		50.0	1		03/02/16 17:50		
Methyl-tert-butyl ether	NE) ppbv	100	1		03/02/16 17:50		
Toluene	466	6 ppbv	50.0	1		03/02/16 17:50	•	
TPH as Gas	5450) ppbv	5000	1		03/02/16 17:50		
Xylene (Total)	517	7 ppbv	100	1		03/02/16 17:50	1330-20-7	



QUALITY CONTROL DATA

Project:

Shore Acres Gas

Pace Project No.:

1261849

QC Batch:

DAVM/3204

QC Batch Method:

Analysis Method:

EPA 8260B

EPA 8260B

Analysis Description:

8260 MSV AIR

100 03/02/16 15:15

Associated Lab Samples: 1261849001

METHOD BLANK: 293261

1261849001

Matrix: Air

ND

Associated Lab Samples:

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ppbv	ND ND	50.0	03/02/16 15:15	
Ethylbenzene	ppbv	ND	50.0	03/02/16 15:15	
Methyl-tert-butyl ether	ppbv	ND	100	03/02/16 15:15	
Toluene	ppbv	ND	50.0	03/02/16 15:15	
TPH as Gas	ppbv	ND	5000	03/02/16 15:15	
Xylene (Total)	ppby	ND	100	03/02/16 15:15	

LABORATORY CONTROL SAMPLE: 293262

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene Ethylbenzene Methyl-tert-butyl ether Toluene Xylene (Total)	ppbv ppbv ppbv ppbv	520 515 515 515 515 768	483 438 488 484 641	93 85 95 94 83	75-125 70-135 75-125 75-125 73-133	

SAMPLE DUPLICATE: 293263

Date: 03/07/2016 10:52 AM

Parameter	Units	1261879001	Dup		Max	
	Offits	Result	Result	RPD	RPD	Qualifiers
Benzene	ppbv	0.073 ppmv	72.5	1	30	
Ethylbenzene	ppbv	0.12 ppmv	143	16	30	
Methyl-tert-butyl ether	ppbv	1.9 ppmv	1920	3	30	
Toluene	ppbv	0.95 ppmv	934	1	30	
TPH as Gas	ppbv	129 ppmv	136000	5	30	ε
Xylene (Total)	ppbv	6.3 ppmv	6220	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project:

Shore Acres Gas

Pace Project No.:

1261849

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

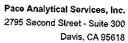
LABORATORIES

PASI-DAV Pace Analytical Services - Davis

ANALYTE QUALIFIERS

Date: 03/07/2016 10:52 AM

E Analyte concentration exceeded the calibration range. The reported result is estimated.



(530) 297-4800

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

Shore Acres Gas

Pace Project No.: 1261849

Date: 03/07/2016 10:52 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1261849001	Influent	EPA 8260B	DAVM/3204		

PACE 2795 2nd Street, Suite 300 Davis, CA 95618 **ANALYTICAL** 1261849 Lab: 530.297.4800 SRG # / Lab No Fax: 530.297.4802 Page Project Contact (Hardcopy or PDF To): California EDF Report? V Yes No Drew Van Allen Chain-of-Custody Record and Analysis Request Company / Address: Sampling Company Log Code: 270 Vintage Drive, Turlock, CA 95382 Analysis Request Phone Number: PLEASE CIRCLE Global ID: 209.664.1035 П METHOD T0600174667 Fax Number: 12 hr S Oxygenates (MTBE, DIPE, ETRE, TAWE, TBA) (EPK 8260B) EDF Deliverable To (Email Address): 209.664.1040 7 Oxygenates (5 oxy + EfOH, MeOH) (EPA 8260B) ecq.ust@omail.com Project #: S Waste Oil Metals (Cd,Cc,NI,Pb,Zn) (EPA 200,716010) P.O. #: .ead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B) Bill to Volatile Organics (EPA 524.2 Drinking Water) GHA 19009 ECG LLC 24 hr Project Name: Volatile Organics Full List (EPA 8260B) Sampler Print Name: Shore Acres Gas Drew Van Allen Volatile Halocarbons (EPA 8260B) TPH as Motor Oil (EPA 8015M) CAM 17 Metals (EPA 200.7 / 6010) Mercury (EPA 245.1 / 7470 / 7471) Sampler Signature: PHB, BTEX, and MTBE by EPA 48hr Total Lead (EPA 200.7 / 6010) TPH as Diesel (EPA 8015M) Project Address: Sampling Container Preservative TPH Gas (EPA 8260B) 403 East 12th Street BTEX (EPA 8260B) Oakland CA 72hr 40 ml VOA Sleeve Glass Tedlar HCI HNO₃ Vater Poly V Sample Designation Soji Date 1 wk influent 3/1/2016 1015 Х Relinguished by: Received by: Relinquished by: Date Time 030214 Relinquished by: Date Page 9 For Lab Use Only: Sample Receipt Temp °C initials Date Time Therm. ID# Coolant Prasent

Yes / No

Distribution: White - Lab; Pink - Originator

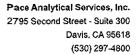
Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.: F-DAV-C-092-rev.02 Document Revised: 25Feb2015 Page 1 of 1

Issuing Authority: Pace Davis, CA Quality Office

Courier: Commercial Tracking Number:	ØFed Ex □Pace 8091	UPS OnTrac 3863	USPS Other:		lient	1			1849 	
Custody Seal on Co	oler/Box Present?	Yes 🗹	ło	Seals Inta	ct? []Ye	s Zînc	Opti	onal: Proj.	Due Date:	Proj. Name:
	Bubble Wrap	□Bubble 8ag	s ⊠Non	e 🔲 C	ther:		-	7emn	Biank? []	es 🛮 No
hermom. Used: Cooler Temp Read(DAZ285 Cooler Temp Co Correction Facto	mected CI:	te: We		В	iological 1	Samples or lissue Frozen Examining Co	ice, cooling pro Yes [Pontents: 2	cess has begu
Chain of Custody F	resent?		Z Yes	□No	□ N/A	1.		Commer	its:	<u> </u>
Chain of Custody F	illed Out?		Z Yes		□N/A	2.				
Chain of Custody R	elinquished?		Z Yes	□N ₀	□N/A	3.			·	
Sampler Name and	or Signature on CC	¢?	Yes	□No	□N/A	4.				
Samples Arrived w	thin Hold Time?		ZYes	□No		5.				
Short Hold Time A			Offes		29-0752€	6.				
Rush Turn Around	Time Requested?		✓	ZNo		7.				
Sufficient Volume?			□ZYes	□No	□N/A	8.			· · · · · · · · · · · · · · · · · · ·	
Correct Containers	Used?		Yes	□No	□N/A	9.				
-Pace Containers	Used?		⊘ Yes	□No	□N/A	J				
Containers Intact?			☐ Yes	∏No	□N/A	10.				
Filtered Volume Rec	eived for Dissalved	Tests?	Yes	□No	ØN/A	 	te if sadim	ant in width to the		
Sample Labels Matc -Includes Date/Ti	me/ID/Analysis M:	atrix: AR	Øyes	□No	□n/a	12.	te ii sediii	ent is visible li	the dissolved a	container.
All containers needing checked? All containers needing	g preservation are		□Yes	□No	Ø√/A		□нио₃	∏H₂SO₄	□иаон	□нсі
compliance with EPA (HNO3, H2SO4, HCI<2 Exceptions: VOA, Col	recommendation? : NaOH >9 Sulfide, N iform, TOC, Oil and	IaOH>12 Creatidat	☐Yes	□No	Øn/a	Sample#				
DRO/8015 (water) Di	oc	Orease,	☐Yes	ØN₀	·	Initial who completed			# of added servative:	
Headspace in VOA Vi Trip Blank Present?	ais (>6mm)?		Yes	□No	ZN/A	14.				
Trip Blank Custody Se	als Present?		□Yes	□N≎	ØN/A	15.			-	*
Pace Trip Blank Lot #			☐Yes	∐No	ØN/A					
ENT NOTIFICATION/	RESOLUTION				·					
							Field	d Data Requir	ed? []Yes	□No
Comments/Res	ntacted:				_ Date/Ti	me:				





