



**CONESTOGA-ROVERS  
& ASSOCIATES**

5900 Hollis Street, Suite A  
Emeryville, California 94608  
Telephone: (510) 420-0700 Fax: (510) 420-9170  
www.CRAworld.com

## TRANSMITTAL

DATE: November 15, 2011 REFERENCE NO.: 240483  
PROJECT NAME: 5755 Broadway, Oakland  
To: Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**RECEIVED**  
  
*4:02 pm, Nov 17, 2011*  
Alameda County  
Environmental Health

Please find enclosed:  Draft  Final  
 Originals  Other  
 Prints

Sent via:  Mail  Same Day Courier  
 Overnight Courier  Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report - Third Quarter 2011

As Requested  For Review and Comment  
 For Your Use

**COMMENTS:**

If you have any questions regarding the contents of this document, please call Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US (electronic copy)  
Thrifty Oil Company, c/o Mr. Raymond Fredricksen, P.O. Box 2128, Santa Fe Springs, CA 90670  
Clint Mercer, SC Fuels (lessee), 1800 West Katella Avenue, Suite 400, Orange, CA 92867  
Orkin, Inc. (property owner), PO Box 2128, Santa Fe Springs, CA 90670

Completed by: Peter Schaefer Signed:

Filing: **Correspondence File**



Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**Denis L. Brown**  
**Shell Oil Products US**  
HSE – Environmental Services  
20945 S. Wilmington Ave.  
Carson, CA 90810-1039  
Tel (707) 865 0251  
Fax (707) 865 2542  
Email [denis.l.brown@shell.com](mailto:denis.l.brown@shell.com)

Re: Shell-branded Service Station  
5755 Broadway  
Oakland, California  
SAP Code 135699  
Incident No. 98995756  
ACEH Case No. RO0000026

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

A handwritten signature in black ink, appearing to read "Denis Brown", is written over a horizontal line.

Denis L. Brown  
Senior Program Manager



## **GROUNDWATER MONITORING REPORT - THIRD QUARTER 2011**

**SHELL-BRANDED SERVICE STATION  
5755 BROADWAY  
OAKLAND, CALIFORNIA**

**SAP CODE           135699  
INCIDENT NO.     98995756  
AGENCY NO.       RO0000026**

**Prepared by:  
Conestoga-Rovers  
& Associates**

5900 Hollis Street, Suite A  
Emeryville, California  
U.S.A. 94608

Office: (510) 420-0700  
Fax: (510) 420-9170

web: <http://www.CRAworld.com>

**NOVEMBER 15, 2011  
REF. NO. 240483 (10)**

This report is printed on recycled paper.

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION.....	1
1.1 SITE INFORMATION .....	1
2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION.....	1
2.1 CURRENT QUARTER'S ACTIVITIES.....	1
2.2 CURRENT QUARTER'S FINDINGS .....	1
2.3 PROPOSED ACTIVITIES.....	2

LIST OF FIGURES  
(Following Text)

- FIGURE 1 VICINITY MAP
- FIGURE 2 GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP

LIST OF TABLES  
(Following Text)

- TABLE 1 GROUNDWATER DATA

LIST OF APPENDICES

- APPENDIX A BLAINE TECH SERVICES, INC. - FIELD NOTES
- APPENDIX B TEST AMERICA - LABORATORY REPORT

## 1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell).

### 1.1 SITE INFORMATION

Site Address	5755 Broadway, Oakland
Site Use	Shell-branded Service Station
Shell Project Manager	Denis Brown
CRA Project Manager	Peter Schaefer
Lead Agency and Contact	ACEH, Jerry Wickham
Agency Case No.	RO0000026
Shell SAP Code	135699
Shell Incident No.	98995756

Date of most recent agency correspondence was November 3, 2010.

## 2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

### 2.1 CURRENT QUARTER'S ACTIVITIES

Blaine Tech Services, Inc. (Blaine) gauged and sampled the wells according to the established monitoring program for this site.

CRA prepared a vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2), and a groundwater data table (Table 1). Blaine's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B.

### 2.2 CURRENT QUARTER'S FINDINGS

Groundwater Flow Direction	Southerly to westerly
----------------------------	-----------------------

Hydraulic Gradient

Averages 0.07

Depth to Water

0.98 to 3.52 feet below top of well casing

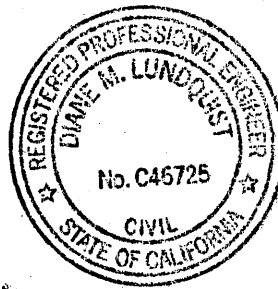
### 2.3 PROPOSED ACTIVITIES

Blaine will gauge and sample wells according to the established monitoring program for this site. This site is monitored semiannually during the first and third quarters, and CRA will issue groundwater monitoring reports semiannually following the sampling events.

All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES

*Peter Schaefer*  
Peter Schaefer, CHG, CEG

*Aubrey K. Cool*  
Aubrey K. Cool, PG

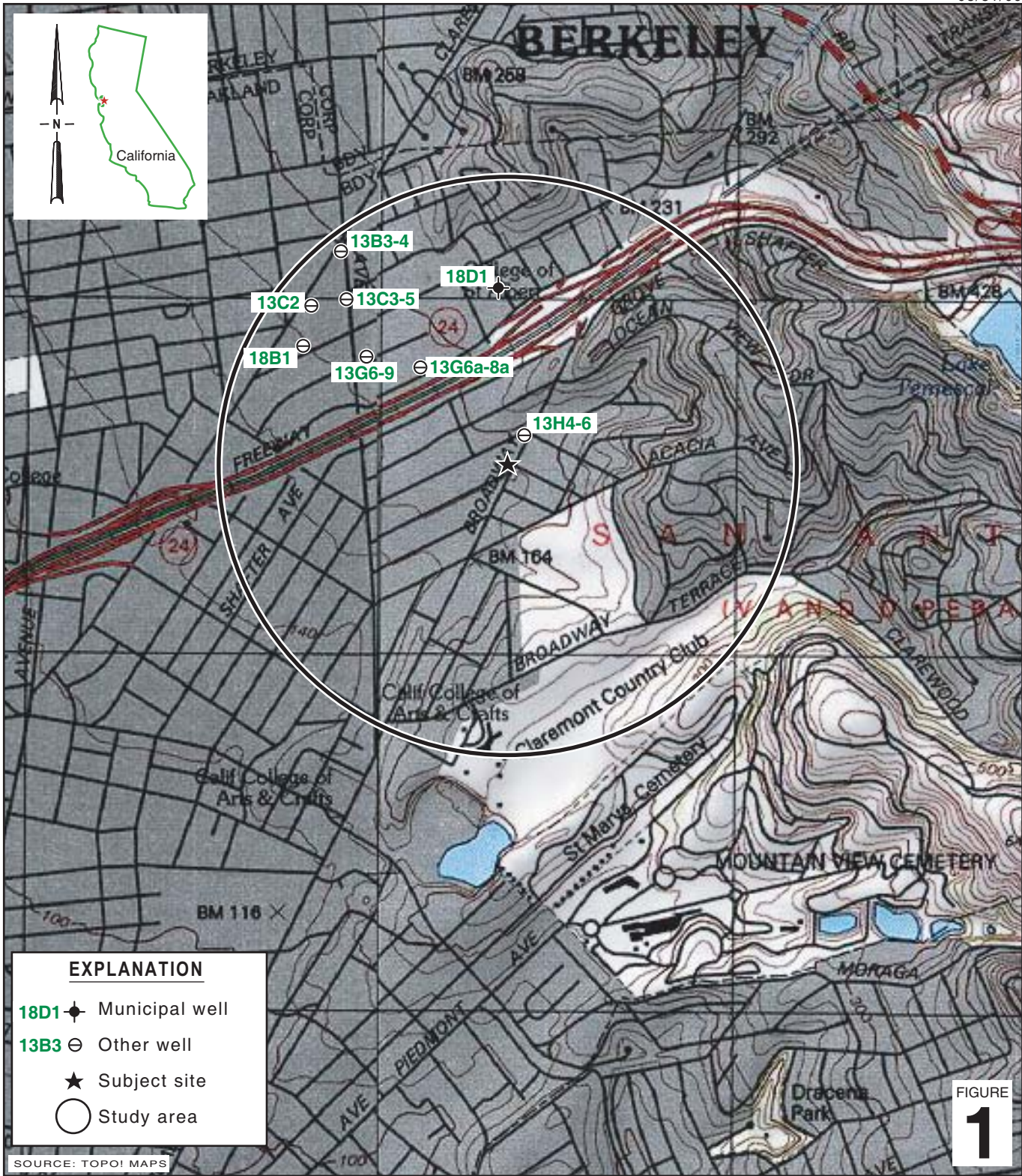




## FIGURES



I:\6-charts\2404--\240483-Oakland 5755 Broadway\240483-FIGURES\240483 VICINITY.AI



EXPLANATION	
18D1	◆ Municipal well
13B3	⊖ Other well
★	★ Subject site
○	○ Study area

