

4620 NORTHGATE BLVD #155, SACRAMENTO, CA 95834 TELEPHONE: (916) 923-3335 • FAX (916) 923-3336

INTERNET: www.geofon.com

25 July 2006

Ms. Donna Drogos LOP Manager Alameda County Environmental Health Local Oversight Program 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Subject:

Summary of Phase II Site Assessment Field Activities Shore Acres Gas, 403 E 12<sup>th</sup> Street, Oakland, California

Dear Ms. Drogos:

Alameda Courry
JUL 2 8 2006
Environmental Health

Geofon, Inc. is pleased to submit one copy of the subject report for your review. The report summarizes permitting, soil boring and sampling, and analytical results. Two additional copies have been distributed as shown on the distribution list below.

The purpose of this work was to evaluate the presence of potential petroleum hydrocarbon impact to soil at the site. The scope of work performed during this investigation consisted of installing two on-site direct push borings to 20 feet in the vicinity of the existing underground storage tanks.

If you have any questions or comments regarding this report, please do not hesitate to call either of us at (916) 923-3335.

Sincerely,

Geofon, Inc.

Dennis M. Jones

Project Manager

Dave Marks, P.G.

Program Manager

cc:

Mr. LeRoy Griffin, Oakland Fire Department, 250 Frank Ogawa Plaza, Suite 3341, Oakland, CA 94612 Mr. Rashid Ghafoor (Owner), 301 Anchor Drive, Bay Point, CA 94565

# **Phase II Site Assessment Field Activities**

Shore Acres Gas 403 E 12<sup>th</sup> Street Oakland, California

LOP Site No. (not established)

Prepared for:

Mr. Rashid Ghafoor 301 Anchor Drive Bay Point, California 94565

Prepared by:



4620 Northgate Boulevard, Suite 155 Sacramento, California 95834

Geofon Project No: 5-70004

**July 2006** 

# Phase II Environmental Site Assessment Shore Acres Gas 403 E 12<sup>th</sup> Street Oakland, California

Signature Block

Dennis M. Jones Project Manager

Date

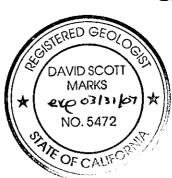
7/25/2006

7/25/06

Dave Marks, P.G. Program Manager

Professional Geologist #5472

Date



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# LIST OF ACRONYMS AND ABBREVIATIONS

bgs below ground surface

Geofon Geofon, Inc.

mg/kg milligrams per kilogram

MTBE methyl tertiary butyl ether

PID photoionization detector

RDL reporting detection limits

TBA tertiary butanol

TPH-D total petroleum hydrocarbons as diesel

TPH-G total petroleum hydrocarbons as gasoline

UST underground storage tank

## 1.0 INTRODUCTION

Geofon, Inc. (Geofon) has prepared this report to summarize field activities and analytical results from soil sampling conducted at 403 East 12<sup>th</sup> Street in Oakland, California. This work was performed on behalf of Mr. Rashid Ghafoor (owner) as part of a Phase II environmental site assessment.

This report has been prepared for submittal to the City of Oakland Fire Department and Alameda County Environmental Health Local Oversight Program. This report documents soil borings activities conducted at the site on 10 July 2006.

The purpose of this work was to investigate and characterize the potential petroleum hydrocarbon impact to soil in the vicinity of the existing underground storage tanks (USTs) at the site. The scope of work has been completed in accordance with permit requirements as set forth by Alameda County Public Works and in accordance with standard industry practices for environmental investigations.

## 2.0 BACKGROUND

#### 2.1 SITE DESCRIPTION

The site is an operating gasoline and diesel facility located at 403 East 12<sup>th</sup> Street in the city of Oakland, California (Figure 1). The petroleum system consists of two dispenser islands, piping, and three 12,000-gallon USTs used for storage of gasoline and diesel fuel. The current site configuration is illustrated on Figure 2.

The site is bound to the northwest by 4<sup>th</sup> Avenue, to the northeast by East 12<sup>th</sup> Street, and by commercial/industrial buildings to the southeast and southwest. Properties in the immediate vicinity appear to be developed for office, warehouse, apartments, and retail use. A swimming pool is located across 4<sup>th</sup> Avenue from the property.