CERTIFICATIONS

Project:

Shore Acres Gas

Pace Project No.: 1262884

Davis Cerification IDs

2795 Second Street Suite 300 Davis, CA 95618
North Dakota Certification #: R-214
Oregon Certification #: CA300002

Washington Certification #: C926-15a California Certification #: 08263CA

REPORT OF LABORATORY ANALYSIS



SAMPLE SUMMARY

Project:

Shore Acres Gas

Pace Project No.:

1262884

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1262884001	Effluent	Air	03/21/16 12:40	03/22/16 09:50
1262884002	Influent	Air	03/21/16 12:45	03/22/16 09:50



SAMPLE ANALYTE COUNT

Project:

Shore Acres Gas

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1262884001	Effluent	EPA 8260B	LM	6	PASI-DAV
1262884002	Influent	EPA 8260B	LM	6	PASI-DAV



ANALYTICAL RESULTS

Project:

Shore Acres Gas

Sample: Effluent	Lab ID: 126	2884001	Collected: 03/21/1	6 12:40	Received: 03	3/22/16 09:50	Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV AIR	Analytical Met	hod: EPA 82	60B					
Benzene	ND	ppbv	50.0	1		03/23/16 17:3	0 71-43-2	
Ethylbenzene	ND	ppbv	50.0	1		03/23/16 17:30	0 100-41-4	
Methyl-tert-butyl ether	ND	ppbv	100	1		03/23/16 17:3	0 1634-04-4	
Toluene	ND	ppbv	50.0	1		03/23/16 17:3	0 108-88-3	
TPH as Gas	ND	ppbv	5000	1		03/23/16 17:30	0	
Xylene (Total)	ND	ppbv	100	1		03/23/16 17:3	0 1330-20-7	
Sample: Influent	Lab ID: 126	2884002	Collected: 03/21/1	6 12:45	Received: 03	3/22/16 09:50	Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV AIR	Analytical Met	hod: EPA 82	60B					
8260B MSV AIR Benzene	Analytical Met	hod: EPA 82 ppbv	60B 50.0	1		03/23/16 16:4	1 71-43-2	
	·			1		03/23/16 16:4 03/23/16 16:4		
Benzene	865	ppbv	50.0			* *	1 100-41-4	
Benzene Ethylbenzene Methyl-tert-butyl ether	865 176	ppbv ppbv	50.0 50.0	1		03/23/16 16:4	1 100-41-4 1 1634-04-4	
Benzene Ethylbenzene	865 176 ND	ppbv ppbv ppbv	50.0 50.0 100	1		03/23/16 16:4 03/23/16 16:4	1 100-41-4 1 1634-04-4 1 108-88-3	



QUALITY CONTROL DATA

Project:

Shore Acres Gas

Pace Project No.:

1262884

QC Batch:

Benzene

Toluene

Ethylbenzene

TPH as Gas

Xylene (Total)

Methyl-tert-butyl ether

Date: 03/29/2016 02:59 PM

DAVM/3354

Analysis Method:

EPA 8260B

QC Batch Method:

EPA 8260B

Analysis Description:

8260 MSV AIR

Associated Lab Samples:

1262884001, 1262884002

METHOD BLANK: 299713

Matrix: Air

ND

Associated Lab Samples:

Parameter

1262884001, 1262884002

Units

ppbv

ppbv ppbv

ppbv

ppbv

ppbv

Blank Result	Reporting Limit	Analyzed	Qualifiers
ND	50.0	03/23/16 16:16	
ND	50.0	03/23/16 16:16	
ND	100	03/23/16 16:16	
ND	50.0	03/23/16 16:16	
ND	5000	03/23/16 16:16	

100 03/23/16 16:16

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
i didilictei	Office		1769uit	/0 1186	Littles -	Qualifiers
Benzene	ppbv	520	519	100	75-125	
Ethylbenzene	ppbv	515	487	95	70-135	
Methyl-tert-butyl ether	ppbv	515	525	102	75-125	
Toluene	ppbv	515	537	104	75-125	
Xylene (Total)	ppbv	768	718	93	73-133	

		1262884002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Benzene	ppbv	865	867		30	
Ethylbenzene	ppbv	176	183	4	30	
Methyl-tert-butyl ether	ppbv	ND	64.3J		30	
Toluene	ppbv	809	795	2	30	
TPH as Gas	ppbv	20200	20800	3	30	
Xylene (Total)	vdqq	1390	1440	3	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALIFIERS

Project:

Shore Acres Gas

Pace Project No.:

1262884

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

.- ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration,

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

Date: 03/29/2016 02:59 PM

PASI-DAV Pace Analytical Services - Davis





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

Shore Acres Gas

Pace Project No.:

1262884

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1262884001	Effluent	EPA 8260B	DAVM/3354	-	
1262884002	Influent	EPA 8260B	DAVM/3354		