SOURCE: TOPOI MAPS

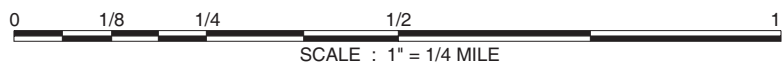


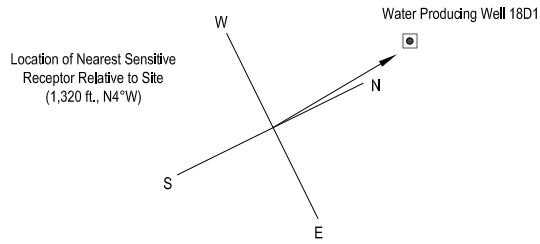
FIGURE 1

**Shell-branded Service Station**  
 5755 Broadway  
 Oakland, California



**CONESTOGA-ROVERS  
 & ASSOCIATES**

**Vicinity Map**



### EXPLANATION

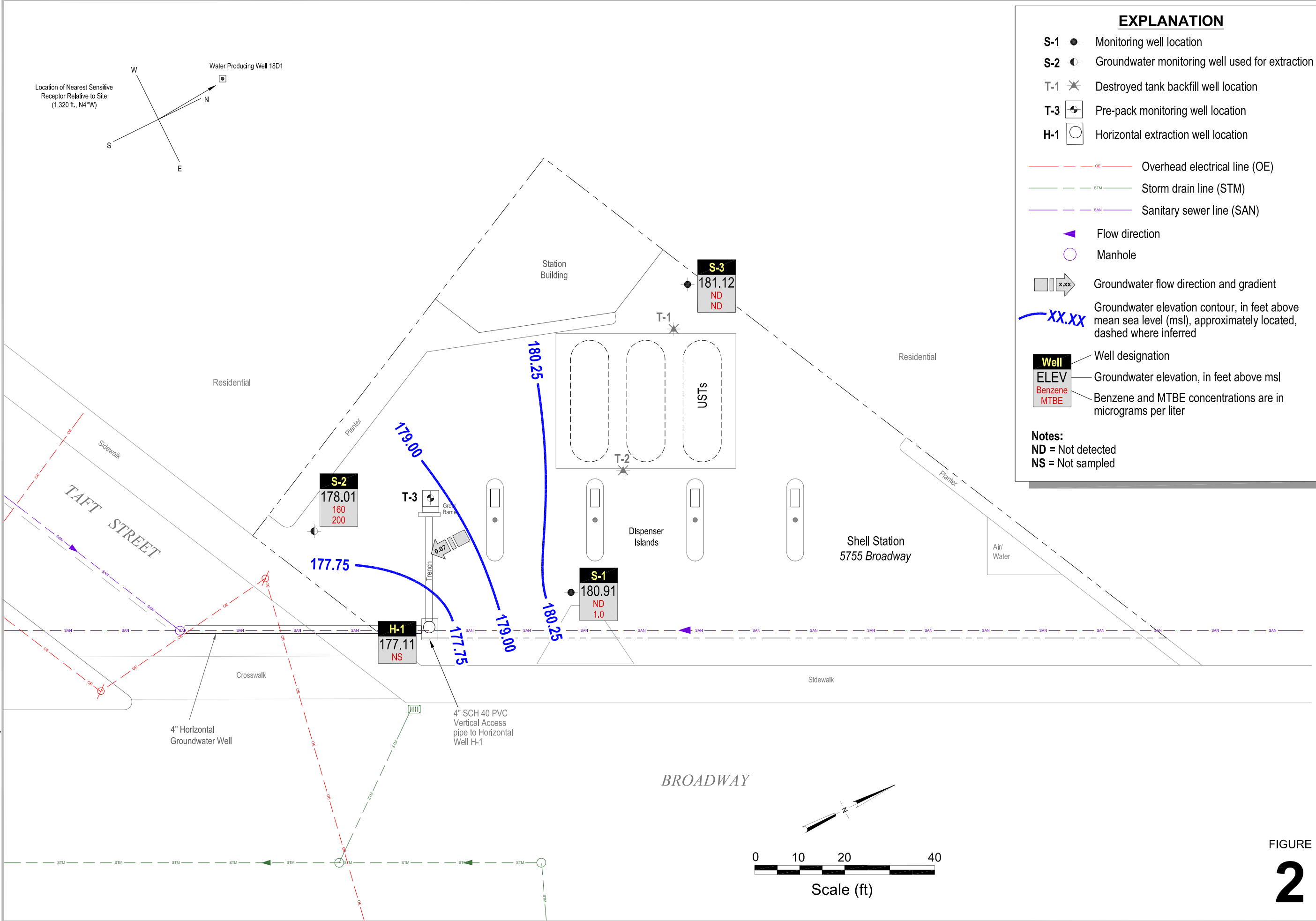
- S-1** ● Monitoring well location
- S-2** ● Groundwater monitoring well used for extraction
- T-1** ✱ Destroyed tank backfill well location
- T-3** ⊕ Pre-pack monitoring well location
- H-1** ⊖ Horizontal extraction well location

- OE — Overhead electrical line (OE)
- STM — Storm drain line (STM)
- SAN — Sanitary sewer line (SAN)

- ▶ Flow direction
- Manhole
- ▢ x.xx Groundwater flow direction and gradient
- xx.xx Groundwater elevation contour, in feet above mean sea level (msl), approximately located, dashed where inferred

Well	Well designation
ELEV	Groundwater elevation, in feet above msl
Benzene	Benzene and MTBE concentrations are in micrograms per liter
MTBE	

**Notes:**  
 ND = Not detected  
 NS = Not sampled



I:\Shell\6-chars\2404--240483-Oakland 5755 Broadway\240483-REPORTS\240483-RPT10-3011240483 30M11-GW.DWG



FIGURE 2

TABLE

TABLE 1

GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water (ft TOC)	Elevation (ft MSL)	Reading (mg/L)
S-1	01/25/1991	<30	<0.3	<0.3	<0.3	<0.3	---	---	---	---	---	---	100.00	3.88	96.12	---
S-1	06/03/1991	<30	<0.3	<0.3	<0.3	<0.3	---	---	---	---	---	---	100.00	3.51	96.49	---
S-1	08/30/1991	<30	<0.3	<0.3	<0.3	<0.3	---	---	---	---	---	---	100.00	4.24	95.76	---
S-1	11/22/1991	<30	2.3	<0.46	0.3	<0.65	---	---	---	---	---	---	100.00	4.29	95.71	---
S-1	03/13/1992	<30	<0.52	<0.3	<0.3	<0.3	---	---	---	---	---	---	100.00	2.87	97.13	---
S-1	05/28/1992	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.79	96.21	---
S-1	08/19/1992	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	4.43	95.57	---
S-1	11/18/1992	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	4.34	95.66	---
S-1	02/10/1993	51	1.4	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	4.20	95.80	---
S-1 (D)	02/10/1993	<50	1.2	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	4.20	95.80	---
S-1	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.39	96.61	---
S-1	08/03/1993	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.69	96.31	---
S-1	11/02/1993	70a	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	4.26	95.74	---
S-1	12/16/1993	---	---	---	---	---	---	---	---	---	---	---	100.00	2.73	97.27	---
S-1	02/01/1994	60a	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.38	96.62	---
S-1	05/04/1994	<50	1.1	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.00	97.00	---
S-1	08/18/1994	<50	0.6	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.70	96.30	---
S-1 (D)	08/18/1994	60a	0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.70	96.30	---
S-1	11/09/1994	<50	4	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	2.52	97.48	---
S-1	02/22/1995	50	0.8	0.7	<0.5	1.3	---	---	---	---	---	---	100.00	4.08	95.92	---
S-1	05/02/1995	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	2.58	97.42	---
S-1	08/30/1995	<50	1.7	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.48	96.52	---
S-1	11/28/1995	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.99	96.01	---
S-1	02/02/1996	<50	11	<0.5	0.9	<0.5	---	---	---	---	---	---	100.00	2.00	98.00	---
S-1	03/09/1996	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	100.00	3.38	96.62	---
S-1	08/22/1996	<50	1.5	<0.5	<0.5	<0.5	130	---	---	---	---	---	100.00	3.43	96.57	---
S-1	11/07/1996	<50	<0.5	<0.5	<0.5	<0.5	57	---	---	---	---	---	100.00	3.70	96.30	4.33
S-1	02/20/1997	<50	0.64	<0.50	<0.50	1.6	6.5	---	---	---	---	---	100.00	3.60	96.40	2
S-1	05/30/1997	<50	<0.50	<0.50	<0.50	<0.50	46	---	---	---	---	---	100.00	3.47	96.53	7

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
							8020 (µg/L)	8260 (µg/L)								
S-1 (D)	05/30/1997	<50	<0.50	<0.50	<0.50	<0.50	47	---	---	---	---	---	100.00	3.47	96.53	7
S-1	08/21/1997	<50	<0.50	<0.50	<0.50	0.84	26	---	---	---	---	---	100.00	3.01	96.99	3.1
S-1	11/03/1997	<50	<0.50	1.1	<0.50	1.3	190	---	---	---	---	---	100.00	3.66	96.34	2
S-1	01/20/1998	110	7.9	2.8	4.4	13	53	---	---	---	---	---	100.00	1.84	98.16	4.6
S-1 (D)	01/20/1998	130	9.2	6.9	5.2	15	93	---	---	---	---	---	100.00	1.84	98.16	4.6
S-1	02/16/1999	<50	<0.50	<0.50	<0.50	<0.50	8.6	---	---	---	---	---	100.00	2.43	97.57	2.2
S-1	09/07/1999	---	---	---	---	---	---	---	---	---	---	---	100.00	2.84	97.16	---
S-1	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	202	---	---	---	---	---	100.00	3.10	96.90	2.1
S-1	04/26/2000	---	---	---	---	---	---	---	---	---	---	---	100.00	2.91	97.09	---
S-1	07/25/2000	<50.0	<0.500	<0.500	<0.500	<0.500	811	---	---	---	---	---	100.00	3.21	96.79	1.8
S-1	11/15/2000	---	---	---	---	---	---	---	---	---	---	---	100.00	3.18	96.82	---
S-1	02/12/2001	<50.0	<0.500	<0.500	<0.500	<0.500	209	---	---	---	---	---	100.00	1.34	98.66	2.2
S-1	06/07/2001	---	---	---	---	---	---	---	---	---	---	---	100.00	1.27	98.73	---
S-1	08/31/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	100.00	3.16	96.84	4.0
S-1	12/05/2001	---	---	---	---	---	---	2.6	---	---	---	---	100.00	1.90	98.10	---
S-1	01/31/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	100.00	2.67	97.33	---
S-1	06/04/2002	---	---	---	---	---	---	---	---	---	---	---	100.00	1.87	98.13	---
S-1	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	100.00	2.01	97.99	---
S-1	11/07/2002	---	---	---	---	---	---	---	---	---	---	---	181.89	3.01	178.88	---
S-1	11/14/2002	---	---	---	---	---	---	---	---	---	---	---	181.89	3.40	178.49	---
S-1	01/30/2003	<50	<0.50	<0.50	<0.50	<0.50	---	27	---	---	---	---	181.89	2.12	179.77	---
S-1	06/03/2003	---	---	---	---	---	---	---	---	---	---	---	181.89	1.83	180.06	---
S-1	08/27/2003	<50	0.50	1.5	<0.50	2.0	---	130	---	---	---	---	181.89	3.32	178.57	---
S-1	11/25/2003	---	---	---	---	---	---	---	---	---	---	---	181.89	3.28	178.61	---
S-1	02/05/2004	270	2.4	6.4	5.8	19	---	8.3	---	---	---	---	181.89	2.09	179.80	---
S-1	04/21/2004	---	---	---	---	---	---	---	---	---	---	---	181.89	2.61	179.28	---
S-1	08/12/2004	<500	<5.0	<5.0	<5.0	<10	---	1,100	<50	<20	<20	<20	181.89	3.70	178.19	---
S-1	11/08/2004	---	---	---	---	---	---	---	---	---	---	---	181.89	3.04	178.85	---
S-1	05/16/2005	<50	<0.50	<0.50	<0.50	<1.0	---	4.9	---	---	---	---	181.89	3.10	178.79	---