Topography in the vicinity of the site is generally flat. Asphalt and concrete cover the entire ground surface. Surface flow at the site appears to be toward storm drains located near 4<sup>th</sup> Avenue and East 12<sup>th</sup> Street.

#### 2.2 SITE HISTORY

In June 2006, Geofon performed a file review at the City of Oakland Fire Department for the Shore Acres Gas Station. Documents reviewed indicated that three (3) 12,000-gallon USTs were installed at the site in 1982. In 1983, the site was purchased by the current owner, and on 6 May 1999, Ulrich Industrial Coatings was contracted to line the inside of the three tanks with a fiberglass liner and corrosion protection. On 27 August 2003, new dispensers were installed at the site. Our file review indicated there had been no soil or groundwater samples collected from the site.

#### 2.3 GEOLOGY AND HYDROLOGY

Site soils are described by the United States Geological Survey (USGS 1987) as being Quaternary fine-grained eolian dune sands and alluvium. Soils encountered at the site consisted mostly of clays and clayey silts with fingers of silty sands and silts. The soil borings in the vicinity of the USTs contained clays and silts to approximately 18 below ground surface (bgs). The nearest body of surface water is the Lake Merritt canal located approximately 1,100 feet west of the site. Groundwater was not encountered during this investigation.

Phase II Environmental Site Assessment Report Shore Acres Gas, 403 E. 12<sup>th</sup> Street, Oakland, CA July 2006

### 3.0 SCOPE OF WORK

In June 2006, Geofon was contracted by the owner to perform a limited Phase II environmental assessment to evaluate soil conditions at the site. On 28 June 2006, Geofon applied for (and obtained) a boring permit through Alameda County Public Works to install up to three direct push borings in the vicinity of the USTs and dispensers. Vironex was subcontracted as the licensed C-57 (number 705927) drilling company to install the borings on 10 July 2006.

All drilling and sampling activities were conducted under the direct supervision of a State of California Registered Geologist in accordance with the standards established by the Tri-Regional Board Guidelines for Hydrocarbon Site Assessment and Remediation (RWQCB 1990). All utility clearance, drilling, and sampling activities were performed in accordance with Geofon Standard Operating Procedures.

#### 3.1 PROJECT PLANNING AND PERMITTING

Geofon initiated the following activities prior to field work:

- Obtained a drilling permit from Alameda County Public Works (Appendix A),
- Retained and scheduled a licensed C-57 drilling contractor,
- Conducted a site inspection and marked boring locations,
- Contacted Underground Service Alert to locate underground utilities in the vicinity of the site, and
- Notified the City of Oakland Fire Department and Alameda County Public Works of the scheduled field activities.

#### 3.2 SOIL BORING INSTALLATION

Soil boring installation was conducted by Vironex Drilling Company under the direct supervision of a Geofon registered professional geologist on 10 July 2006. Final locations of the soil borings (GP-1 and GP-2) are illustrated on Figure 2. Boring logs are presented in Appendix B.

Prior to drilling activities, boreholes GP-1 and GP-2 were cored through concrete using a concrete saw. Each core cut was approximately 4 inches in diameter to facilitate the placement

of the direct push tools. All borehole locations were hand-augered to 5 feet bgs with a 4-inch diameter auger to clear utilities. The borings were installed to total depths of 20 feet bgs using a Geoprobe<sup>®</sup> direct push rig.

#### 3.2.1 Soil Sampling and Analytical Methods

Soil samples were collected continuously from each boring using a continuous 4-foot core sampler. Soil from each sampled interval was screened for volatile organic compounds in the field with a portable photoionization detector (PID). A geologist recorded PID readings, soil types (according to the Unified Soil Classification System), and other pertinent geologic data on the borehole logs provided in Appendix B. Two soil samples were submitted for chemical analysis from each of the soil boring locations.

The supervising geologist selected soil samples for chemical analysis based upon the sample interval with the highest PID response and other conditions observed in the field at the time of drilling, such as apparent odor and staining.

All samples were properly labeled, placed in zip-lock type bags, placed in an ice-chilled cooler with chain-of-custody document, and transported to Kiff Analytical LLC a California-state certified laboratory located in Davis, California. The certified laboratory analytical report is provided in Appendix C.

Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethyl benzene, and total xylenes; methyl tertiary, butyl ether (MTBE); diisopropyl ether; tertiary amyl methyl ether; ethyl tertiary butyl ether; and tertiary butanol (TBA) by EPA Method 8260B, and for total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 8015. Soil samples results are summarized in Table 1.

## 3.2.2 **Equipment Decontamination**

The following procedures were used to decontaminate all sampling equipment:

- Washed with non-phosphate (Liquidnox®) detergent, and
- Double rinse with tap water

Down-hole tools were decontaminated prior to the start of drilling activities and between boreholes using a high-pressure steam cleaner.

# 3.2.3 Investigation Derived Waste

Waste soil and water generated during drilling and sampling activities were stored on-site in properly labeled 55-gallon drums. Soil analytical results will be used to characterize the waste and determine the proper waste disposal procedure.

## 4.0 RESULTS

#### 4.1 SOIL ANALYTICAL RESULTS

Four soil samples (two from each boring) were collected during drilling activities. Laboratory analytical results reported three of the four soil samples from the two boring locations contained TPH-G. Results ranged from less than the reporting detection limit (RDL) of 1.0 milligrams per kilogram (mg/kg) in GP-1-18.0 to 3,600 mg/kg in GP-2-12.0. Benzene was reported in all samples from both boring locations, ranging from 0.0056 mg/kg in GP-1-18.0 to 17 mg/kg in GP-2-12.0. Toluene was reported in all samples from both boring locations, ranging from 0.052 mg/kg in GP-1-15.5 to 180 mg/kg in GP-2-12.0. Ethyl-benzene was reported ranging from less than the RDL (<0.005) in GP-1-18.0 to 98 mg/kg in GP-2-12.0. Total xylenes were also reported in all four samples, ranging from 0.019 mg/kg in GP-1-18.0 to 440 mg/kg in GP-2-12.0.

Laboratory analytical results reported that two of the four soil samples contained TPH-D. Results ranged from less than the RDL (<1.0) in GP-1-18.0 to 600 mg/kg in GP-2-12.0.

Laboratory results reported two oxygenates (of the five tested for) were detected in three of the four soil samples. MTBE concentrations ranged from less than the RDL of 0.50 mg/kg in GP-2-12.0 to 0.54 mg/kg in GP-1-18.0. TBA concentrations ranged from less than the RDL of 0.15 mg/kg in GP-2-20.0 to 0.33 mg/kg in GP-1-18.0. Soil sample analytical results are summarized in Table 1.

Groundwater was not encountered during this investigation.

# 5.0 RECOMMENDATIONS

Based on the laboratory results from soil samples collected during this site investigation, petroleum hydrocarbons have impacted soil at the site. Geofon has completed an Unauthorized Release Form on behalf of the owner and included it in Appendix D. Based on the results from this preliminary investigation and review of City of Oakland files on the subject site Geofon recommends that:

- 1) The petroleum storage system (USTs and conveyance piping) be tested for tightness, and
- 2) The county provides a directive letter to the station owner for additional investigation at the site.

# 6.0 REFERENCES

- Regional Water Quality Control Board. 1990. "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites." 10 August 1990.
- United States Geological Society. 1990. Geologic Map of The San Francisco-San Jose Quadrangle. 1990.

**TABLE** 

## TABLE 1 - SUMMARY OF SOIL ANALYTICAL RESULTS Shore Acre Gas, 403 E 12th Street, Oakland, California

Sample ID	Date sampled	Sample Depth (feet bgs)	TPH-D	TPH-G	Benzene	Tolüene	Ethyl- benzene	Total Xylenes	MTBE	DIPE	YGENA ETBE	TAME	TBA
GP-1-15.5	7/10/2006	15.5	13.0	18.0	0.63	0.052	0.69	0.13	.029	<0.005	<0.005	<0.005	0.27
GP-1-18.0	7/10/2006	18.0	<1.0	<1.0	0.0056	0.0082	<0.005	0.019	0.54	<0.005	<0.005	<0.005	0.33
GP-2-12.0	7/10/2006	12.0	600	3600	17	180	98	440	<0.50	<0.50	<0.50	<0.50	<2.5
GP-2-20.0	7/10/2006	20.0	79	1100	3.2	41	25	130	0.041	<0.025	<0.025	<0.025	<0.15

#### Notes:

All concentrations are reported in milligrams per kilograms.