PACE 2795 2nd Street, Suite 300 Davis, CA 95618. SRG#/Lab No. 1262884 **ANALYTICAL** Lab: 530.297.4800 Page of 1 Fax: 530,297,4802 Project Contact (Hardcopy or PDF To): California EDF Report? V Yes No Chain-of-Custody Record and Analysis Request Drew Van Allen Company / Address: Sampling Company Log Code: Analysis Request TAT 270 Vintage Drive, Turlock, CA 95382 ECGT PLEASE CIRCLE Phone Number: Global (D) METHOD 209.664.1035 T0600174667 12 hr Fax Number: EDF Deliverable To (Email Address): 7 Oxygenates (5 oxy + EtOH, MeOH) (EPA 6260B) 209.664,1040 eco:ust@gmail.com Waste Oil Metals (Cd.Cr.Ni,Pb,Zri) (EPA'200;1 / 6010) .ead Scav. (1.2 DCA & 1.2 EDB) (EPA 8260B) Project #: Volatile Organics Full List (EPA 8280B)
Volatile Organics (EPA 524.2 Drinking Water) P.O. #: Bill to: or Lab Use Only 24 h GHA, 19009 ECG LLC FPHg, BTEX, and MTBE by EPA 8260B Project Name: Sampler Print Name: Shore Acres Gas Volatile Halocarbons (EPA 8260B) CAM 17 Metals (EPA 200.7 / 6010) Mercury (EPA 245.1 / 7470 / 7471) Drew Van Allen TPH as Motor Oil (EPA 8015M) 48hr Sampler Signature: Total Lead (EPA 200,7 / 6010) TPH as Diesel (EPA 8015M) Project Address: MTBE @ 0.5 ppb (EPA Sampling Container TPH Gas (EPA 8280B) Preservative. Matrix 403 East 12th Street BTEX (EPA 8260B) 72hr Oakland, CA 40 mi VOA Sleeve Poly []Tedlar HNO. Water 오 Soi 1 wk Sample Designation ₹ Date Time Effluent 1240 3/21/2016 X إنتان influent 3/21/2016 1245 X 00 3 21 16 Relinguished by: Time Received by: Remarks: 1250 Prolon Relinquished by: Date 032216

For Lab Use Only:

Date

Temp *C

initials

Sample Receipt

Time

Them. ID#

Coolent Present Yes / No

Organization: White - Lab: Pink - Originator Rev: 061708

Date

Received by Laboratory:

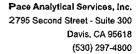
Relinquished by:

Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.: F-DAV-C-002-rev.02 Document Revised: 25Feb2015
Page 1 of 1
Issuing Authority:
Pace Davis, CA Quality Office

Sample Condition Upon Receipt Client Name:		Pi	oject#:	W0#:1262884
Courier:	□USPS □Other: _5/30	Che	nt 	1262884
Custody Seal on Cooler/Box Present? Yes No	s	eals intact	? []Yes	No Optional: Proj. Due Date: Proj. Name:
Packing Material: Subble Wrap Bubble Bags	ZNone	Oth	er:	Temp Blank? Yes No
Thermom. Used: DA1434 Cooler Temp Read('C): Cooler Temp Corremp Should be above freezing to 6'C Correction Factor:	ected(°C):	: Wet	Blve	Dry Ice None Samples on ice, cooling process has begun Biological Tissue Frozen? Yes No No Not Initials of Person Examining Contents:
Chain of Custody Present?	Zveis	[]No	□ N/A	1
Chain of Custody Filled Out?	ZYes	□No	□N/A	2.
Chain of Custody Relinquished?	Zyes	□Nc	□N/A	3.
Sampler Name and/or Signature on COC?	Z ∕Yes	□No	□n/A	4.
Samples Arrived within Hold Time?	Zyes	□No	□n/A	5.
Short Hold Time Analysis (<72.hr)?	Z/Yes	□No	□N/A	6.
Rush Turn Around Time Requested?	Yes	ZNo	□N/A	7.
Sufficient Volume?	Z ves	[]No	□N/A	8.
Correct Containers Used?	ZYes	□No		9.
-Pace Containers Used?	ZÍves	□No	∐N/A	2.
Containers Intact?	ZYes	[]No	<u>∟///</u> ∐N/A	16.
Filtered Volume Received for Dissolved Tests?	□Yes		ZNA	11. Note if sediment is visible in the dissolved container.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: AR	ZYes	□Nc	□N/A	12. Note it settiment is visible in the dissolved container.
All containers needing acid/base preservation have been	[]yes	□No	ØN/A	
checked? All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	□Yes		ZIN/A	13.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC.	□Yes	No		Initial when Lot # of added completed: preservative:
Headspace in VOA Vials (>6mm)?	□Yes	□No	DNIA	14.
Trip Blank Present?	□Yes	□No	ZN/A	15.
Trip Blank Custody Seals Present?	∏Yes	∐No	ZNIA	
Pace Trip Blank Lot # (if purchased): JENT NOTIFICATION/RESOLUTION				Field Data Required? Yes No
Person Contacted: Comments/Resolution:			Date/T	
Comments/ Resolution:				:
oject Manager Review:		~		Date: 3/2-2/16





April 13, 2016

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

RE: Project: Shore Acres Gas

Pace Project No.: 1263943

Dear Drew Van Allen:

Enclosed are the analytical results for sample(s) received by the laboratory on April 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott M Forbes

scott.forbes@pacelabs.com

Project Manager

Enclosures





Pace Analytical Services, Inc. 2795 Second Street - Suite 300 Davis, CA 95618 (530) 297-4800

CERTIFICATIONS

Project:

Shore Acres Gas

Pace Project No.:

1263943

Davis Cerification IDs

2795 Second Street Suite 300 Davis, CA 95618 North Dakota Certification #: R-214 Oregon Certification #: CA300002

Washington Certification #: C926-15a California Certification #: 08263CA

REPORT OF LABORATORY ANALYSIS



SAMPLE SUMMARY

Project:

Shore Acres Gas

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1263943001	Effluent	Air	04/11/16 10:25	04/12/16 09:45
1263943002	Influent	Air	04/11/16 10:30	04/12/16 09:45





SAMPLE ANALYTE COUNT

Project:

Shore Acres Gas

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1263943001	Effluent	EPA 8260B	JCP	9	PASI-DAV
1263943002	Influent	EPA 8260B	JCP	9	PASI-DAV



ANALYTICAL RESULTS

Project:

Shore Acres Gas

Sample: Effluent	Lab ID: 126	3943001	Collected: 04/11/1	6 10:25	Received: (04/12/16 09:45	Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8260B MSV AIR	Analytical Meti	hod: EPA 82	260B					
Benzene	ND	ppbv	50.0	1		04/12/16 15:4:	2 71-43-2	
Ethylbenzene	ND	ppbv	50.0	1		04/12/16 15:4:	2 100-41-4	
Methyl-tert-butyl ether	ПN	ppbv	100	1		04/12/16 15:4:	2 1634-04-4	
Toluene	62.3	ppbv	50.0	1		04/12/16 15:4:	2 108-88-3	
TPH as Gas	ND	ppbv	5000	1		04/12/16 15:4:	2	
Xylene (Total)	ND	ppbv	100	1		04/12/16 15:4:	2 1330-20-7	
Surrogates		= *						
Toluene-d8 (S)	95	%.	75-125	1		04/12/16 15:4:	2 2037-26-5	
1,2-Dichloroethane-d4 (S)	111	%.	75-125	1		04/12/16 15:4:	2 17060-07-0	
4-Bromofluorobenzene (S)	79	%.	7 5-1 25	1		04/12/16 15:4:	2 460-00-4	
Sample: Influent	Lab ID: 126	3943002	Collected: 04/11/1	6 10:30	Received: (04/12/16 09:45	Matrix: Air	
Sample: Influent Parameters	Lab ID: 126	3943002 Units	Collected: 04/11/1 Report Limit	6 10:30 DF	Received: (04/12/16 09:45 Analyzed	Matrix: Air CAS No.	Qual
Parameters		Units	Report Limit					Qual
Parameters 3260B MSV AIR	Results	Units	Report Limit				CAS No.	Qual
Parameters 3260B MSV AIR Benzene	Results Analytical Metr	Units nod: EPA 82	Report Limit 60B	DF		Analyzed	CAS No.	Qual
Parameters 8260B MSV AIR Benzene Ethylbenzene	Results Analytical Meth	Units nod: EPA 82 ppbv	Report Limit 60B 50.0	DF 1		Analyzed 04/12/16 14:08 04/12/16 14:08	CAS No. 5 71-43-2 5 100-41-4	Qual
Parameters 8260B MSV AIR Benzene Ethylbenzene Methyl-tert-butyl ether	Results Analytical Meth 865 190	Units nod: EPA 82 ppbv ppbv	Report Limit 60B 50.0 50.0	DF 1 1		Analyzed 04/12/16 14:05	CAS No. 5 71-43-2 5 100-41-4 5 1634-04-4	Qual
Parameters 8260B MSV AIR Benzene Ethylbenzene Methyl-tert-butyl ether Toluene	Results Analytical Meth 865 190 ND	Units nod: EPA 82 ppbv ppbv ppbv	Report Limit 60B 50.0 50.0 100	DF 1 1 1 1 1		Analyzed 04/12/16 14:08 04/12/16 14:08 04/12/16 14:08	CAS No. 5 71-43-2 5 100-41-4 5 1634-04-4 5 108-88-3	Qual
Parameters 8260B MSV AIR Benzene Ethylbenzene Methyl-tert-butyl ether Toluene TPH as Gas	Results Analytical Meth 865 190 ND 437	Units nod: EPA 82 ppbv ppbv ppbv ppbv	Report Limit 60B 50.0 50.0 100 50.0	DF 1 1 1 1 1 1		Analyzed 04/12/16 14:05 04/12/16 14:05 04/12/16 14:05 04/12/16 14:05	CAS No. 5 71-43-2 5 100-41-4 5 1634-04-4 5 108-88-3	Qual
Parameters 8260B MSV AIR Benzene Ethylbenzene Methyl-tert-butyl ether Toluene TPH as Gas Kylene (Total)	Results Analytical Meth 865 190 ND 437 43100	Units nod: EPA 82 ppbv ppbv ppbv ppbv ppbv ppbv	Report Limit 50.0 50.0 100 50.0 50.0 50.0	DF 1 1 1 1 1 1 1		Analyzed 04/12/16 14:09 04/12/16 14:09 04/12/16 14:09 04/12/16 14:09	CAS No. 5 71-43-2 5 100-41-4 5 1634-04-4 5 108-88-3	Qual
Parameters 3260B MSV AIR Benzene Ethylbenzene Methyl-tert-butyl ether foluene IPH as Gas Kylene (Total) Surrogates	Results Analytical Meth 865 190 ND 437 43100	Units nod: EPA 82 ppbv ppbv ppbv ppbv ppbv ppbv	Report Limit 50.0 50.0 100 50.0 50.0 50.0	DF 1 1 1 1 1 1 1		Analyzed 04/12/16 14:09 04/12/16 14:09 04/12/16 14:09 04/12/16 14:09	CAS No. 5 71-43-2 5 100-41-4 5 1634-04-4 5 108-88-3 5 1330-20-7	Qual
Sample: Influent Parameters 8260B MSV AIR Benzene Ethylbenzene Methyl-tert-butyl ether Toluene IPH as Gas Kylene (Total) Surrogates Toluene-d8 (S) 1,2-Dichloroethane-d4 (S)	Results Analytical Meth 865 190 ND 437 43100 1740	Units pod: EPA 82 ppbv ppbv ppbv ppbv ppbv ppbv ppbv	Report Limit 50.0 50.0 100 50.0 50.0 100 100	DF 1 1 1 1 1 1 1 1		Analyzed 04/12/16 14:05 04/12/16 14:05 04/12/16 14:05 04/12/16 14:05	CAS No. 5 71-43-2 5 100-41-4 5 1634-04-4 5 108-88-3 5 1330-20-7 5 2037-26-5	Qual



QUALITY CONTROL DATA

Project:

Shore Acres Gas

Pace Project No.:

1263943

QC Batch:

DAVM/3486

Analysis Method:

EPA 8260B

QC Batch Method:

EPA 8260B

Analysis Description:

8260 MSV AIR

Associated Lab Samples:

es: 1263943001, 1263943002

METHOD BLANK: 305253

Matrix: Air

Associated Lab Samples:

1263943001, 1263943002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers	
Benzene	ppbv	ND	50.0	04/12/16 13:41		
Ethylbenzene	ppbv	ND	50.0	04/12/16 13:41		149
Methyl-tert-butyl ether	ppbv	ND	100	04/12/16 13:41		
Toluene	ppbv	ND	50.0	04/12/16 13:41		
TPH as Gas	ppbv	ND	5000	04/12/16 13:41		
Xylene (Total)	ppbv	ND	100	04/12/16 13:41		
1,2-Dichloroethane-d4 (S)	%.	102	75-125	04/12/16 13:41		
4-Bromofluorobenzene (S)	%.	82	75-125	04/12/16 13:41		
Toluene-d8 (S)	%.	95	75-125	04/12/16 13:41		

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
enzene	ppbv	520	418	80	75-125	
nylbenzene	ppbv	515	534	104	70-135	
thyl-tert-butyl ether	ppbv	515	438	85	75-125	
ene	ppbv	515	430	84	75-125	
ne (Total)	ppbv	768	805	105	73-133	
Dichloroethane-d4 (S)	%.			104	75-125	
omofluorobenzene (S)	%.			82	75-125	
ene-d8 (S)	%.			90	75-125	

SAMPLE DUPLICATE: 305255						
		1263943002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Benzene	ppbv	865	883		30	
Ethylbenzene	ppbv	190	202	6	30	
Methyl-tert-butyl ether	ppbv	ND	92,2J		30	
Toluene	ppbv	437	443	1	30	
TPH as Gas	ppbv	43100	46500	8	30	
Xylene (Total)	ppby	1740	1830	5	30	
1,2-Dichloroethane-d4 (S)	%.	109	110	1		
4-Bromofluorobenzene (S)	%.	82	81	1		
Toluene-d8 (S)	%.	87	89	2		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..