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water (ft TOC)	Elevation (ft MSL)	Reading (mg/L)
S-1	08/16/2005	<50	<0.50	<0.50	<0.50	<1.0	---	64	52	<2.0	<2.0	<2.0	181.89	0.73	181.16	---
S-1	11/03/2005	---	---	---	---	---	---	---	---	---	---	---	181.89	3.49	178.40	---
S-1	02/16/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	22.7	---	---	---	---	181.89	0.73	181.16	---
S-1	05/05/2006	---	---	---	---	---	---	---	---	---	---	---	181.89	0.71	181.18	---
S-1	08/21/2006	<50.0	0.630	<0.500	<0.500	1.71	---	44.6	<10.0	<0.500	<0.500	<0.500	181.89	3.34	178.55	---
S-1	11/13/2006	---	---	---	---	---	---	---	---	---	---	---	181.89	2.55	179.34	---
S-1	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	---	24	---	---	---	---	181.89	0.91	180.98	---
S-1	05/23/2007	---	---	---	---	---	---	---	---	---	---	---	181.89	2.50	179.39	---
S-1	08/09/2007	<50 h	0.35 i	<1.0	<1.0	<1.0	---	33	<10	<2.0	<2.0	<2.0	181.89	0.81	181.08	---
S-1	11/13/2007	---	---	---	---	---	---	---	---	---	---	---	181.89	0.55	181.34	---
S-1	02/13/2008	<50 h	0.56	<1.0	<1.0	<1.0	---	2.9	---	---	---	---	181.89	0.45	181.44	---
S-1	05/20/2008	---	---	---	---	---	---	---	---	---	---	---	181.89	1.00	180.89	---
S-1	08/04/2008	66	<0.50	<1.0	<1.0	<1.0	---	3.6	<10	<2.0	<2.0	<2.0	181.89	0.72	181.17	---
S-1	12/02/2008	---	---	---	---	---	---	---	---	---	---	---	181.89	0.89	181.00	---
S-1	01/23/2009	<50	<0.50	<1.0	<1.0	2.1	---	4.8	---	---	---	---	181.89	0.81	181.08	---
S-1	05/05/2009	---	---	---	---	---	---	---	---	---	---	---	181.89	0.81	181.08	---
S-1	08/07/2009	53	0.86	<1.0	<1.0	<1.0	---	34	11	<2.0	<2.0	<2.0	181.89	4.33	177.56	---
S-1	02/03/2010	140	15	48	1.6	15	---	2.4	---	---	---	---	181.89	0.62	181.27	---
S-1	08/31/2010	<50	<0.50	<1.0	<1.0	<1.0	---	6.3	<10	<2.0	<2.0	<2.0	181.89	1.00	180.89	---
S-1	02/10/2011	<50	<0.50	<0.50	<0.50	<1.0	---	1.9	---	---	---	---	181.89	0.51	181.38	---
S-1	07/22/2011	<50	<0.50	<0.50	<0.50	<1.0	---	1.0	<10	<1.0	<1.0	<1.0	181.89	0.98	180.91	---
S-2	01/25/1991	450	140	1.8	6.2	15	---	---	---	---	---	---	98.92	4.52	94.40	---
S-2	06/03/1991	490	150	2.7	8.2	7	---	---	---	---	---	---	98.92	4.02	94.90	---
S-2	08/30/1991	70	0.37	<0.3	<0.3	<0.3	---	---	---	---	---	---	98.92	4.70	94.22	---
S-2	11/22/1991	1,600	110	9.3	29	150	---	---	---	---	---	---	98.92	4.72	94.20	---
S-2	03/13/1992	1,300	210	5.7	34	79	---	---	---	---	---	---	98.92	3.47	95.45	---
S-2	05/28/1992	100	28	<0.5	<0.5	<0.5	---	---	---	---	---	---	98.92	4.45	94.47	---
S-2	08/19/1992	470	42	<0.5	8.3	4	---	---	---	---	---	---	98.92	4.84	94.08	---

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water	Elevation	Reading
S-2	11/18/1992	490	43	39	17	29	---	---	---	---	---	---	98.92	4.73	94.19	---
S-2	02/10/1993	19,000	710	760	80	370	---	---	---	---	---	---	98.92	4.83	94.09	---
S-2	06/11/1993	33,000	3,100	1,600	370	1,100	---	---	---	---	---	---	98.92	3.74	95.18	---
S-2	08/03/1993	18,000	1,400	130	81	130	---	---	---	---	---	---	98.92	4.23	94.69	---
S-2 (D)	08/03/1993	19,000	1,400	140	86	150	---	---	---	---	---	---	98.92	4.23	94.69	---
S-2	11/02/1993	12,000 a	470	47	31	92	---	---	---	---	---	---	98.92	4.72	94.20	---
S-2 (D)	11/02/1993	13,000 a	530	47	35	96	---	---	---	---	---	---	98.92	4.72	94.20	---
S-2	12/16/1993	---	---	---	---	---	---	---	---	---	---	---	98.92	3.00	95.92	---
S-2	02/01/1994	31,000 a	430	46	50	130	---	---	---	---	---	---	98.92	3.48	95.44	---
S-2 (D)	02/01/1994	31,000 a	300	33	30	100	---	---	---	---	---	---	98.92	3.48	95.44	---
S-2	05/04/1994	3,900	1,200	31	53	71	---	---	---	---	---	---	98.92	3.26	95.66	---
S-2 (D)	05/04/1994	4,500	1,200	37	57	110	---	---	---	---	---	---	98.92	3.26	95.66	---
S-2	08/18/1994	24,000	600	8.3	15	27	---	---	---	---	---	---	98.92	3.98	94.94	---
S-2	11/09/1994	1,400 a	240	9.3	13	20	---	---	---	---	---	---	98.92	3.10	95.82	---
S-2 (D)	11/09/1994	1,800	260	8.5	13	21	---	---	---	---	---	---	98.92	3.10	95.82	---
S-2	02/22/1995	29,000	550	18	12	63	---	---	---	---	---	---	98.92	4.02	94.90	---
S-2 (D)	02/22/1995	28,000	530	17	10	60	---	---	---	---	---	---	98.92	4.02	94.90	---
S-2	05/02/1995	4,400	1,000	25	38	77	---	---	---	---	---	---	98.92	2.86	96.06	---
S-2 (D)	05/02/1995	4,400	1,000	26	41	83	---	---	---	---	---	---	98.92	2.86	96.06	---
S-2	08/30/1995	800	350	20	6.7	16	---	---	---	---	---	---	98.92	4.06	94.86	---
S-2 (D)	08/30/1995	960	220	22	12	48	---	---	---	---	---	---	98.92	4.06	94.86	---
S-2	11/28/1995	2,000	230	220	50	230	---	---	---	---	---	---	98.92	4.48	94.44	---
S-2 (D)	11/28/1995	2,100	240	230	51	230	---	---	---	---	---	---	98.92	4.48	94.44	---
S-2	02/02/1996	18,000	540	18	12	22	---	---	---	---	---	---	98.92	1.99	96.93	---
S-2 (D)	02/02/1996	11,000	600	18	13	28	---	---	---	---	---	---	98.92	1.99	96.93	---
S-2	03/09/1996	3,800	1,500	27	30	58	---	---	---	---	---	---	98.92	3.27	95.65	---
S-2 (D)	03/09/1996	3,500	1,300	24	21	53	---	---	---	---	---	---	98.92	3.27	95.65	---
S-2	08/22/1996	<20,000	490	<200	<200	<200	43,000	---	---	---	---	---	98.92	3.85	95.07	---
S-2 (D)	08/22/1996	<20,000	570	<200	<200	<200	59,000	51,000	---	---	---	---	98.92	3.85	95.07	---



TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water	Elevation	Reading
														(ft TOC)	(ft MSL)	(mg/L)
S-2	11/07/1996	<5,000	290	<50	<50	<50	32,000	---	---	---	---	---	98.92	4.00	94.92	3.51
S-2 (D)	11/07/1996	<5,000	290	<50	<50	<50	32,000	---	---	---	---	---	98.92	4.00	94.92	3.51
S-2	02/20/1997	<10,000	520	<100	<100	<100	28,000	---	---	---	---	---	98.92	3.20	95.72	1
S-2 (D)	02/20/1997	<10,000	520	<100	<100	<100	35,000	---	---	---	---	---	98.92	3.20	95.72	1
S-2	05/30/1997	150	15	11	3.5	15	11	---	---	---	---	---	98.92	3.87	95.05	6
S-2	08/21/1997	1,600	220	<10	20	<10	18,000	---	---	---	---	---	98.92	3.29	95.63	3.3
S-2 (D)	08/21/1997	1,500	180	<10	16	<10	21,000	---	---	---	---	---	98.92	3.29	95.63	3.3
S-2	11/03/1997	1,000	94	<10	<10	<10	<50	---	---	---	---	---	98.92	4.02	94.90	1.8
S-2	01/20/1998	590	110	8.3	18	23	7,800	---	---	---	---	---	98.92	1.54	97.38	3.2
S-2	07/23/1998	2,600	840	<10	44	22	15,000	---	---	---	---	---	98.92	2.89	96.03	---
S-2	02/16/1999	680	140	6.1	10	18	19,000	---	---	---	---	---	98.92	1.86	97.06	2.0
S-2	09/07/1999	<2,000	248	<20.0	<20.0	<20.0	22,800	---	---	---	---	---	98.92	3.66	95.26	1.8
S-2	02/02/2000	103	0.825	<0.500	<0.500	<0.500	11,700	10,500	---	---	---	---	98.92	4.02	94.90	2.0
S-2	04/26/2000	4,040	799	<20.0	40.9	255	19,000	17,100 b	---	---	---	---	98.92	2.63	96.29	2.3
S-2	07/25/2000	1,120	195	5.94	5.62	11.3	26,600	21,100	---	---	---	---	98.92	3.42	95.50	0.6
S-2	11/15/2000	613 b	35.6 b	<5.00 b	<5.00 b	7.36 b	18,100 b	17,800 b	---	---	---	---	98.92	3.31	95.61	1.8
S-2	02/12/2001	9,010	1,430	<20.0	219	848	28,300	17,000	---	---	---	---	98.92	1.47	97.45	2.0
S-2	06/07/2001	31,000	1,000	<25	630	3,200	---	17,000	---	---	---	---	98.92	3.43	95.49	10.4
S-2	08/31/2001	50,000	950	<20	1,500	6,000	---	17,000	---	---	---	---	98.92	4.72	94.20	0.9
S-2	12/05/2001	49,000	590	7.2	1,400	4,900	---	11,000	---	---	---	---	98.92	1.53	97.39	---
S-2	01/31/2002	37,000	860	<25	1,100	4,000	---	14,000	---	---	---	---	98.92	2.13	96.79	---
S-2	06/04/2002	150,000	800	<20	1,200	4,000	---	9,200	---	---	---	---	98.92	2.24	96.68	---
S-2	07/25/2002	37,000	350	<20	660	2,400	---	10,000	---	---	---	---	98.92	2.03	96.89	---
S-2	11/14/2002	25,000	510	<25	590	2,000	---	10,000	---	---	---	---	180.79	3.17	177.62	---
S-2	01/02/2003	---	710	<25	560	2,074	---	---	---	---	---	---	180.79	2.15	178.64	---
S-2	01/30/2003	21,000	670	<20	360	1,200	---	9,300	---	---	---	---	180.79	2.09	178.70	---
S-2	06/03/2003	42,000	800	<50	660	1,500	---	9,600	---	---	---	---	180.79	3.08	177.71	---
S-2	08/27/2003	31,000	630	<100	510	1,200	---	15,000	---	---	---	---	180.79	2.55	178.24	---
S-2	11/25/2003 d	8,400 a	<50	<50	<50	<100	---	4,500	---	---	---	---	180.79	---	---	---