bgs = below ground surface

TPH-D = total petroleum hydrocarbons as diesel

TPH-G = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary butyl ether

DIPE = di isopropyl ether

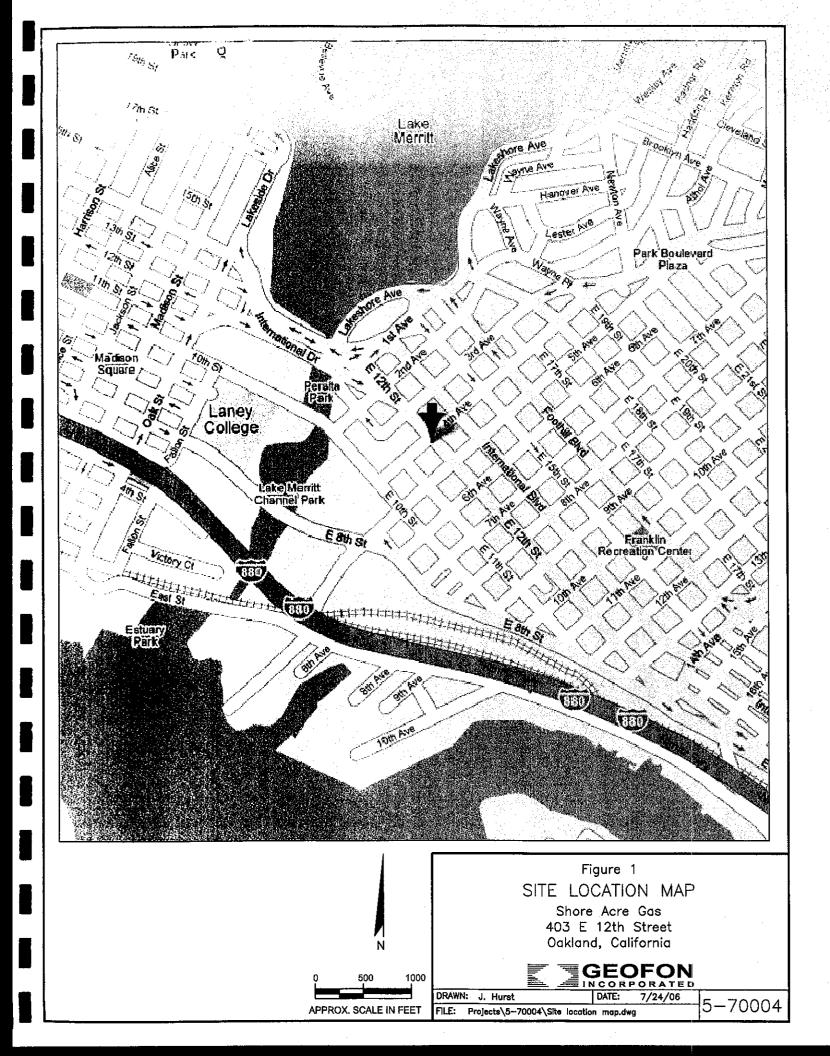
ETBE = ethyl tertiary butyl ether

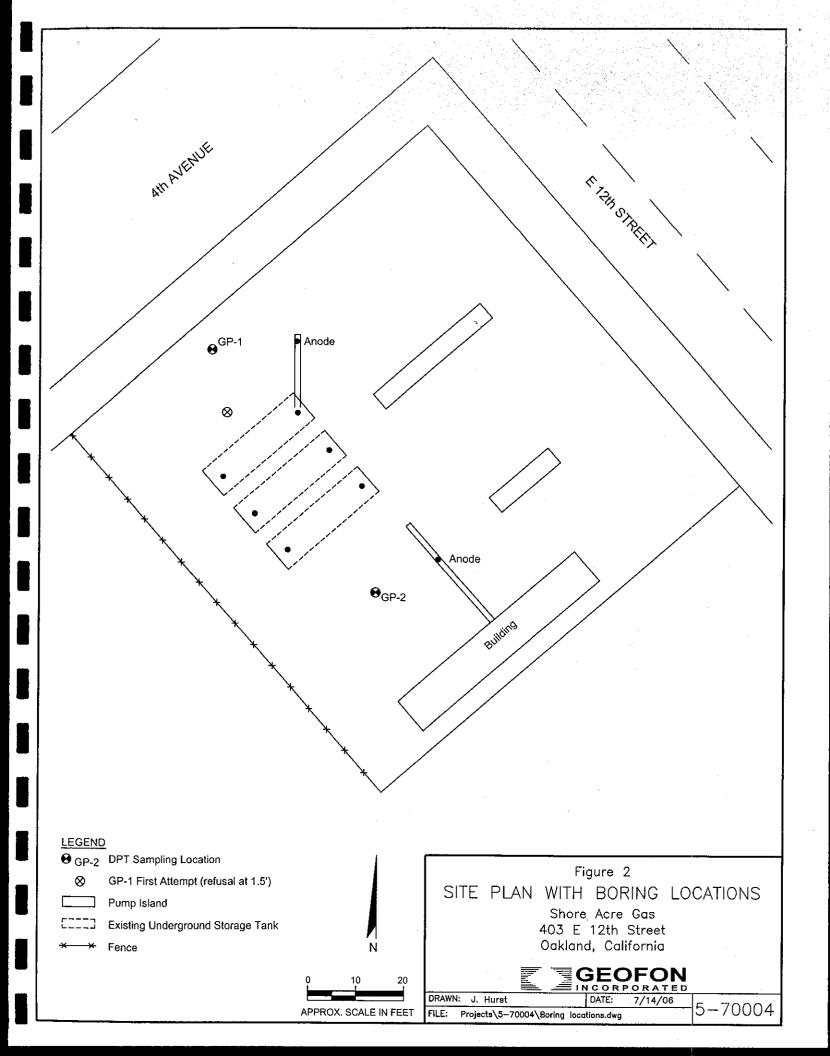
TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

Bold indicates reported detections.

# **FIGURES**





# APPENDIX A

Permit

## Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 06/29/2006 By suel

Permit Numbers: W2006-0637

Permits Valid from 07/10/2006 to 07/10/2006

Application Id:

1151529806351

City of Project Site:Oakland

Site Location:

Shore Acres Gas

403 E. 12th Street

Oakland, California

**Project Start Date:** 

07/10/2006

Completion Date: 07/10/2006

Applicant:

Client:

Geofon, Inc. - Dave Marks

Phone: 916-923-3335

4620 Northgate Blvd., Suite 155, Sacramento, CA 95834 Rashid Ghafoor

Phone: --

**Property Owner:** 

301 Anchor Drive, Bay Point, CA 74565

\*\* same as Property Owner '

Total Due:

\$200.00

Receipt Number: WR2006-0320

**Total Amount Paid:** 

\$200.00

Payer Name: David S. Marks Paid By: VISA

PAID IN FULL

#### Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 3 Boreholes

Driller: Vironex - Lic #: 705927 - Method: DP

Work Total: \$200.00

#### Specifications

Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2006-	06/29/2006	10/08/2006	3	2.00 in.	25.00 ft
0637					

#### **Specific Work Permit Conditions**

- 1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.
- 2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
- 3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 4. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

## Alameda County Public Works Agency - Water Resources Well Permit

- 6. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.
- 7. No Inspector assigned to this site. Possible spot inspection only Inspector does not have to be present for grout inspection.

Applicant shall contact this office by e-mail at wells@acpwa.org and certify that work was completed according to County Standards within five (5) working days after the completion of work.