QUALIFIERS

Project:

Shore Acres Gas

Pace Project No.:

1263943

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

Date: 04/13/2016 04:58 PM

PASI-DAV Pace Analytical Services - Davis





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

Shore Acres Gas

Pace Project No.: 1263943

Date: 04/13/2016 04:58 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1263943001 1263943002	Effluent Influent	EPA 8260B EPA 8260B	DAVM/3486 DAVM/3486		

PACE ANALYTICAL

2795 2nd Street, Suite 300

Davis, CA 95618 Lab: 530.297.4800 Fax: 530.297.4802

SRG # / Lab No.

1263943

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Project Contact (Hardcopy or PD Drew Van Allen	F To):		C	alifor	nia (EDF	Rep	ort?		Ş	Yes	-	∏No	,		T				Chi	ain.	of-i		tod	v 🛱	20		~~	el A	nio l		- F		iest		***********	4
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Sample Designation	Date	Time	ő	Sleeve	Poly	Glass	08	오	HNO	None		Įş	Soil	Αį	i	MTBE @ 0.5 ppb (EPA 8260B)	8TEX (EPA 82608)	TPH Gas (EPA 8260B)	S Oxygenates (MTBE, DXPE, RT8E, TAME, TBA) (EPA 82608)	7 Oxygenates (5 oxy + EfOH, MeOH) (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 6260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	CAM 17 Metals (EPA 200.77 6010)	5 Waste Oil Metals (Cd, Cr, Ni, Pb, Zn) (EPA 2007, 76010)	Mercury (EPA 245.1 / 7470 / 7471)	Total Lead (EPA 200.7 / 6010)	W.E.T. Lead (STLC)	TPHg, BTEX, and MTBE by EPA 82608			Twk		1
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Effluent	4/11/2016	1025				_	Х	1						Х												3			3	-		X	-			02) [
Influent	4/11/2016	1030					х							х			.							T	Т	1		\neg				х	_	\top	1	8	Ţ,
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Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.: F-DAV-C-002-rev.02 Document Revised: 25Feb2015
Page 1 of 1
Issuing Authority:
Pace Davis, CA Quality Office

Sample Condition Upon Receipt Client Name:		١	Project#:	W0#:1263943
Courler:	□USPS □Other:	□Ch	ent	
Custody Seal on Cooler/Box Present? Yes No	9 .:	Seals Intac	t? []Ye	No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Bags	□Mon	e 🗍01	her:	Temp Blank? Yes No
Copier Temp Read(°C): Copier Temp Read(°C): Copier Temp Corection Factor	rected(*C):	æ: []Wet		Dry Ice None Samples on Ice, cooking process has begined biological Tissue Frozen? Yes No of the Initials of Person Examining Contents:
Chain of Custody Present?	Yes	□No	□ N/A	Comments:
Chain of Custody Filled Out?	ØYes	□No	∐N/A	2
Chain of Custody Relinquished?	Zyes	•••	N/A	3.
Sampler Name and/or Signature on COC?	Zíves	□No		4.
Samples Arrived within Hold Time?	ZYes	∏No	□n/a	5.
Short Hold Time Analysis (<72 hr)?	Ø Yes	□No		6.
Rush Turn Around Time Requested?	Yes	ZNo	□N/A	7.
Sufficient Volume?	Yes	[]No		8.
Correct Containers Used?	[Z]Yes	□No	 □n/a	8
Pace Containers Used?	Zves	□No.	□n/A	
Containers Intact?	ØŸes	[]No	∐N/A	30.
Filtered Volume Received for Dissolved Tests?	Yes	□No	[ZN/A	11. Note if sediment is visible in the dissolved container:
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: AYR.	ØYes	□No	□n/a	12.
All containers needing acid/base preservation have been checked?	Yes	□No	ØN/A	13. THNO: THISO, THEOH THE
All containers needing preservation are found to be in				13. ☐HNO₃ ☐H₂SO₄ ☐NaOH ☐HCI Sample#
compliance with EPA recommendation? (HNO ₁ , H ₂ SO ₄ , HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC, Oil and Grease,	Yes	□No	Æ)N/A	
DRO/8015 (water) DOC	[]]Yes	ZNO	***************************************	Initial when Lot # of added completed: preservative:
Headspace in VOA Vials (>6mm)?	□Yes	DNo	[ZÎN/A	14.
Trip Blank Present?	Yes:	□No	ZÎN/A	15.
Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased):	Yes	□No	[ZN/A	
ENT NOTIFICATION/RESOLUTION		·····		
Branch & Carles of			~ 13.22	Field Data Required? Yes No
Comments/Resolution:				me:
ect Manager Review:			***************************************	on other lit

GROUNDWATER LEVEL DATA FORM

PROJECT NAME:

Shore Acres

PROJECT NUMBER:

GHA.19009

PROJECT MANAGER:

MSS

TASK NUMBER:

SITE ADDRESS:

403 East 12th Street, Oakland, Ca

WELL ID	TIME	DEPTH TO BOTTOM	DEPTH TO WATER	DEPTH TO PRODUCT	PRODUCT THICKNESS	PRODUCT THICKNESS X 0.8	COMMENTS
MW-1	1102	1992	10.43				
_{MW-2} (O	1(01	1945	11.11				
MW-3	u		11.39		0.		
MW-4	1058	13.71	11.22		ų		
MVV-5	1114	19.31	12,26	Alexander .	Sage Servery		
MW-6	1100	19.92	10,10	***			
EW-1	1106		11.54			f	sawlinetly
EW-2	1112		16.50	× (treaturat
EW-3	1109	1	16,56	# W		<i>A</i>	system
EW-4	1110		16,74				, U
ž. 7.					****		X
						S	~
er Ste							
		,			\$		
5						,	

FIELD TECHNICIAN:	Dir.	, ,		i	
DATE:	3	122	II	Ø	

PROJECT	MANAGER:	MSS		and, Ca			GHA.19009
WATER CO	Well De	Total Depth: pth to Water:	19.92		2-inch:	1	-
PURGE VO			ultiplier x No. '	Volumes =	Purge Volume		
Wa				×		=	S Purge Volume
	Multiplier for THOD: Disp	2-inch: 4-inch: 6-inch: osable Bailer PVC Bailer ersible Pump	0.17 0.65 1.5		METHOD:	able Bailer Pump:	
TIME	PURGED	рН	(°C)		DO (mg/l)		COMMENTS
1220		7.39	(O.L	799			
1224	3,2	1.31	10.2	791			
1230		4.36	13.1				sacya
		···					
FIELD T	ECHNICIAN: DATE:	0/4A 3/22	116				