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water (ft TOC)	Elevation (ft MSL)	Reading (mg/L)
S-2	02/05/2004	Well inaccessible		--	--	--	--	--	--	--	--	--	180.79	--	--	--
S-2	02/10/2004 d	<2,500	130	<25	<25	<50	--	3,800	--	--	--	--	180.79	--	--	--
S-2	04/21/2004	4,700	100	<25	<25	<50	--	2,900	--	--	--	--	180.79	7.38	173.41	--
S-2	08/12/2004	2,600	63	<13	<13	<25	--	1,400	1,200	<50	<50	<50	180.79	e	--	--
S-2	11/08/2004	3,600	<25	<25	<25	<50	--	1,300	--	--	--	--	180.79	e	--	--
S-2	05/16/2005	73 g	<0.50	<0.50	<0.50	<1.0	--	3.3	--	--	--	--	180.79	3.33	177.46	--
S-2	08/16/2005	10,000	370	<13	60	63	--	1,300	2,900	<50	<50	<50	180.79	4.03	176.76	--
S-2	11/03/2005	1,010	31.4	<0.500	2.81	31.4	--	349	880	--	--	--	180.79	--	--	--
S-2	02/16/2006	5,350	79.0	<0.500	2.90	59.5	--	687	690	--	--	--	180.79	5.86	174.93	--
S-2	05/05/2006	5,240	148	<0.500	17.1	48.8	--	815	478	--	--	--	180.79	--	--	--
S-2	08/21/2006	4,640	162	0.910	25.8	27.2	--	519	711	<0.500	<0.500	0.780	180.79	4.72	176.07	--
S-2	11/13/2006	2,100	200	<5.0	58	21	--	820	1,300	--	--	--	180.79	3.44	177.35	--
S-2	01/30/2007	3,300	250	<5.0	59	17	--	1,100	1,600	--	--	--	180.79	2.32	178.47	--
S-2	05/23/2007	4,600 h	410	2.3 i	92	24.8 i	--	890	620	--	--	--	180.79	2.61	178.18	--
S-2	08/09/2007	4,100 h	320	<10	30	11	--	650	1,400	<20	<20	<20	180.79	3.72	177.07	--
S-2	11/13/2007	4,900 h	230	<10	33	12	--	540	590	<20	<20	<20	180.79	2.31	178.48	--
S-2	02/13/2008	4,800 h	560	<10	67	37	--	1,500	610	--	--	--	180.79	1.83	178.96	--
S-2	05/20/2008	5,400	340	<10	11	17	--	460	310	--	--	--	180.79	2.90	177.89	--
S-2	08/04/2008	4,800	240	<10	<10	<10	--	390	640	<20	<20	<20	180.79	3.95	176.84	--
S-2	12/02/2008	3,700	120	<5.0	<5.0	<5.0	--	280	810	--	--	--	180.79	4.13	176.66	--
S-2	01/23/2009	3,500	210	<10	26	<10	--	640	650	--	--	--	180.79	2.85	177.94	--
S-2	05/05/2009	3,200	190	<5.0	7.6	5.5	--	340	350	--	--	--	180.79	2.48	178.31	--
S-2	08/07/2009	3,100	76	<1.0	<1.0	2.3	--	81	310	<2.0	<2.0	<2.0	180.79	4.78	176.01	--
S-2	02/03/2010	4,000	180	<1.0	34	9.1	--	420	190	--	--	--	180.79	2.25	178.54	--
S-2	08/31/2010	3,400	120	<1.0	<1.0	1.8	--	83	380	<2.0	<2.0	<2.0	180.79	4.32	176.47	--
S-2	02/10/2011	3,600	220	<2.0	13	<4.0	--	330	450	--	--	--	180.79	2.51	178.28	--
<b>S-2</b>	<b>07/22/2011</b>	<b>4,000</b>	<b>160</b>	<b>&lt;1.2</b>	<b>5.0</b>	<b>6.4</b>	<b>--</b>	<b>200</b>	<b>270</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>180.79</b>	<b>2.78</b>	<b>178.01</b>	<b>--</b>
S-3	01/25/1991	<30	<0.3	<0.3	<0.3	<0.3	--	--	--	--	--	--	101.67	3.84	97.83	--

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water (ft TOC)	Elevation (ft MSL)	Reading (mg/L)
S-3	06/03/1991	<30	<0.3	0.3	0.3	0.3	---	---	---	---	---	---	101.67	3.25	98.42	---
S-3	08/03/1991	<30	<0.3	<0.3	<0.3	<0.3	---	---	---	---	---	---	101.67	4.73	96.94	---
S-3	11/22/1991	<30	<0.3	<0.3	<0.3	<0.3	---	---	---	---	---	---	101.67	4.81	96.86	---
S-3	03/13/1992	<30	<0.3	0.3	0.3	0.3	---	---	---	---	---	---	101.67	2.29	99.38	---
S-3	05/28/1992	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	3.62	98.05	---
S-3	08/19/1992	<50	<0.5	<0.5	<0.5	0.5	---	---	---	---	---	---	101.67	4.66	97.01	---
S-3	11/18/1992	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	4.51	97.16	---
S-3	02/10/1993	30	1.9	3.2	2.4	5.6	---	---	---	---	---	---	101.67	4.36	97.31	---
S-3	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.91	98.76	---
S-3 (D)	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.91	98.76	---
S-3	08/03/1993	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	3.70	97.97	---
S-3	11/02/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	101.67	---	---	---
S-3	12/16/1993	---	---	---	---	---	---	---	---	---	---	---	101.67	2.12	99.55	---
S-3	02/01/1994	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.90	98.77	---
S-3	05/04/1994	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.54	99.13	---
S-3	08/18/1994	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	3.51	98.16	---
S-3	11/09/1994	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.44	99.23	---
S-3	02/22/1995	80	<0.5	0.5	<0.5	0.5	---	---	---	---	---	---	101.67	4.12	97.55	---
S-3	05/02/1995	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.83	98.84	---
S-3	08/30/1995	<50	0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	3.16	98.51	---
S-3	11/28/1995	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	3.87	97.80	---
S-3	02/02/1996	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	2.24	99.43	---
S-3	03/09/1996	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	101.67	3.05	98.62	---
S-3	08/22/1996	<50	0.8	<0.5	<0.5	<0.5	<2.5	---	---	---	---	---	101.67	2.85	98.82	4.6
S-3	11/07/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---	---	---	---	101.67	3.35	98.32	4.6
S-3	02/20/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	101.67	3.00	98.67	1
S-3	05/30/1997	140	14	10	3.3	14	8.6	---	---	---	---	---	101.67	3.00	98.67	8
S-3	08/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	101.67	2.94	98.73	3.3
S-3	11/03/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	101.67	3.36	98.31	2.4

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
							8020 (µg/L)	8260 (µg/L)								
S-3 (D)	11/03/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	101.67	3.36	98.31	2.4
S-3	01/20/1998	Well inaccessible		---	---	---	---	---	---	---	---	---	101.67	---	---	---
S-3	07/23/1998	---	---	---	---	---	---	---	---	---	---	---	101.67	2.69	98.98	---
S-3	02/16/1999	<50	<0.50	0.92	0.59	3.9	3.7	---	---	---	---	---	101.67	2.20	99.47	2.8
S-3	09/07/1999	---	---	---	---	---	---	---	---	---	---	---	101.67	2.81	98.86	---
S-3	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	101.67	3.97	97.70	2.7
S-3	04/26/2000	---	---	---	---	---	---	---	---	---	---	---	101.67	2.96	98.71	---
S-3	07/25/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	101.67	3.00	98.67	0.8
S-3	11/15/2000	---	---	---	---	---	---	---	---	---	---	---	101.67	2.86	98.81	---
S-3	02/12/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	101.67	2.47	99.20	2.3
S-3	06/07/2001	---	---	---	---	---	---	---	---	---	---	---	101.67	2.78	98.89	---
S-3	08/31/2001	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	101.67	3.94	97.73	0.5
S-3	12/05/2001	---	---	---	---	---	---	---	---	---	---	---	101.67	2.05	99.62	---
S-3	01/31/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	101.67	2.29	99.38	---
S-3	06/04/2002	---	---	---	---	---	---	---	---	---	---	---	101.67	2.56	99.11	---
S-3	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	101.67	2.70	98.97	---
S-3	11/14/2002	---	---	---	---	---	---	---	---	---	---	---	183.54	3.43	180.11	---
S-3	01/30/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	183.54	2.16	181.38	---
S-3	01/30/2003	---	---	---	---	---	---	---	---	---	---	---	183.54	2.65	180.89	---
S-3	08/27/2003	<50	<0.50	<0.50	<0.50	<1.0	---	0.55	---	---	---	---	183.54	2.75	180.79	---
S-3	11/25/2003	---	---	---	---	---	---	---	---	---	---	---	183.54	2.85	180.69	---
S-3	02/05/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	183.54	2.04	181.50	---
S-3	04/21/2004	---	---	---	---	---	---	---	---	---	---	---	183.54	2.50	181.04	---
S-3	08/12/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	<5.0	<2.0	<2.0	<2.0	183.54	3.91	179.63	---
S-3	11/08/2004	---	---	---	---	---	---	---	---	---	---	---	183.54	2.84	180.70	---
S-3	05/16/2005	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	183.54	3.05	180.49	---
S-3	08/16/2005	<100	<1.0	<1.0	<1.0	<2.0	---	<1.0	<10	<4.0	<4.0	<4.0	183.54	3.42	180.12	---
S-3	11/03/2005	---	---	---	---	---	---	---	---	---	---	---	183.54	4.09	179.45	---
S-3	02/16/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	183.54	2.25	181.29	---

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
							8020 (µg/L)	8260 (µg/L)								
S-3	05/05/2006	---	---	---	---	---	---	---	---	---	---	---	183.54	2.27	181.27	---
S-3	08/21/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	36.4	<0.500	<0.500	0.570	183.54	3.17	180.37	---
S-3	11/13/2006	---	---	---	---	---	---	---	---	---	---	---	183.54	3.42	180.12	---
S-3	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	183.54	2.36	181.18	---
S-3	05/23/2007	---	---	---	---	---	---	---	---	---	---	---	183.54	2.65	180.89	---
S-3	08/09/2007	<50 h	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	183.54	2.93	180.61	---
S-3	11/13/2007	---	---	---	---	---	---	---	---	---	---	---	183.54	2.04	181.50	---
S-3	02/13/2008	<50 h	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	183.54	2.03	181.51	---
S-3	05/20/2008	---	---	---	---	---	---	---	---	---	---	---	183.54	2.75	180.79	---
S-3	08/04/2008	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	183.54	3.52	180.02	---
S-3	12/02/2008	---	---	---	---	---	---	---	---	---	---	---	183.54	3.68	179.86	---
S-3	01/23/2009	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	183.54	2.52	181.02	---
S-3	05/05/2009	---	---	---	---	---	---	---	---	---	---	---	183.54	2.02	181.52	---
S-3	08/07/2009	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	183.54	4.61	178.93	---
S-3	02/03/2010	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	183.54	1.89	181.65	---
S-3	08/31/2010	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	183.54	3.44	180.10	---
S-3	02/10/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	---	---	---	---	183.54	1.91	181.63	---
S-3	07/22/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	<1.0	<1.0	<1.0	183.54	2.42	181.12	---
H-1	12/05/2001	150	<0.50	8.3	1.6	16	---	52	---	---	---	---	---	1.43	---	---
H-1	01/31/2002	3,200	12	<0.50	5.7	3.7	---	650	---	---	---	---	---	2.34	---	---
H-1	06/04/2002	280,000	<10	150	62	9,500	---	<100	---	---	---	---	---	2.56	---	---
H-1	07/25/2002	8,200	2.2	46	5.3	99	---	<10	---	---	---	---	---	2.83	---	---
H-1	11/14/2002	1,700	2.1	2.6	1.5	14	---	380	---	---	---	---	180.63	3.74	176.89	---
H-1	01/02/2003	---	1.1	<0.50	<0.50	3.6	---	---	---	---	---	---	180.63	1.45	179.18	---
H-1	01/30/2003	630	0.99	2.0	1.6	12	---	21	---	---	---	---	180.63	2.10	178.53	---
H-1	06/03/2003	55	<0.50	1.3	<0.50	2.4	---	2.6	---	---	---	---	180.63	3.38	177.25	---
H-1	08/27/2003	<50	0.55	<0.50	<0.50	1.2	---	2.8	---	---	---	---	180.63	4.10	176.53	---
H-1	11/25/2003	77 a	9.7	<0.50	<0.50	<1.0	---	21	---	---	---	---	180.63	3.72	176.91	---