APPENDIX B

**Boring Logs** 

		GE IN C C	E <b>O</b> I	F(	ON ATE	□ Sad Tel	crament ephone	ngate Blvd, Ste 155 to, CA 95834 : (916) 923-3335 : 923-3336				GP-1 PAGE 1 OF 1					
PROJ	ECT N	JMBER	5-7	000	)4				DATE STARTED 7/10/06								
									DATE COMPLETED7/10/06			<u> </u>					
									CASING TYPE/DIAMETER								
DENI	ING M	ETHOD	Vir	one.	v Drillin	a Com	nany (	Seonrohe Direct Push	SCREEN TYPE/SLOT		<del></del> .						
GRUL	JND EL	EVAIIC	JN				<del> </del>	<u></u>	GROUT TYPE/QUANTITY Neat ce	ment		<del></del>					
									DEPTH TO WATER								
	SED BY								GROUND WATER ELEVATION f surface then completed with concrete.								
REMA	ARKS .		iole wa	s ba	cktilled	with n	eat cen	nent to within 6-inches of	surface then completed with concrete.								
PID (ppm)	BLOW	RECOVERY(in)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITH	DLOGIC DESCRIPTION	DEPTH	WEI	.L DIAGRAM					
								Concrete reinforced v Red brick fragments.	vith wire mesh. looks similar to roof tiles.	0.3 0.5		· · · · · · · · · · · · · · · · · · ·					
								Hand cleared boreho	le 4-inches in diameter by 5-feet deep.	0.5							
		:						Clay: greenish black, petroleum odor, low p	moist, 10-15% fine sand, slight lasticity.								
						CL											
0		36	3P-1-5.0		- 5 -	_ <b></b>		Silty clay: olive green	, dry, friable, moderate petroleum odor.	5.0							
			9	K		CL- ML											
777		48						Silty clay: olive green	, dry, friable, moderate petroleum odor.	8.0							
				N	- 10 	CL- ML				12.0							
1,067		48			-			Silty clay: olive green	, dry, friable, moderate petroleum odor.	12.0							
						CL- ML				15.0							
			GP-1-15.5		- 15- -			Clay: olive green, dry odor.	low plasticity, moderate petroleum								
1,010		48	GP-1	V		CL				18.0		· .					
				1	-	SM		diameter round shell f	n, dry, fine sand, 15-20% silt, 0.25-inch ragments, white- opalescence color, larger but broke up during drilling, r.								
				$\dashv$	-20-		11111	Botto	m of boring at 20.0 feet.	20.0		-					
Bottom of bo							1 1			1	!						

Bottom of boring at 20.0 feet.

20.0

3P-2-20.0

# APPENDIX C

Laboratory Analytical Report



Report Number: 51003

Date: 7/14/2006

Dave Marks Geofon, Inc. 4620 Northgate Boulevard, Suite #155 Sacramento, CA 95834

Subject: 4 Soil Samples
Project Name: Shore Acre
Project Number: 5-70004

Dear Mr. Marks,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Report Number: 51003

Date: 7/14/2006

Subject :

4 Soil Samples

Project Name : Project Number :

Shore Acre 5-70004

# **Case Narrative**

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for samples GP-1-15.5, GP-2-12.0 and GP-2-20.0. These hydrocarbons are lower boiling than typical diesel fuel

Approved By:

e Kiff



Project Name : Shore Acre

Project Number: 5-70004

Matrix : Soil

Lab Number : 51003-01

Report Number: 51003

Date: 7/14/2006

Sample Date :7/10/2006

Sample: **GP-1-15.5** 

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.63	0.0050	mg/Kg	EPA 8260B	7/12/2006
Toluene	0.052	0.0050	mg/Kg	EPA 8260B	7/12/2006
Ethylbenzene	0.69	0.0050	mg/Kg	EPA 8260B	7/12/2006
Total Xylenes	0.13	0.0050	mg/Kg	EPA 8260B	7/12/2006
Methyl-t-butyl ether (MTBE)	0.29	0.0050	mg/Kg	EPA 8260B	7/12/2006
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/12/2006
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/12/2006
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/12/2006
Tert-Butanol	0.27	0.015	mg/Kg	EPA 8260B	7/12/2006
TPH as Gasoline	18	1.0	mg/Kg	EPA 8260B	7/12/2006
Toluene - d8 (Surr)	96.8		% Recovery	EPA 8260B	7/12/2006
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	7/12/2006
TPH as Diesel	13	1.0	mg/Kg	M EPA 8015	7/13/2006
1-Chlorooctadecane (Diesel Surrogate)	prooctadecane (Diesel Surrogate) 107		% Recovery	M EPA 8015	7/13/2006

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Project Name : Shore Acre

Project Number: 5-70004

Report Number: 51003 Date: 7/14/2006

Sample: **GP-1-18.0** 

Matrix : Soil

Lab Number : 51003-02

Sample Date :7/10/2006					
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.0056	0.0050	mg/Kg	EPA 8260B	7/11/2006
Toluene	0.0082	0.0050	mg/Kg	EPA 8260B	7/11/2006
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Total Xylenes	0.019	0.0050	mg/Kg	EPA 8260B	7/11/2006
Methyl-t-butyl ether (MTBE)	0.54	0.0050	mg/Kg	EPA 8260B	7/11/2006
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Tert-Butanol	0.33	0.0050	mg/Kg	EPA 8260B	7/11/2006
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	7/11/2006
Toluene - d8 (Surr)	97.8		% Recovery	EPA 8260B	7/11/2006
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	7/11/2006
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	7/13/2006
1-Chlorooctadecane (Diesel Surrogate)	99.9		% Recovery	M EPA 8015	7/13/2006