PROJECT PROJECT SITE ADDE	MANAGER:	Shore Acres MSS 403 East 12	s 2th Street, Oak	– land, Ca	PROJECT NI TASK NUMB		GHA.19009
	WELL ID	. MW-	2		TYPE	OF WELL:	Monitoring
WATER CO	De	: I Total Depth epth to Water olumn Length	: 11,11	_ _ _	WELL DIAMI 2-inch: 4-inch: 6-inch:		- - -
PURGE VO	LUME CALC	JLATION:					
		nn Length x M	lultiplier x No.	Volumes =	Purge Volume		
Wa	8,84 ater Column Le	_ x ength	O.\} Multiplier	_ x	No. Volumes	=	Purge Volume
MULTIPLIE	יאדאי פּ						
PURGE ME	Multiplier for THOD: Disp Subm	2-inch: 4-inch:	0.17 0.65 1.5	Linear Foot SAMPLE I		able Bailer	
TIME	VOLUME PURGED (gal)	рН	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1142	(.)	7.71	19.2	901			
1146	3 45	7.61	19.2	4.8			
1153	7.5	7,761	10,0	800			- C. (A)
							sayou
							· · · · · · · · · · · · · · · · · · ·
							· · · · · · · · · · · · · · · · · · ·
<u> </u>							

PROJECT I SITE ADDR	NAME: MANAGER: ESS:	Shore Acres MSS 403 East 12	th Street, Oakl	- and, Ca	PROJECT NU TASK NUMBI		GHA.19009
	WELL ID:	: <u>/\/\/\</u> :	-3	-	TYPE (OF WELL:	Monitoring
WATER CO	De	: I Total Depth: epth to Water: elumn Length:	11.39	- - -	WELL DIAME 2-inch: 4-inch: 6-inch:		• •
PURGE VO	LUME CALCU						
		ın Length x M	ultiplier x No. '	Volumes = 1	Purge Volume		
	6.44	_ x	O-(7 Multiplier	_ X	No. Volumes	=	3.5
Wa	ter Column Le	ngth	Multiplier	•	No. Volumes		Purge Volume
MULTIPLIE PURGE ME	Multiplier for THOD:	2-inch: 4-inch: 6-inch: osable Bailer	0.17 0.65 1.5	Linear Foot		able Bailer	
	Subm	PVC Bailer ersible Pump		-		Pump: Other:	
		Other		-		Othor.	
TIME	VOLUME PURGED (gal)	рН	TEMP. (°C)	COND. (u\$/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1240	PURGED (gal)	рН 7.31-	(°C)	(uS/cm)	DO (mg/l)		COMMENTS
	PURGED (gal) (, t) (, z)		(°C)	(uS/cm)	DO (mg/l)		COMMENTS
1240	PURGED (gal)		(°C)	(uS/cm)	DO (mg/l)		COMMENTS
1240	PURGED (gal) (, t) (, z)		(°C)	(uS/cm)	DO (mg/l)		
1240	PURGED (gal) (, t) (, z)		(°C)	(uS/cm)	DO (mg/l)		
1240	PURGED (gal) (, t) (, z)		(°C)	(uS/cm)	DO (mg/l)		
1790	PURGED (gal) (, t) (, z)		(°C)	(uS/cm)	DO (mg/l)		

PROJECT PROJECT SITE ADDR	MANAGER:	Shore Acres MSS 403 East 12	th Street, Oak	– Iand. Ca	PROJECT NO TASK NUMB		GHA.19009
	WELL ID:	- MW-			TYPE	OF WELL:	Monitoring
WATER CO	DLUMN DATA Wel De Water Co	: I Total Depth: pth to Water: lumn Length:	18.71 11.22 7.49	- - -	WELL DIAME 2-inch: 4-inch: 6-inch:	ETER:	
PURGE VO	LUME CALCU Water Colum		ultiplier x No.	Volumes =	Purge Volume		
Wa			-		No. Volumes		3.75 Purge Volume
MULTIPLIE		Schedule 40 2-inch: 4-inch: 6-inch:	0.17 0.65	Linear Foot	Based on Cas	ing Diamet	er:
PURGE ME	Disp	osable Bailer PVC Bailer ersible Pump Other		SAMPLE [- - -			
TIME	VOLUME PURGED (gal)	рН	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1157	1-25	7-86	19.6	602			
12.04	7.75	792	19.7	611	•		
1204 1206	J. 4.1	T. (0	(1.6	5+18			Samu
			·····				
			· · · · · · · · · · · · · · · · · · ·				

FIELD TECHNICIAN:
DATE:
3/22116

SITE ADDRESS: 403 East 12th Street, Oakland, Ca	
WELL ID: Monito	toring
WATER COLUMN DATA: Well Total Depth: Depth to Water: Water Column Length: Water Column Length: WELL DIAMETER: 2-inch: 4-inch: 6-inch:	
Water Column Length x Multiplier x No. Volumes = Purge Volume	
$\frac{7.05}{\text{Water Column Length}} \times \frac{0.17}{\text{Multiplier}} \times \frac{3}{\text{No. Volumes}} =$	3. 6 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	
(gal) (°C) (us/cm) (mv)	COMMENTS
1312 (.21 7.37 (9.2 (0))	
1315 15 7.71 18.9 1043	
1323 Saw	\(\sigma \)
	*
	· · · · · · · · · · · · · · · · · · ·

FIELD TECHNICIAN: 500 PATE: 272416

PROJECT PROJECT SITE ADDE	MANAGER:	Shore Acres MSS 403 East 12	s 2th Street, Oak	_ land, Ca	PROJECT N TASK NUMB		GHA.19009
	WELL ID	:MW	1-6	_	TYPE	OF WELL:	Monitoring
WATER CO		l Total Depth	1010	<u></u>	WELL DIAMI 2-inch: 4-inch: 6-inch:	ETER:	- - -
PURGE VO	LUME CALCU		fultiplier v No	Volumes =	Purge Volume		
Wa	9.81 ater Column Le		Multiplier		J		Purge Volume
MULTIPLIE PURGE ME	Multiplier for THOD:	2-inch: 4-inch: 6-inch: osable Bailer	0.17 0.65 1.5	/Linear Foot		able Bailer	
	Subm	PVC Bailer ersible Pump Other		- - -	·	Pump: Other:	
TIME	VOLUME PURGED (gal)	рН	TEMP. (°C)	COND. (uS/cm)	DO (mg/l)	ORP (mV)	COMMENTS
1256	(3)	7.31	ાં હ. વ	7183 141			
1301	3,2	7.21	182	791			
135	2	7.65	17. +	763			
130							
							<u>.</u>
						4 <u> </u>	
		,					
				ļ 			
FIELD T	ECHNICIAN: DATE:	0 3	122 (150				

Date of site visit:	12/16/15
Time of arrival:	09:30
Time of departure:	12:00

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

SOIL VAPOI	R EXTRACTI	ON SYSTEM	1					
	Vapor	Manifold (int	luent)	ent) INFLUENT	Traviani			
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
οĸ	3.64000	4.0		148.0	A DISTRIBUTE	0	10,085.9	09:30