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA**

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water	Elevation	Reading
														(ft TOC)	(ft MSL)	(mg/L)
H-1	02/05/2004	380	41	1.2	5.1	8.0	---	21	---	---	---	---	180.63	1.69	178.94	---
H-1	04/21/2004	640	27	0.63	2.0	2.3	---	33	---	---	---	---	180.63	2.14	178.49	---
H-1	08/12/2004	340	18	0.75	<0.50	1.7	---	43	---	---	---	---	180.63	4.78	175.85	---
H-1	11/08/2004	1,500	29	<1.0	1.7	<2.0	---	57	---	---	---	---	180.63	4.17	176.46	---
H-1	05/16/2005	150 g	<0.50	<0.50	<0.50	<1.0	---	48	---	---	---	---	180.63	4.16	176.47	---
H-1	08/16/2005	100 g	<0.50	<0.50	<0.50	<1.0	---	57	---	---	---	---	180.63	4.66	175.97	---
H-1	11/03/2005	<50.0	<0.500	<0.500	<0.500	<0.500	---	12.1	---	---	---	---	180.63	5.13	175.50	---
H-1	02/16/2006	4,230	<0.500	<0.500	37.7	80.5	---	7.12	---	---	---	---	180.63	1.87	178.76	---
H-1	05/05/2006	368	<0.500	<0.500	2.56	<0.500	---	22.2	---	---	---	---	180.63	2.21	178.42	---
H-1	08/21/2006	---	---	---	---	---	---	---	---	---	---	---	180.63	4.62	176.01	---
H-1	11/13/2006	---	---	---	---	---	---	---	---	---	---	---	180.63	3.89	176.74	---
H-1	01/30/2007	---	---	---	---	---	---	---	---	---	---	---	180.63	3.04	177.59	---
H-1	05/23/2007	330 h	7.9	0.32 i	0.48 i	0.61 i	---	74	---	---	---	---	180.63	3.38	177.25	---
H-1	08/09/2007	---	---	---	---	---	---	---	---	---	---	---	180.63	4.30	176.33	---
H-1	11/13/2007	---	---	---	---	---	---	---	---	---	---	---	180.63	1.97	178.66	---
H-1	02/13/2008	---	---	---	---	---	---	---	---	---	---	---	180.63	1.78	178.85	---
H-1	05/20/2008	230	19	<1.0	2.8	2.2	---	23	---	---	---	---	180.63	3.60	177.03	---
H-1	08/04/2008	---	---	---	---	---	---	---	---	---	---	---	180.63	3.27	177.36	---
H-1	12/02/2008	---	---	---	---	---	---	---	---	---	---	---	180.63	4.33	176.30	---
H-1	01/23/2009	---	---	---	---	---	---	---	---	---	---	---	180.63	2.03	178.60	---
H-1	05/05/2009	290	15	<1.0	7.1	4.2	---	36	---	---	---	---	180.63	2.76	177.87	---
H-1	08/07/2009	---	---	---	---	---	---	---	---	---	---	---	180.63	5.49	175.14	---
H-1	02/03/2010	2,700	85	1.5	130	62	---	24	---	---	---	---	180.63	2.45	178.18	---
H-1	08/31/2010	---	---	---	---	---	---	---	---	---	---	---	180.63	4.12	176.51	---
H-1	02/10/2011	1,800	51	1.3	120	65	---	36	---	---	---	---	180.63	3.10	177.53	---
H-1	07/22/2011	---	---	---	---	---	---	---	---	---	---	---	180.63	3.52	177.11	---
T-1	05/30/1997	---	---	---	---	---	---	---	---	---	---	---	---	2.65	---	---
T-1	08/21/1997	---	---	---	---	---	---	---	---	---	---	---	---	2.69	---	---

TABLE 1

GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE	MTBE	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to	GW	DO
							8020 (µg/L)	8260 (µg/L)						Water (ft TOC)	Elevation (ft MSL)	Reading (mg/L)
T-1	11/03/1997	---	---	---	---	---	---	---	---	---	---	---	---	3.09	---	---
T-1	01/20/1998	---	---	---	---	---	---	---	---	---	---	---	---	0.61	---	---
T-1	07/23/1998	---	---	---	---	---	---	---	---	---	---	---	---	2.32	---	---
T-1	02/16/1999	---	---	---	---	---	---	---	---	---	---	---	---	1.95	---	---
T-1	09/07/1999	---	---	---	---	---	---	---	---	---	---	---	---	2.48	---	---
T-1	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	---	2.66	---	2.5
T-1	04/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	2.56	---	---
T-1	07/25/2000	---	---	---	---	---	---	---	---	---	---	---	---	2.60	---	---
T-1	11/15/2000	---	---	---	---	---	---	---	---	---	---	---	---	2.47	---	---
T-1	02/12/2001	---	---	---	---	---	---	---	---	---	---	---	---	1.20	---	---
T-1	06/07/2001	---	---	---	---	---	---	---	---	---	---	---	---	2.36	---	---
T-1	08/31/2001	---	---	---	---	---	---	---	---	---	---	---	---	3.45	---	---
T-1	01/09/2002	---	---	---	---	---	---	---	---	---	---	---	183.08	---	---	---
T-2	05/30/1997	---	---	---	---	---	---	---	---	---	---	---	---	1.81	---	---
T-2	08/21/1997	---	---	---	---	---	---	---	---	---	---	---	---	1.89	---	---
T-2	11/03/1997	---	---	---	---	---	---	---	---	---	---	---	---	2.25	---	---
T-2	01/20/1998	---	---	---	---	---	---	---	---	---	---	---	---	0.55	---	---
T-2	07/23/1998	---	---	---	---	---	---	---	---	---	---	---	---	1.21	---	---
T-2	02/16/1999	---	---	---	---	---	---	---	---	---	---	---	---	1.08	---	---
T-2	09/07/1999	---	---	---	---	---	---	---	---	---	---	---	---	0.72	---	---
T-2	02/02/2000	1,540	53.4	20.8	11.4	21.8	1,330	---	---	---	---	---	---	0.98	---	3.0
T-2	04/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	1.02	---	---
T-2	07/25/2000	815	17.6	10.8	1.63	3.47	133	---	---	---	---	---	---	1.80	---	0.8
T-2	11/15/2000	---	---	---	---	---	---	---	---	---	---	---	---	1.68	---	---
T-2	02/12/2001	310	7.48	7.76	0.693	2.28	301	---	---	---	---	---	---	1.45	---	1.6
T-2	06/07/2001	---	---	---	---	---	---	---	---	---	---	---	---	1.57	---	---
T-2	08/31/2001	720	30	0.67	<0.50	2.3	---	540	---	---	---	---	---	2.69	---	0.8
T-2	12/05/2001	---	---	---	---	---	---	---	---	---	---	---	---	0.58	---	---

TABLE 1

GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
5755 BROADWAY, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE		TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)	DO Reading (mg/L)
							8020 (µg/L)	8260 (µg/L)								
T-2	01/31/2002	---	---	---	---	---	---	---	---	---	---	---	---	1.32	---	---
T-2	02/04/2002	1,000	41	30	4.6	20	---	1,200	---	---	---	---	---	1.46	---	---
T-2	06/04/2002	---	---	---	---	---	---	---	---	---	---	---	---	1.50	---	---
T-2	07/25/2002	660	11	0.59	<0.50	2.6	---	97	---	---	---	---	---	1.53	---	---
T-2	11/14/2002	---	---	---	---	---	---	---	---	---	---	182.30	2.39	179.91	---	---
T-2	01/30/2003	560	11	<0.50	<0.50	0.53	---	160	---	---	---	182.30	1.01	181.29	---	---
T-2	06/03/2003	---	---	---	---	---	---	---	---	---	---	182.30	1.55	180.75	---	---
T-2	08/27/2003	180 a	1.6	<0.50	<0.50	<1.0	---	10	---	---	---	182.30	1.60	180.70	---	---
T-2	11/25/2003	---	---	---	---	---	---	---	---	---	---	182.30	1.64	180.66	---	---
T-2	02/05/2004	940	110	10	2.4	14	---	67	---	---	---	182.30	0.66	181.64	---	---
T-2	04/21/2004	---	---	---	---	---	---	---	---	---	---	182.30	1.50	180.80	---	---
T-2	08/12/2004	450	<0.50	<0.50	<0.50	<1.0	---	33	---	---	---	182.30	2.72	179.58	---	---
T-2	11/08/2004	---	---	---	---	---	---	---	---	---	---	182.30	1.72	180.58	---	---
T-3	05/30/1997	---	---	---	---	---	---	---	---	---	---	---	---	2.31	---	---
T-3	08/21/1997	---	---	---	---	---	---	---	---	---	---	---	---	1.57	---	---
T-3	11/03/1997	---	---	---	---	---	---	---	---	---	---	---	---	3.50	---	---
T-3	01/20/1998	---	---	---	---	---	---	---	---	---	---	---	---	0.76	---	---
T-3	07/23/1998	---	---	---	---	---	---	---	---	---	---	---	---	0.82	---	---
T-3	02/16/1999	---	---	---	---	---	---	---	---	---	---	---	---	0.55	---	---
T-3	09/07/1999	---	---	---	---	---	---	---	---	---	---	---	---	2.89	---	---
T-3	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	---	3.02	---	2.9
T-3	04/26/2000	---	---	---	---	---	---	---	---	---	---	---	---	2.81	---	---
T-3	07/25/2000	---	---	---	---	---	---	---	---	---	---	---	---	3.00	---	---
T-3	11/15/2000	---	---	---	---	---	---	---	---	---	---	---	---	1.70	---	---
T-3	02/12/2001	---	---	---	---	---	---	---	---	---	---	---	---	2.11	---	---
T-3	06/07/2001	---	---	---	---	---	---	---	---	---	---	---	---	1.68	---	---
T-3	08/31/2001	---	---	---	---	---	---	---	---	---	---	---	---	3.14	---	---
T-3	01/09/2002	---	---	---	---	---	---	---	---	---	---	180.95	---	---	---	---



TABLE 1

**GROUNDWATER DATA**  
**SHELL-BRANDED SERVICE STATION**  
**5755 BROADWAY, OAKLAND, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHg</i>	<i>B</i>	<i>T</i>	<i>E</i>	<i>X</i>	<i>MTBE</i>	<i>MTBE</i>	<i>TBA</i>	<i>DIPE</i>	<i>ETBE</i>	<i>TAME</i>	<i>TOC</i>	<i>Depth to</i>	<i>GW</i>	<i>DO</i>
		<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>8020</i>	<i>8260</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(ft MSL)</i>	<i>Water</i>	<i>Elevation</i>	<i>Reading</i>
							<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>	<i>(µg/L)</i>		<i>(ft TOC)</i>	<i>(ft MSL)</i>	<i>(mg/L)</i>

Notes:

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to June 7, 2001, analyzed by EPA Method 8015 unless otherwise noted.

BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to June 7, 2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary-butyl ether analyzed by method noted

TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B

DIPE = Di-isopropyl ether analyzed by EPA Method 8260B

ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B

TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B

TOC = Top of casing elevation, in feet relative to mean sea level

SPH = Separate-phase hydrocarbon

GW = Groundwater

DO = Dissolved oxygen

µg/L = Micrograms per liter

ft = Feet

MSL = Mean sea level

mg/L = Milligrams per liter

<x = Not detected at reporting limit x

--- = Not analyzed or available

(D) = Duplicate sample

a = Chromatogram pattern indicated an unidentified hydrocarbon/Hydrocarbon does not match pattern of laboratory's standard.

b = Sample analyzed outside of EPA recommended hold time.

d = Sampled by client (Cambria Environmental Technology)

e = Unable to gauge depth to water

g = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

h = Analyzed by EPA Method 8015B (M).

i = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

GROUNDWATER DATA  
 SHELL-BRANDED SERVICE STATION  
 5755 BROADWAY, OAKLAND, CALIFORNIA

<i>Well ID</i>	<i>Date</i>	<i>TPHg</i> ( $\mu\text{g/L}$ )	<i>B</i> ( $\mu\text{g/L}$ )	<i>T</i> ( $\mu\text{g/L}$ )	<i>E</i> ( $\mu\text{g/L}$ )	<i>X</i> ( $\mu\text{g/L}$ )	<i>MTBE</i> 8020 ( $\mu\text{g/L}$ )	<i>MTBE</i> 8260 ( $\mu\text{g/L}$ )	<i>TBA</i> ( $\mu\text{g/L}$ )	<i>DIPE</i> ( $\mu\text{g/L}$ )	<i>ETBE</i> ( $\mu\text{g/L}$ )	<i>TAME</i> ( $\mu\text{g/L}$ )	<i>TOC</i> (ft MSL)	<i>Depth to</i> <i>Water</i> (ft TOC)	<i>GW</i> <i>Elevation</i> (ft MSL)	<i>DO</i> <i>Reading</i> (mg/L)
----------------	-------------	------------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------	--	--	-----------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------	---	---	---------------------------------------

Site wells surveyed January 9, 2002 by Virgil Chavez Land Surveying

APPENDIX A

BLAINE TECH SERVICES, INC. -  
FIELD NOTES

# WELL GAUGING DATA

Project # 110722-BPZ Date 7/22/11 Client SK11

Site 5755 Broadway, Oakland

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
S-1	1001	3					0.98	11.26	↓	
S-2	1014	4				2.78	9.44			
S-3	0954	4				2.42	9.54			
H-1	1008	4				3.52	11.97			

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>110722-BP2</u>	Site: <u>98995756</u>
Sampler: <u>B. Panel 11</u>	Date: <u>7/22/11</u>
Well I.D.: <u>S-1</u>	Well Diameter: 2 <u>(3)</u> 4 6 8 _____
Total Well Depth (TD): <u>11.26</u>	Depth to Water (DTW): <u>0.98</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>3.03</u>	

Purge Method: <u>Bailer</u> Disposable Bailer Positive Air Displacement <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	--	--

$\underline{3.8} \text{ (Gals.)} \times \underline{3} = \underline{11.4} \text{ Gals.}$ 1 Case Volume                      Specified Volumes                      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td><u>0.37</u></td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	<u>0.37</u>	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	<u>0.37</u>	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
<u>1037</u>	<u>73.3</u>	<u>8.85</u>	<u>242</u>	<u>106</u>	<u>3.8</u>	
<u>1038</u>	<u>Well Deaerated @</u>			<u>5.1 Gals</u>		<u>DTW: 9.90</u>
<u>1240</u>	<u>68.7</u>	<u>9.06</u>	<u>268</u>	<u>33</u>	<u>—</u>	

Did well dewater? (Yes) No                      Gallons actually evacuated: 5.1

Sampling Date: 7/22/11    Sampling Time: 1240    Depth to Water: 7.98 (2hr)

Sample I.D.: S-1                      Laboratory: (Test America) Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COL

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time                      Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# SHELL WELL MONITORING DATA SHEET

BTS #: <u>110722-BP2</u>	Site: <u>98995756</u>
Sampler: <u>B. Panel 11</u>	Date: <u>7/22/11</u>
Well I.D.: <u>S-2</u>	Well Diameter: 2 3 <b>4</b> 6 8 <u>    </u>
Total Well Depth (TD): <u>9.44</u>	Depth to Water (DTW): <u>2.78</u>
Depth to Free Product: <u>    </u>	Thickness of Free Product (feet): <u>    </u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> <u>HACH</u>
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>4.11</u>	

Purge Method: Bailer                      Waterra                      Sampling Method: Bailer  
 Disposable Bailer                      Peristaltic                      Disposable Bailer  
 Positive Air Displacement                      Extraction Pump                      Extraction Port  
Electric Submersible                      Other \_\_\_\_\_                      Dedicated Tubing

$4.3 \text{ (Gals.)} \times \underline{3} = \underline{12.9} \text{ Gals.}$ 1 Case Volume                      Specified Volumes                      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td><u>0.65</u></td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	<u>0.65</u>	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	<u>0.65</u>														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
<u>1040</u>	<u>70.8</u>	<u>7.10</u>	<u>559</u>	<u>59</u>	<u>4.3</u>	<u>ODOR</u>
<u>1041</u>	<u>Well</u>	<u>Dewatered</u>	<u>@</u>	<u>4.6</u>	<u>Gals</u>	<u>DTW: 6.80</u>
<u>1140</u>	<u>68.2</u>	<u>7.06</u>	<u>585</u>	<u>28</u>	<u>—</u>	<u>ODOR</u>

Did well dewater? Yes No                      Gallons actually evacuated: 4.6

Sampling Date: 7/22/11                      Sampling Time: 1140                      Depth to Water: 4.07

Sample I.D.: S-2                      Laboratory: Test America Other \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: SEE COC

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time                      Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

A)

## SHELL WELL MONITORING DATA SHEET

BTS #: <b>110722-BP2</b>	Site: <b>98995756</b>
Sampler: <b>B. Panel 11</b>	Date: <b>7/22/11</b>
Well I.D.: <b>S-3</b>	Well Diameter: 2 3 <b>(4)</b> 6 8
Total Well Depth (TD): <b>9.54</b>	Depth to Water (DTW): <b>2.92</b>
Depth to Free Product: <b>—</b>	Thickness of Free Product (feet): <b>—</b>
Referenced to: <b>(PVC)</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <b>3.84</b>	

Purge Method:  Bailer       Waterra      Sampling Method:  **Bailer**

Disposable Bailer       Peristaltic       Disposable Bailer

Positive Air Displacement       Extraction Pump       Extraction Port

**Electric Submersible**      Other \_\_\_\_\_       Dedicated Tubing

Other: \_\_\_\_\_

$\underline{4.6} \text{ (Gals.)} \times \underline{3} = \underline{13.8} \text{ Gals.}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td><b>(0.65)</b></td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td><b>1.47</b></td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	<b>(0.65)</b>	2"	0.16	6"	<b>1.47</b>	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	<b>(0.65)</b>														
2"	0.16	6"	<b>1.47</b>														
3"	0.37	Other	radius <sup>2</sup> * 0.163														
I Case Volume      Specified Volumes      Calculated Volume																	

Time	Temp (°F)	pH	Cond. (mS or <b>(µS)</b> )	Turbidity (NTUs)	Gals. Removed	Observations
1023	71.1	7.45	443	310	4.6	
1024	Well Dewatered @			5.7 Gals		DTW: 7.02
1115	68.2	7.47	540	38	—	

Did well dewater?  **Yes**    No    Gallons actually evacuated: **5.7**

Sampling Date: **7/22/11**    Sampling Time: **1115**    Depth to Water: **3.80**

Sample I.D.: **S-3**    Laboratory: **(Test America)** Other \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: **SEE LOC**

EB I.D. (if applicable): @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# SHELL WELLHEAD INSPECTION FORM

(FOR SAMPLE TECHNICIAN)

Site Address 5755 Broadway, Oakland Date 7/22/11  
Job Number 110722-BP2 Technician B Parrell Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Well Box Meets Compliance Requirements *See Below	Water Bailed From Wellbox	Cap Replaced	Lock Replaced	Well Not Inspected (explain in notes)	New Deficiency Identified	Previously Identified Deficiency Persists	Notes
S-1	X	X							
S-2	X	X							
S-3	X	X							
H-1	X								NOT A G, VAULT, stringer in well

\*Well box must meet all three criteria to be compliant: 1) WELL IS SECURABLE BY DESIGN (12" or less) 2) WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12" or less) 3) WELL TAG IS PRESENT, SECURE, AND CORRECT

Notes: \_\_\_\_\_  
\_\_\_\_\_



APPENDIX B

TEST AMERICA -  
LABORATORY REPORT

## LABORATORY REPORT

Prepared For: Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project: 5755 Broadway, Oakland, CA

Sampled: 07/22/11  
Received: 07/26/11  
Issued: 08/05/11 08:36

NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

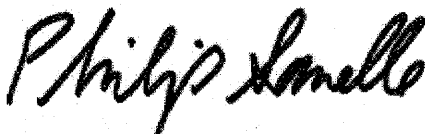
*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.*

*This entire report was reviewed and approved for release.*

## SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
IUG2406-01	S-1	Water
IUG2406-02	S-2	Water
IUG2406-03	S-3	Water

Reviewed By:



TestAmerica Irvine

Philip Sanelle  
Project Manager

Blaine Tech San Jose/CRA Shell  
 1680 Rogers Avenue  
 San Jose, CA 95112-1105  
 Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11  
 Received: 07/26/11

## VOLATILE FUEL HYDROCARBONS BY GC/MS (CA LUFT)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IUG2406-01 (S-1 - Water)</b>								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	11G3647	50	ND	1	7/30/2011	7/30/2011	
Surrogate: Dibromofluoromethane (80-120%)				109 %				
Surrogate: Toluene-d8 (80-120%)				105 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				94 %				
<b>Sample ID: IUG2406-02 (S-2 - Water)</b>								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	11H0032	120	4000	2.5	8/1/2011	8/1/2011	
Surrogate: Dibromofluoromethane (80-120%)				95 %				
Surrogate: Toluene-d8 (80-120%)				97 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				95 %				
<b>Sample ID: IUG2406-03 (S-3 - Water)</b>								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	11G3647	50	ND	1	7/30/2011	7/30/2011	
Surrogate: Dibromofluoromethane (80-120%)				108 %				
Surrogate: Toluene-d8 (80-120%)				105 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				93 %				