Approved By:

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Project Name : Shore Acre

Project Number: 5-70004

Matrix : Soil

Lab Number : 51003-03

Report Number: 51003

Date: 7/14/2006

Sample: **GP-2-12.0** Sample Date:7/10/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	17	0.50	mg/Kg	EPA 8260B	7/11/2006
Toluene	180	0.50	mg/Kg	EPA 8260B	7/11/2006
Ethylbenzene	98	0.50	mg/Kg	EPA 8260B	7/11/2006
Total Xylenes	440	0.50	mg/Kg	EPA 8260B	7/11/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	mg/Kg	EPA 8260B	7/11/2006
Dilsopropyl ether (DIPE)	< 0.50	0.50	mg/Kg	EPA 8260B	7/11/2006
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	mg/Kg	EPA 8260B	7/11/2006
Tert-amyl methyl ether (TAME)	< 0.50	0.50	mg/Kg	EPA 8260B	7/11/2006
Tert-Butanoi	< 2.5	2.5	mg/Kg	EPA 8260B	7/11/2006
TPH as Gasoline	3600	50	mg/Kg	EPA 8260B	7/11/2006
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	7/11/2006
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	7/11/2006
TPH as Diesel	600	1.0	mg/Kg	M EPA 8015	7/14/2006
1-Chlorooctadecane (Diesel Surrogate)	105		% Recovery	M EPA 8015	7/14/2006

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800 \



Project Name: Shore Acre

Project Number: 5-70004

Report Number: 51003

Date: 7/14/2006

Sample: GP-2-20.0

Matrix : Soil

Lab Number: 51003-04

Sample Date :7/10/2006

Sample Date ://T0/2006		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	3.2	0.15	mg/Kg	EPA 8260B	7/12/2006
Toluene	41	0.15	mg/Kg	EPA 8260B	7/12/2006
Ethylbenzene			mg/Kg	EPA 8260B	7/12/2006
Total Xylenes	130	0.15	mg/Kg	EPA 8260B	7/12/2006
Methyl-t-butyl ether (MTBE)	0.041	0.025	mg/Kg	EPA 8260B	7/11/2006
Dilsopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	7/11/2006
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	7/11/2006
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	7/11/2006
Tert-Butanol	< 0.15	0.15	mg/Kg	EPA 8260B	7/11/2006
TPH as Gasoline	1100	15	mg/Kg	EPA 8260B	7/12/2006
Toluene - d8 (Surr)	90.9		% Recovery	EPA 8260B	7/11/2006
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	7/11/2006
TPH as Diesel	79	1.0	mg/Kg	M EPA 8015	7/13/2006
1-Chlorooctadecane (Diesel Surrogate)	rooctadecane (Diesel Surrogate) 97.4		% Recovery	M EPA 8015	7/13/2006

Approved By:

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800 \

QC Report : Method Blank Data

Project Name: Shore Acre

Project Number: 5-70004

<u>Parameter</u>	Measured Value	Method Reporting Limit	] <u>U</u> nits	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	
1-Chlorooctadecane (Diesel Surrogate)	85.4		%	M EPA 8015	7/12/2006
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	7/11/2006
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	7/11/2006
Toluene - d8 (Surr)	99.6		%	EPA 8260B	7/11/2006
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	7/11/2006

Report Number: 51003

Date: 7/14/2006

Method Reporting Measured Analysis Method Date Parameter Limit Analyzed

KIFF ANALYTICAL, LLC 2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800 QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 51003