UTILI	TIES	-		SAMPLES	COLLECTE	D AND SAMPI	LE TIMES
Natural Gas		Gas Train	EFFLUENT		Time	Sampler	PID
Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	10:55	dva	2.1
			148.0	INFLUENT	11:00	dva	109.0

VAPOR EXTRACTION WELL MANIFOLD LINES											
	% Open Vacuum Delta PI Temp Field PID										
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)						
EW-1	0%	<u>.</u>	1		44 (1 to 1 to 1 to 1 to 1 to 1 to 1 to 1 t						
EW-2	100%	1	-	1	water						
EW-3	.0%										
EW-4	0%				6 6 <u>1</u> 1 1 1						

	MISC. FIELD NOTES	
System shut down for carbon change out		
temp 1454 dil 1407	- 1900 - 1 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 -	
Groundwater flow meter 1082639		

Date of site visit:	01/21/16
Time of arrival:	09:30
Time of departure:	12:00

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

SOIL VAPOR EXTRACTION SYSTEM									
	Vapor Manifold (influent)			INFLUENT	Traviani				
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time	
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)	
ОК				0.0		0	10,085.9	09:30	

UTILITIES				SAMPLES	COLLECTE	O AND SAMPL	E TIMES
 Natural Gas		Gas Train	EFFLUENT	Time Sample		Sampler	PID
Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT			
			0.0	INFLUENT			er Bulli de G

	VAPOR EXTRACTION WELL MANIFOLD LINES									
***************************************	% Open	Vacuum	Vacuum Delta PI Temp							
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)					
EW-1	0%	‡	ļ	-	<u></u>					
EW-2	100%				water					
EW-3	0%	2.2	4	101025	<u> 111</u> 4-6					
EW-4	0%	10 to 442 to 10 to		4 (14 <u>22</u> 4)						

	MISC. FIELD NOTES	
earbon change out completed and unit restart	ed	,
		···

Date of site visit:	01/27/16
Time of arrival:	09:30
Time of departure:	13:30

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

	Vapor Manifold (influent)			INFLUENT Travian				
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
OK		Augustus 1919.		146.0		Ö	10,233.6	09:30

UTILITIES				SAMPLES	COLLECTE	O AND SAMPL	E TIMES
Natural Gas		Gas Train	EFFLUENT	FFLUENT		Sampler	PID
Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	10:00	dva	1.5
			146.0	INFLUENT	10:05	dva	52.0

VAPOR EXTRACTION WELL MANIFOLD LINES									
% Open Vacuum Delta PI Temp F									
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)				
EW-1	0%		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
EW-2	100%	1			water				
EW-3	0%	4 - 1 <u>1 1</u> 1 1 1 4	5 6 <u>1 1</u> 1 1	0 6 <u>11</u> 0 er	10 (10 <u>11 1</u> 1 11 11 11 11 11 11 11 11 11 11 11				
EW-4	0%		6 4 6 <u>44</u>		an in <u>su</u> stanti				

MISC. FIELD NOTES	
Shut down system to clean AS system, restarted unit	
temp 1449 dil 1403 Groundwater flow meter 111042.9	

Date of site visit:	02/03/16
Time of arrival:	09:30
Time of departure:	11:30

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

SOIL VAPOR EXTRACTION SYSTEM									
Vapor Manifold (influent)				INFLUENT	Traviani				
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time	
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)	
OK				159.0		0	10,399.3	09:30	

	UTILITIES				SAMPLES	COLLECTE	O AND SAMPL	E TIMES
	Natural Gas (Gas Train	EFFLUENT	Time Sampler		Sampler	PID
	Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
:	(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	100	dva	
	1000000			159.0	INFLUENT		dva	

	VAPOR EXTRA	CTION WELL	MANIFOLD L	INES					
% Open Vacuum Delta Pl Temp Fie									
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)				
EW-1	0%		_	-	1 2				
EW-2	100%				water				
EW-3	0%	di di <u>kal</u> i mu		Distribution in	10.00				
EW-4	0%		a all all the design	or construction	4.0				

Leaking hose from bag filter to oxidizer					
temp 1458 dil 1410					
Groundwater flow meter 113561.0					

Date of site visit:	02/05/16
Time of arrival:	09:30
Time of departure:	11:30

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

SOIL VAPOR	R EXTRACTI	ON SYSTEM	1				·	
Vapor Manifold (influent)			luent)	INFLUENT	Traviani			
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
ok	Barrier B.	and clear the		160.0	por de la company	0	10,448.0	09:30

UTILITIES				SAMPLES	COLLECTE	O AND SAMPL	E TIMES
Natural Gas		Gas Train	EFFLUENT	Time		Sampler	PID
Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT		dva	
			160.0	INFLUENT		dva	

	VAPOR EXTRA	CTION WELL	MANIFOLD L	INES	7-Ann.
	% Open	Delta Pi	Temp	Field PID	
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	0%	_	1		2-2
EW-2	100%			100 <u>110</u> 0 1100	water
EW-3	0%	5191.5 <u>2.</u> 1916.6			
EW-4	100%				water

	MISC. FIELD NOTES	
Replaced leaking hose from bag filter to oxidizer		
temp 1453 dil 1406		
Groundwater flow meter 114268.3	·····	

Date of site visit:	02/17/16
Time of arrival:	09:30
Time of departure:	11:30

ECG employee:	dva
System status upon arrival:	shut down
System status upon departure:	shut down

OIL VAPOR EXTRACTION SYSTEM Vapor Manifold (influent)			INFLUENT	Traviani		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)

	UTILITIES				SAMPLES	COLLECTE	O AND SAMPL	E TIMES
	Natural Gas		Gas Train EFFLUENT			Time		PID
	Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
	(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT		dva	
albatan e e			A BURNEY	0.0	INFLUENT		dva	nasilari e

	VAPOR EXTRACTION WELL MANIFOLD LINES									
	% Open	Vacuum	Delta PI	Temp	Field PID					
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)					
EW-1	0%				_					
EW-2	100%		chen <u>alis</u> (and	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	water					
EW-3	0%	200 E200 C		ka u <u>u</u> u ka	A. J. 1118 Feb.					
EW-4	100%		district of the last		water					

MISC. FIELD NOTES						
System shut down due to high water in AS						
AS would not restart						
Manufacturer contacted for repairs						

Date of site visit:	02/19/16
Time of arrival:	09:30
Time of departure:	11:30

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

SOIL VAPOR	R EXTRACTI	ON SYSTEM						
Vapor Manifold (influent)			INFLUENT	Traviani				
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
ок	and the same					0	0.0000000000000000000000000000000000000	

UTILITIES					SAMPLES	COLLECTE	O AND SAMPL	E TIMES
	Natural Gas		Gas Train EFFLUENT			Time	Sampler	PID
	Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
	(ft ³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT		dva	
625666				0.0	INFLUENT		dva	