TestAmerica Irvine

Philip Sanelle  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

IUG2406 <Page 2 of 12>

Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11

Received: 07/26/11

## VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IUG2406-01 (S-1 - Water)</b>								
Reporting Units: ug/l								
Benzene	EPA 8260B	11G3647	0.50	ND	1	7/30/2011	7/30/2011	
Ethylbenzene	EPA 8260B	11G3647	0.50	ND	1	7/30/2011	7/30/2011	
Toluene	EPA 8260B	11G3647	0.50	ND	1	7/30/2011	7/30/2011	
Xylenes, Total	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
Di-isopropyl Ether (DIPE)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
<b>Methyl-tert-butyl Ether (MTBE)</b>	EPA 8260B	11G3647	1.0	<b>1.0</b>	1	7/30/2011	7/30/2011	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
tert-Butanol (TBA)	EPA 8260B	11G3647	10	ND	1	7/30/2011	7/30/2011	
Surrogate: 4-Bromofluorobenzene (80-120%)				94 %				
Surrogate: Dibromofluoromethane (80-120%)				109 %				
Surrogate: Toluene-d8 (80-120%)				105 %				
<b>Sample ID: IUG2406-02 (S-2 - Water)</b>								
Reporting Units: ug/l								
<b>Benzene</b>	EPA 8260B	11H0032	1.2	<b>160</b>	2.5	8/1/2011	8/1/2011	
<b>Ethylbenzene</b>	EPA 8260B	11H0032	1.2	<b>5.0</b>	2.5	8/1/2011	8/1/2011	
Toluene	EPA 8260B	11H0032	1.2	ND	2.5	8/1/2011	8/1/2011	
<b>Xylenes, Total</b>	EPA 8260B	11H0032	2.5	<b>6.4</b>	2.5	8/1/2011	8/1/2011	
Di-isopropyl Ether (DIPE)	EPA 8260B	11H0032	2.5	ND	2.5	8/1/2011	8/1/2011	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	11H0032	2.5	ND	2.5	8/1/2011	8/1/2011	
<b>Methyl-tert-butyl Ether (MTBE)</b>	EPA 8260B	11H0032	2.5	<b>200</b>	2.5	8/1/2011	8/1/2011	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	11H0032	2.5	ND	2.5	8/1/2011	8/1/2011	
<b>tert-Butanol (TBA)</b>	EPA 8260B	11H0032	25	<b>270</b>	2.5	8/1/2011	8/1/2011	
Surrogate: 4-Bromofluorobenzene (80-120%)				95 %				
Surrogate: Dibromofluoromethane (80-120%)				95 %				
Surrogate: Toluene-d8 (80-120%)				97 %				

TestAmerica Irvine

Philip Sanelle  
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

IUG2406 <Page 3 of 12>

Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11

Received: 07/26/11

## VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IUG2406-03 (S-3 - Water)</b>								
<b>Reporting Units: ug/l</b>								
Benzene	EPA 8260B	11G3647	0.50	ND	1	7/30/2011	7/30/2011	
Ethylbenzene	EPA 8260B	11G3647	0.50	ND	1	7/30/2011	7/30/2011	
Toluene	EPA 8260B	11G3647	0.50	ND	1	7/30/2011	7/30/2011	
Xylenes, Total	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
Di-isopropyl Ether (DIPE)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	11G3647	1.0	ND	1	7/30/2011	7/30/2011	
tert-Butanol (TBA)	EPA 8260B	11G3647	10	ND	1	7/30/2011	7/30/2011	
Surrogate: 4-Bromofluorobenzene (80-120%)								93 %
Surrogate: Dibromofluoromethane (80-120%)								108 %
Surrogate: Toluene-d8 (80-120%)								105 %

TestAmerica Irvine

Philip Sanelle  
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

IUG2406 <Page 4 of 12>

Blaine Tech San Jose/CRA Shell  
 1680 Rogers Avenue  
 San Jose, CA 95112-1105  
 Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11  
 Received: 07/26/11

## METHOD BLANK/QC DATA

### VOLATILE FUEL HYDROCARBONS BY GC/MS (CA LUFT)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11G3647 Extracted: 07/30/11</b>									
<b>Blank Analyzed: 07/30/2011 (11G3647-BLK1)</b>									
Volatile Fuel Hydrocarbons (C4-C12)	ND	50	ug/l						
Surrogate: Dibromofluoromethane	26.4		ug/l	25.0		105 80-120			
Surrogate: Toluene-d8	26.5		ug/l	25.0		106 80-120			
Surrogate: 4-Bromofluorobenzene	23.9		ug/l	25.0		96 80-120			
<b>LCS Analyzed: 07/30/2011 (11G3647-BS2)</b>									
Volatile Fuel Hydrocarbons (C4-C12)	367	50	ug/l	500		73 55-130			
Surrogate: Dibromofluoromethane	26.3		ug/l	25.0		105 80-120			
Surrogate: Toluene-d8	26.7		ug/l	25.0		107 80-120			
Surrogate: 4-Bromofluorobenzene	25.0		ug/l	25.0		100 80-120			
<b>Matrix Spike Analyzed: 07/30/2011 (11G3647-MS1)</b>					<b>Source: IUG2273-07</b>				
Volatile Fuel Hydrocarbons (C4-C12)	1480	50	ug/l	1720	211	73 50-145			
Surrogate: Dibromofluoromethane	26.3		ug/l	25.0		105 80-120			
Surrogate: Toluene-d8	26.2		ug/l	25.0		105 80-120			
Surrogate: 4-Bromofluorobenzene	25.3		ug/l	25.0		101 80-120			
<b>Matrix Spike Dup Analyzed: 07/30/2011 (11G3647-MSD1)</b>					<b>Source: IUG2273-07</b>				
Volatile Fuel Hydrocarbons (C4-C12)	1500	50	ug/l	1720	211	75 50-145	2	20	
Surrogate: Dibromofluoromethane	25.9		ug/l	25.0		104 80-120			
Surrogate: Toluene-d8	26.7		ug/l	25.0		107 80-120			
Surrogate: 4-Bromofluorobenzene	25.0		ug/l	25.0		100 80-120			
<b>Batch: 11H0032 Extracted: 08/01/11</b>									
<b>Blank Analyzed: 08/01/2011 (11H0032-BLK1)</b>									
Volatile Fuel Hydrocarbons (C4-C12)	ND	50	ug/l						
Surrogate: Dibromofluoromethane	24.7		ug/l	25.0		99 80-120			
Surrogate: Toluene-d8	24.3		ug/l	25.0		97 80-120			
Surrogate: 4-Bromofluorobenzene	24.1		ug/l	25.0		96 80-120			

TestAmerica Irvine

Philip Sanelle  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Blaine Tech San Jose/CRA Shell  
 1680 Rogers Avenue  
 San Jose, CA 95112-1105  
 Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11  
 Received: 07/26/11

## METHOD BLANK/QC DATA

### VOLATILE FUEL HYDROCARBONS BY GC/MS (CA LUFT)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits RPD	RPD	Limit	Data Qualifiers
<b>Batch: 11H0032 Extracted: 08/01/11</b>										
<b>LCS Analyzed: 08/01/2011 (11H0032-BS2)</b>										
Volatile Fuel Hydrocarbons (C4-C12)	550	50	ug/l	500		110	55-130			
Surrogate: Dibromofluoromethane	24.4		ug/l	25.0		98	80-120			
Surrogate: Toluene-d8	24.4		ug/l	25.0		98	80-120			
Surrogate: 4-Bromofluorobenzene	24.6		ug/l	25.0		98	80-120			
<b>Matrix Spike Analyzed: 08/01/2011 (11H0032-MS1)</b>					<b>Source: IUG2402-02</b>					
Volatile Fuel Hydrocarbons (C4-C12)	4780	50	ug/l	1720	3190	92	50-145			
Surrogate: Dibromofluoromethane	22.7		ug/l	25.0		91	80-120			
Surrogate: Toluene-d8	24.5		ug/l	25.0		98	80-120			
Surrogate: 4-Bromofluorobenzene	24.2		ug/l	25.0		97	80-120			
<b>Matrix Spike Dup Analyzed: 08/01/2011 (11H0032-MSD1)</b>					<b>Source: IUG2402-02</b>					
Volatile Fuel Hydrocarbons (C4-C12)	4630	50	ug/l	1720	3190	83	50-145	3	20	
Surrogate: Dibromofluoromethane	22.7		ug/l	25.0		91	80-120			
Surrogate: Toluene-d8	24.3		ug/l	25.0		97	80-120			
Surrogate: 4-Bromofluorobenzene	24.1		ug/l	25.0		97	80-120			

TestAmerica Irvine

Philip Sanelle  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Blaine Tech San Jose/CRA Shell  
 1680 Rogers Avenue  
 San Jose, CA 95112-1105  
 Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11  
 Received: 07/26/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11G3647 Extracted: 07/30/11</b>										
<b>Blank Analyzed: 07/30/2011 (11G3647-BLK1)</b>										
Benzene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
m,p-Xylenes	ND	1.0	ug/l							
o-Xylene	ND	0.50	ug/l							
Xylenes, Total	ND	1.0	ug/l							
Di-isopropyl Ether (DIPE)	ND	1.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	1.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	1.0	ug/l							
tert-Butanol (TBA)	ND	10	ug/l							
Surrogate: 4-Bromofluorobenzene	23.9		ug/l	25.0		96	80-120			
Surrogate: Dibromofluoromethane	26.4		ug/l	25.0		105	80-120			
Surrogate: Toluene-d8	26.5		ug/l	25.0		106	80-120			
<b>LCS Analyzed: 07/30/2011 (11G3647-BS1)</b>										
Benzene	25.8	0.50	ug/l	25.0		103	70-120			
Ethylbenzene	27.5	0.50	ug/l	25.0		110	75-125			
Toluene	26.2	0.50	ug/l	25.0		105	70-120			
m,p-Xylenes	56.7	1.0	ug/l	50.0		113	75-125			
o-Xylene	28.3	0.50	ug/l	25.0		113	75-125			
Xylenes, Total	85.0	1.0	ug/l	75.0		113	70-125			
Di-isopropyl Ether (DIPE)	24.6	1.0	ug/l	25.0		98	60-135			
Ethyl tert-Butyl Ether (ETBE)	23.0	1.0	ug/l	25.0		92	65-135			
Methyl-tert-butyl Ether (MTBE)	21.9	1.0	ug/l	25.0		88	60-135			
tert-Amyl Methyl Ether (TAME)	23.3	1.0	ug/l	25.0		93	60-135			
tert-Butanol (TBA)	138	10	ug/l	125		110	70-135			
Surrogate: 4-Bromofluorobenzene	25.0		ug/l	25.0		100	80-120			
Surrogate: Dibromofluoromethane	26.0		ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.6		ug/l	25.0		107	80-120			

TestAmerica Irvine

Philip Sanelle  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.



Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11

Received: 07/26/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11G3647 Extracted: 07/30/11</b>										
<b>Matrix Spike Analyzed: 07/30/2011 (11G3647-MS1)</b>					<b>Source: IUG2273-07</b>					
Benzene	30.4	0.50	ug/l	25.0	3.98	106	65-125			
Ethylbenzene	29.6	0.50	ug/l	25.0	0.560	116	65-130			
Toluene	27.2	0.50	ug/l	25.0	ND	109	70-125			
m,p-Xylenes	59.7	1.0	ug/l	50.0	ND	119	65-130			
o-Xylene	29.8	0.50	ug/l	25.0	ND	119	65-125			
Xylenes, Total	89.4	1.0	ug/l	75.0	ND	119	60-130			
Di-isopropyl Ether (DIPE)	26.0	1.0	ug/l	25.0	ND	104	60-140			
Ethyl tert-Butyl Ether (ETBE)	23.7	1.0	ug/l	25.0	ND	95	60-135			
Methyl-tert-butyl Ether (MTBE)	30.2	1.0	ug/l	25.0	5.55	99	55-145			
tert-Amyl Methyl Ether (TAME)	24.8	1.0	ug/l	25.0	ND	99	60-140			
tert-Butanol (TBA)	910	10	ug/l	125	743	134	65-140			MHA
Surrogate: 4-Bromofluorobenzene	25.3		ug/l	25.0		101	80-120			
Surrogate: Dibromofluoromethane	26.3		ug/l	25.0		105	80-120			
Surrogate: Toluene-d8	26.2		ug/l	25.0		105	80-120			
<b>Matrix Spike Dup Analyzed: 07/30/2011 (11G3647-MSD1)</b>					<b>Source: IUG2273-07</b>					
Benzene	31.4	0.50	ug/l	25.0	3.98	110	65-125	3	20	
Ethylbenzene	29.9	0.50	ug/l	25.0	0.560	117	65-130	0.9	20	
Toluene	28.0	0.50	ug/l	25.0	ND	112	70-125	3	20	
m,p-Xylenes	60.8	1.0	ug/l	50.0	ND	122	65-130	2	25	
o-Xylene	29.8	0.50	ug/l	25.0	ND	119	65-125	0	20	
Xylenes, Total	90.5	1.0	ug/l	75.0	ND	121	60-130	1	20	
Di-isopropyl Ether (DIPE)	26.8	1.0	ug/l	25.0	ND	107	60-140	3	25	
Ethyl tert-Butyl Ether (ETBE)	25.4	1.0	ug/l	25.0	ND	101	60-135	7	25	
Methyl-tert-butyl Ether (MTBE)	31.8	1.0	ug/l	25.0	5.55	105	55-145	5	25	
tert-Amyl Methyl Ether (TAME)	26.1	1.0	ug/l	25.0	ND	104	60-140	5	30	
tert-Butanol (TBA)	855	10	ug/l	125	743	89	65-140	6	25	MHA
Surrogate: 4-Bromofluorobenzene	25.0		ug/l	25.0		100	80-120			
Surrogate: Dibromofluoromethane	25.9		ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.7		ug/l	25.0		107	80-120			