Date: 7/14/2006

Project Name : Shore Acre

Project Number: 5-70004

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Percent	Duplicate Spiked Sample Percent Recov.	Relative	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	50999-02	<0.0050	0.0391	0.0396	0.0370	0.0367	mg/Kg	EPA 8260B	7/11/06	94.7	92.6	2.24	70-130	
Toluene	50999-02	<0.0050	0.0391	0.0396	0.0355	0.0351		EPA 8260B	7/11/06	90.9	88.7	2.43		
Tert-Butanol	50999-02	<0.0050	0.195	0.198	0.160	0.156		EPA 8260B		81.7	79.0	3.27		
Methyl-t-Butyl Ethe	r 50999-02	<0.0050	0.0391	0.0396	0.0352	0.0343		EPA 8260B	7/11/06	90.2	86.6	4.07	70-130 70-130	25 25
TPH as Diesel	51008-06	<1.0	20.0	20.0	18.9	18.9	mg/Kg	M EPA 8015	7/12/06	94.7	94.4	0.297	60-140	25

Approved By: Joe kiff

QC Report : Laboratory Control Sample (LCS)

Report Number: 51003

Date: 7/14/2006

Project Name : Shore Acre

Project Number: 5-70004

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit	
Benzene	0.0393	mg/Kg	EPA 8260B	7/11/06	101	70-130	
Toluene	0.0393	mg/Kg	EPA 8260B	7/11/06	98.8	70-130	
Tert-Butanol	0.196	mg/Kg	EPA 8260B	7/11/06	87.2	70-130	
Methyl-t-Butyl Ether	0.0393	mg/Kg	EPA 8260B	7/11/06	98.9	70-130	
TPH as Diesel	20.0	mg/Kg	M EPA 8015	7/12/06	92.6	70-130	

KIFF ANALYTICAL, LLC

Approved By:

loe Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

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# APPENDIX D

Unauthorized Release Form

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK)/ CONTAMINATION SITE REPORT						
EMERGENCY HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? TYPES TO YES NO			FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PERSUANT TO SECTION 25180,7 OF THE HEALTH AND SAFETY CODE.			
REP	7/21/2006 CASE #			SIGNED DATE		
PORTED BY	NAME OF INDIVIDUAL FILING REPORT Dennis M. Jones (916)		ı	) 923-3335	SIGNATURE	Magnes
	REPRESENTING  LOCAL AGENCY  REGIONAL BOARD  OWNER/OPERATOR  OTHER			COMPANY OR AGENCY NAME Insight Environmental Engineering and Construction, Inc.		
	ADDRESS 4620 Northgate Blvd., Suite 155 Sacramento CA 95834  STATE  PHONE					STATE ZIP
RESPONSIBLE PARTY	Rashid Ghafoor Unknown			<u>.</u>	· 	111000
	301 AICHOL DIIVC STR	EET		Point CITY	CA	94565 I PHONE
SITE LOCATION	Shore Acre Gas			OPERATOR 1		PHONE
	ADDRESS 403 E. 12th Street	land city	Alameda	94606 COUNTY ZIP		
	CROSS STREET  4th Street					
MPLEMENTING	Alameda County Environmental Health PHONE (510)56765777					
	REGIONAL BOARD San Francisco Bay Región (2) PHONE (510)622-2300					
SUBSTANCES	Petroleum hydrocarbons NAME QUANTITY LOST (GALLONS)  XX Unknown					
	(2) Unknown					
DISCOVERY/ABATEMENT	7/10/2006	HOW DISCOVERED T	ank Test ventory Co	☐ Tank Removal ontrol ☐ Subsurface Mon	□ Nuisance Conditoring ♀ Other Soi:	ditions 1 sampling
						Υ)
	HAS DISCHARGE BEEN STOPPED?  Yes No Unkno	Replace Tank Other				
SOURCE	SOURCE OF DISCHARGE  CAUSE(S)  Tank Leak Piping Leak Whitnown Other Overfill Corrosion Rupture/Failure Unknown Spill Other					
CASE	CHECK ONE ONLY  Undetermined Soil Only Groundwater Drinking Water - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)					
CURRENT	Reliminary Site Assessment Underway					
REMEDIAL	CHECK APPROPRIATE ACTION(S)  Cap Site (CD)  Excavate & Treat (ET)  Contamination Barrier (CB)  No Action Required (NA)  Enhanced Bio Degradation (IT)  Acuum Extract (VE)  Remove Free Product (FP)  Remove Free Product (FP)  Vent Soil (VS)					
COMMENTS	Additional investigation required.					