	VAPOR EXTRACTION WELL MANIFOLD LINES									
	% Open Vacuum Delta PI Temp Field PI									
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)					
EW-1	0%			-	1 <u>1</u>					
EW-2	100%				water					
EW-3	0%	akal <u>da</u> kares		said de la compansión de la compansión de la compansión de la compansión de la compansión de la compansión de	elisiik <u>tat</u> ukeen					
EW-4	100%		ara nuutanism		water					

	MISC. FIELD NOTES					
System repairs by Manufacturer, system res	arted					
	A CONTRACTOR OF THE CONTRACTOR					

Date of site visit:	02/24/16
Time of arrival:	09:30
Time of departure:	11:30

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

SOIL VAPOR EXTRACTION SYSTEM									
	Vapor Manifold (influent)			INFLUENT	Traviani				
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time	
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)	
ok :				155.0		0	10,832.1	09:30	

UTILITIES				SAMPLES COLLECTED AND SAMPLE				
Natura	Natural Gas		n EFFLUENT T		Time	Sampler	PID	
Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)	
 (ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT		dva		
			155.0	INFLUENT		dva		

	VAPOR EXTRACTION WELL MANIFOLD LINES									
	Temp	Field PID								
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)					
EW-1	0%				3 Page 1					
EW-2	100%	<u>:</u>			water					
EW-3	0%		- 645 <u>-15</u> -16-16	10 to 10 to						
EW-4	100%	122		4	water					

	MISC. FIELD NOTES	
System down 2/23/16 due to power outage	· · · · · · · · · · · · · · · · · · ·	
Temp 1448 Dil 1357		·
Groundwater meter 117279.0		

Date of site visit:	03/01/16
Time of arrival:	09:30
Time of departure:	11:30

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

SOIL VAPOR	R EXTRACTI	ON SYSTEM	И				*	
	Vapor Manifold (influent)			INFLUENT	Traviani			
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
ок		popular di sa		156.0		0	10,975.8	09:30

	UTILITIES				SAMPLES	O AND SAMPL	SAMPLE TIMES	
	Natur	Natural Gas		EFFLUENT	,	Time	Sampler	PID
	Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
Ĺ	(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	10:00	dva	1.1
		医侧线 压缩		156.0	INFLUENT	10:15	dva	78.0

	VAPOR EXTRACTION WELL MANIFOLD LINES									
% Open Vacuum Delta PI Temp Fi										
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)					
EW-1	0%		<u>-</u>		20					
EW-2	100%		5 5 <u>1 1</u> 5 5 5	a a <u>de</u> lana	water					
EW-3	0%	1	- 10 <u>- 11</u> - 11 - 11	ar (1 <u>851</u> 6 a) c	ranelin <u>eli</u> gija (i					
EW-4	100%				water					

	MISC. FIELD NOTES	
Temp 1445 Dil 1403		
Groundwater meter 118864.2		

Date of site visit:	03/21/16
Time of arrival:	11:30
Time of departure:	13:30

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

SOIL VAPOR	EXTRACTION	ON SYSTEM	1					
	Vapor Manifold (influent)			INFLUENT	Traviani			
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
ок				138.0	54 44 59	0	11,270.1	11:30

UTILITIES				SAMPLES	COLLECTE	D AND SAMPI	LE TIMES
Natural Gas		Gas Train	EFFLUENT		Time	Time Sampler	
 Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	12:40	dva	1.1
ISI BIDDE			138.0	INFLUENT	12:45	dva	109.0

VAPOR EXTRACTION WELL MANIFOLD LINES									
	% Open	% Open Vacuum Delta PI Temp		Temp	Field PID				
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)				
EW-1	0%								
EW-2	100%				water				
EW-3	0%	in one <u>e</u> station			1949 <u>(21</u> 194)				
EW-4	100%			a to superior	water				

	MISC. FIELD NOTES	
Unknown why system down		
Temp 1464 Dil 1396		
Changed bag filter		- Advisor
Groundwater meter 123952.6		

Date of site visit:	04/05/16
Time of arrival:	. 09:30
Time of departure:	11:30

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

SOIL VAPOR EXTRACTION SYSTEM								
	Vapor Manifold (influent)			Vapor Manifold (influent) INFLUENT	Traviani			
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
ок	54434			123.0		0	11,609.5	09:30

UTILITIES				SAMPLES	COLLECTE	O AND SAMPL	E TIMES
Natural Gas Gas Train		EFFLUENT	Time Sampler			PID	
Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT		dva	
			123.0	INFLUENT		dya	

VAPOR EXTRACTION WELL MANIFOLD LINES						
	% Open	Vacuum	Delta Pi	Temp	Field PID	
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)	
EW-1	0%	1	1	1	10 (10 Pm)	
EW-2	100%	ţ	1	Ţ	water	
EW-3	0%	<u>.</u>	100	100 <u>100</u>	9400 <u>11</u> 000	
EW-4	100%		parameter	a area de la composition della composition della	water	

	MISC. FIELD NOTES
Unknown why system down	-
Temp 1485 Dil 1411	,
Changed bag filter	
Groundwater meter 131094.1	· · · · · · · · · · · · · · · · · · ·

Date of site visit:	04/11/16
Time of arrival:	09:30
Time of departure:	11:30

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

SOIL VAPOR	EXTRACTI	ON SYSTEM	1	***			· · · · · · · · · · · · · · · · · · ·	
	Vapor	Manifold (inf	luent)	INFLUENT	Traviani	, , , , , , , , , , , , , , , , , , ,		
Oil Level	ΔΡ	Temp.	Pressure	Flow	Blower	Dilution	Hours	Time
(OK/Low)	("w.c.)	(°F)	("w.c.)	(SCFM)	Pressure	%	(Hours)	(Hours)
. ok				135.0		0	11,752.3	09:30

UTILITIES				SAMPLES COLLECTED AND SAMPLE TIM				
	Natura	al Gas	Gas Train	EFFLUENT		Time	Sampler	PID:
	Meter	Flow Rate	Pressure	Flow		(hours)		(ppmv)
	(ft³ X 1000)	(SCFM)	(psig)	(SCFM)	EFFLUENT	10:25	dva	1.1
				135.0	INFLUENT	10:30	dva	52.0

	VAPOR EXTRA	CTION WELL	MANIFOLD LI	NES	
	% Open	Vacuum	Delta PI	Temp	Field PID
Line	(%)	("Hg)	("w.c.)	(°F)	(ppmv)
EW-1	0%				
EW-2	100%			56 <u>(188</u>)	water
EW-3	0%		4 0 1 <u>11</u> 0 0		ar madair a
EW-4	100%				water

	MISC. FIELD NOTES	
System shut down		
Temp 1519 Dil 1468		H
Groundwater meter 134042.5		