TestAmerica Irvine

Philip Sanelle  
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Blaine Tech San Jose/CRA Shell  
 1680 Rogers Avenue  
 San Jose, CA 95112-1105  
 Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11

Received: 07/26/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits RPD	RPD Limit	Data Qualifiers
<b>Batch: 11H0032 Extracted: 08/01/11</b>									
<b>Blank Analyzed: 08/01/2011 (11H0032-BLK1)</b>									
Benzene	ND	0.50	ug/l						
Ethylbenzene	ND	0.50	ug/l						
Toluene	ND	0.50	ug/l						
m,p-Xylenes	ND	1.0	ug/l						
o-Xylene	ND	0.50	ug/l						
Xylenes, Total	ND	1.0	ug/l						
Di-isopropyl Ether (DIPE)	ND	1.0	ug/l						
Ethyl tert-Butyl Ether (ETBE)	ND	1.0	ug/l						
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l						
tert-Amyl Methyl Ether (TAME)	ND	1.0	ug/l						
tert-Butanol (TBA)	ND	10	ug/l						
Surrogate: 4-Bromofluorobenzene	24.1		ug/l	25.0		96	80-120		
Surrogate: Dibromofluoromethane	24.7		ug/l	25.0		99	80-120		
Surrogate: Toluene-d8	24.3		ug/l	25.0		97	80-120		
<b>LCS Analyzed: 08/01/2011 (11H0032-BS1)</b>									
Benzene	23.5	0.50	ug/l	25.0		94	70-120		
Ethylbenzene	24.8	0.50	ug/l	25.0		99	75-125		
Toluene	24.0	0.50	ug/l	25.0		96	70-120		
m,p-Xylenes	50.7	1.0	ug/l	50.0		101	75-125		
o-Xylene	25.9	0.50	ug/l	25.0		104	75-125		
Xylenes, Total	76.6	1.0	ug/l	75.0		102	70-125		
Di-isopropyl Ether (DIPE)	25.8	1.0	ug/l	25.0		103	60-135		
Ethyl tert-Butyl Ether (ETBE)	25.3	1.0	ug/l	25.0		101	65-135		
Methyl-tert-butyl Ether (MTBE)	24.6	1.0	ug/l	25.0		99	60-135		
tert-Amyl Methyl Ether (TAME)	26.3	1.0	ug/l	25.0		105	60-135		
tert-Butanol (TBA)	127	10	ug/l	125		102	70-135		
Surrogate: 4-Bromofluorobenzene	23.9		ug/l	25.0		95	80-120		
Surrogate: Dibromofluoromethane	23.7		ug/l	25.0		95	80-120		
Surrogate: Toluene-d8	24.7		ug/l	25.0		99	80-120		

TestAmerica Irvine

Philip Sanelle  
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA  
Report Number: IUG2406

Sampled: 07/22/11  
Received: 07/26/11

## METHOD BLANK/QC DATA

### VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 11H0032 Extracted: 08/01/11</b>										
<b>Matrix Spike Analyzed: 08/01/2011 (11H0032-MS1)</b>					<b>Source: IUG2402-02</b>					
Benzene	31.6	0.50	ug/l	25.0	11.8	79	65-125			
Ethylbenzene	25.5	0.50	ug/l	25.0	0.330	101	65-130			
Toluene	24.4	0.50	ug/l	25.0	ND	98	70-125			
m,p-Xylenes	53.0	1.0	ug/l	50.0	1.14	104	65-130			
o-Xylene	26.4	0.50	ug/l	25.0	ND	106	65-125			
Xylenes, Total	79.5	1.0	ug/l	75.0	1.14	104	60-130			
Di-isopropyl Ether (DIPE)	23.1	1.0	ug/l	25.0	ND	92	60-140			
Ethyl tert-Butyl Ether (ETBE)	23.2	1.0	ug/l	25.0	ND	93	60-135			
Methyl-tert-butyl Ether (MTBE)	26.3	1.0	ug/l	25.0	ND	105	55-145			
tert-Amyl Methyl Ether (TAME)	24.4	1.0	ug/l	25.0	ND	97	60-140			
tert-Butanol (TBA)	162	10	ug/l	125	11.7	120	65-140			
Surrogate: 4-Bromofluorobenzene	24.2		ug/l	25.0		97	80-120			
Surrogate: Dibromofluoromethane	22.7		ug/l	25.0		91	80-120			
Surrogate: Toluene-d8	24.5		ug/l	25.0		98	80-120			
<b>Matrix Spike Dup Analyzed: 08/01/2011 (11H0032-MSD1)</b>					<b>Source: IUG2402-02</b>					
Benzene	30.3	0.50	ug/l	25.0	11.8	74	65-125	4		20
Ethylbenzene	25.1	0.50	ug/l	25.0	0.330	99	65-130	2		20
Toluene	23.6	0.50	ug/l	25.0	ND	95	70-125	3		20
m,p-Xylenes	52.3	1.0	ug/l	50.0	1.14	102	65-130	1		25
o-Xylene	26.2	0.50	ug/l	25.0	ND	105	65-125	1		20
Xylenes, Total	78.5	1.0	ug/l	75.0	1.14	103	60-130	1		20
Di-isopropyl Ether (DIPE)	22.4	1.0	ug/l	25.0	ND	89	60-140	3		25
Ethyl tert-Butyl Ether (ETBE)	22.5	1.0	ug/l	25.0	ND	90	60-135	3		25
Methyl-tert-butyl Ether (MTBE)	24.6	1.0	ug/l	25.0	ND	98	55-145	7		25
tert-Amyl Methyl Ether (TAME)	23.1	1.0	ug/l	25.0	ND	92	60-140	6		30
tert-Butanol (TBA)	140	10	ug/l	125	11.7	103	65-140	14		25
Surrogate: 4-Bromofluorobenzene	24.1		ug/l	25.0		97	80-120			
Surrogate: Dibromofluoromethane	22.7		ug/l	25.0		91	80-120			
Surrogate: Toluene-d8	24.3		ug/l	25.0		97	80-120			

TestAmerica Irvine

Philip Sanelle  
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11

Received: 07/26/11

## DATA QUALIFIERS AND DEFINITIONS

- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

## ADDITIONAL COMMENTS

### For 8260 analyses:

Due to the high water solubility of alcohols and ketones, the calibration criteria for these compounds is <30% RSD. The average % RSD of all compounds in the calibration is 15%, in accordance with EPA methods.

### For Volatile Fuel Hydrocarbons (C4-C12):

Volatile Fuel Hydrocarbons (C4-C12) are quantitated against a gasoline standard. Quantitation begins immediately before TBA-d9.

**TestAmerica Irvine**

Philip Sanelle  
Project Manager

*The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.*

**IUG2406 <Page 11 of 12>**

Blaine Tech San Jose/CRA Shell  
1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attention: Lorin King

Project ID: 5755 Broadway, Oakland, CA

Report Number: IUG2406

Sampled: 07/22/11  
Received: 07/26/11

## Certification Summary

### TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 8260B	Water	X	X
TPH by GC/MS	Water	X	X

*Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at [www.testamericainc.com](http://www.testamericainc.com)*

TestAmerica Irvine

Philip Sanelle  
Project Manager

*The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.*

IUG2406 <Page 12 of 12>

LAB (LOCATION)



Shell Oil Products Chain Of Custody Record

- CALSCIENCE ( )
- SPL ( )
- XENCO ( )
- TEST AMERICA (IRVINE)
- OTHER ( )

Please Check Appropriate Box:

<input type="checkbox"/> ENV. SERVICES	<input type="checkbox"/> MOTIVA RETAIL	<input type="checkbox"/> SHELL RETAIL
<input type="checkbox"/> MOTIVA SD&CM	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> SHELL PIPELINE	<input type="checkbox"/> OTHER _____	

Print Bill To Contact Name: Peter Schaefer 240483

INCIDENT # (ENV SERVICES): 9 8 9 9 5 7 5 6

PO #: 4 0 - 4 0 3 4 9 7 3

SAP #

CHECK IF NO INCIDENT # APPLIES

DATE: 7-22-11

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

ADDRESS: 1680 Rogers Avenue, San Jose, CA

PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King

TELEPHONE: 310-995-4455 x 108 FAX: 310-637-5802 E-MAIL: lking@blainetech.com

TURNAROUND TIME (CALENDAR DAYS):  STANDARD (14 DAY)  5 DAYS  3 DAYS  2 DAYS  24 HOURS  RESULTS NEEDED ON WEEKEND

LA - RWQCB REPORT FORMAT  UST AGENCY:

SITE ADDRESS: Street and City: 5755 Broadway, Oakland State: CA GLOBAL ID NO.: T0600101270

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville PHONE NO.: 510-420-3343 E-MAIL: shelledf@craworld.com CONSULTANT PROJECT NO.: 110722-BP2

SAMPLER NAME(S) (P#M#D#): Ben Panell

LAB USE ONLY: IJ07296

SPECIAL INSTRUCTIONS OR NOTES:

Email invoice and copy of final report to Shell.Lab.Billing@craworld.com

SHELL CONTRACT RATE APPLIES

STATE REIMBURSEMENT RATE APPLIES.

EDD NOT NEEDED

RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	PRESERVATIVE					NO. OF CONT.	TPH -GRO, Purgeable (8260B)	TPH -DRO, Extractable (8015M)	TPH (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 6 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Single Compound: (8260B)	1,2-DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TEMPERATURE ON RECEIPT °C	Container PID Readings or Laboratory Notes
		DATE	TIME		HCL	HNO3	H2SO4	NONE	OTHER																
	S-1	7-22-11	11:40	W	X					3	X			X	X	X								50	
	S-2	7-22-11	11:40	W	X					3	X			X	X	X									
	S-3	7-22-11	12:45	W	✓					3	X			X	X	X									

Relinquished by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i> (sample custodian)	Date: 7-22-11	Time: 1350
Relinquished by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i> TAPR	Date: 7/25/11	Time: 1105
Relinquished by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i> Joan Muller	Date: 07/25/11	Time: 1205

Joan Muller  
7-25-11/630

VuBana

7/26/11 9:55