CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: August 28, 2014

REFERENCE NO.: 241501

PROJECT NAME: 461 8th Street, Oakland

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

Please find enclosed:
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☒ Final
- ☐ Other

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

QUANTITY	DESCRIPTION
1	Separate-Phase Hydrocarbon Removal Work Plan

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐
- ☐

COMMENTS:
If you have any questions regarding the contents of this document, please call the CRA project manager Peter Schaefer at (510) 420-3319 or the Shell program manager Perry Pineda at (425) 413-1164.

Copy to: Perry Pineda, Shell Oil Products US (electronic copy)
Leroy Griffin, Fire Prevention Bureau, 250 Frank Ogawa Plaza, 3rd Floor, Suite 3341, Oakland, CA 94612
Broadway Oak Partners, LLC (property owner), c/o Terry Wolf Sr., 5165 Brandin Court, Fremont, CA 94538

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Shell Oil Products US
Soil and Groundwater Focus Delivery Group
20945 S. Wilmington Avenue
Carson, CA 90810
Tel (425) 413 1164
Fax (425) 413 0988
Email perry.pineda@shell.com
Internet http://www.shell.com

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

Re: 461 8th Street
Oakland, California
SAP Code 129453
Incident No. 97093399
ACEH Case No. RO0000343

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.

As always, please feel free to contact me directly at (425) 413-1164 with any questions or concerns.

Sincerely,
Shell Oil Products US

Perry Pineda
Senior Environmental Program Manager

SEPARATE-PHASE HYDROCARBON REMOVAL WORK PLAN

FORMER SHELL SERVICE STATION
461 8TH STREET
OAKLAND, CALIFORNIA

SAP CODE	**129453**
INCIDENT NO.	**97093399**
AGENCY NO.	**RO0000343**

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

AUGUST 28, 2014
REF. NO. 241501 (36)
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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this work plan on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to provide a work plan for increasing the separate-phase hydrocarbon (SPH) removal rate as requested in Alameda County Environmental Health's (ACEH's) July 9, 2014 letter.

The site is a paved parking lot located at the southwestern corner of the intersection of 8th Street and Broadway in a primarily commercial area of Oakland, California (Figure 1). The former station layout included an underground storage tank complex and dispenser islands (Figure 2).

A summary of previous work performed at the site and additional background information is contained in Appendix A. Historical SPH gauging data is provided in Table 1.

2.0 HISTORICAL SPH OCCURRENCE AND REMOVAL

In January 1979, the Bay Area Rapid Transit (BART) Authority notified Shell that they had found SPHs in a tunnel under the intersection of 7th Street and Broadway. SPH analyses conducted in January 1979 and in May 1981 identified the SPHs in the BART tunnel as Shell Regular gasoline. From October 1979 to May 1998, approximately 6,497 gallons of groundwater mixed with SPHs were removed from well S-5 and the adjacent BART tunnel.

From October 1989 to January 1998, up to 0.99 foot of SPHs were measured in well S-5. No other wells contained measurable SPHs prior to March 2014. During the January 31, 2014, March 14, 2014, and April 21, 2014 groundwater monitoring events, up to 1.15 feet of SPHs were measured in well S-5. During the March 14, 2014 and April 21, 2014 monitoring events, up to 0.39 foot of SPHs were measured in well S-13. No measureable SPHs were found in other site wells.

On March 14, 2014, Blaine Tech Services, Inc. (Blaine) collected SPH samples from wells S-5 and S-13 and sent them to Shell's Houston, Texas laboratory for hydrocarbon fingerprinting. The fingerprint analysis confirmed that the SPHs are consistent with gasoline manufactured in the mid-1960s to the mid-1980s. Blaine also installed SPH-absorbent socks in wells S-5 and S-13 during this event. On April 21, 2014, Blaine replaced the SPH-absorbent socks in wells S-5 and S-13. Approximately 14.01 pounds of SPHs were recovered by hand bailing (12.43 pounds from MW-5 and 1.58 pounds from MW-13) and 2.42 pounds of SPHs were recovered from the absorbent socks (1.36 pounds

from MW-5 and 1.06 pounds from MW-13) during first and second quarters of 2014. Approximately 16.43 pounds of SPHs have been removed from wells S-5 and S-13 since the SPHs reoccurred in 2014.

3.0 WORK TASKS

To enhance SPH removal, CRA will replace the SPH-absorbent socks in wells S-5 and S-13 and hand bail the wells more frequently. CRA will initially monitor and inspect the socks weekly to evaluate their effectiveness and record SPH removal quantities. If any SPHs are found in the wells after the socks are removed, they will be recovered by hand bailing. The frequency of inspections will be modified based on the results of the weekly inspections.

4.0 SCHEDULE

CRA will implement the enhanced SPH removal plan upon receiving ACEH's written approval of this work plan.

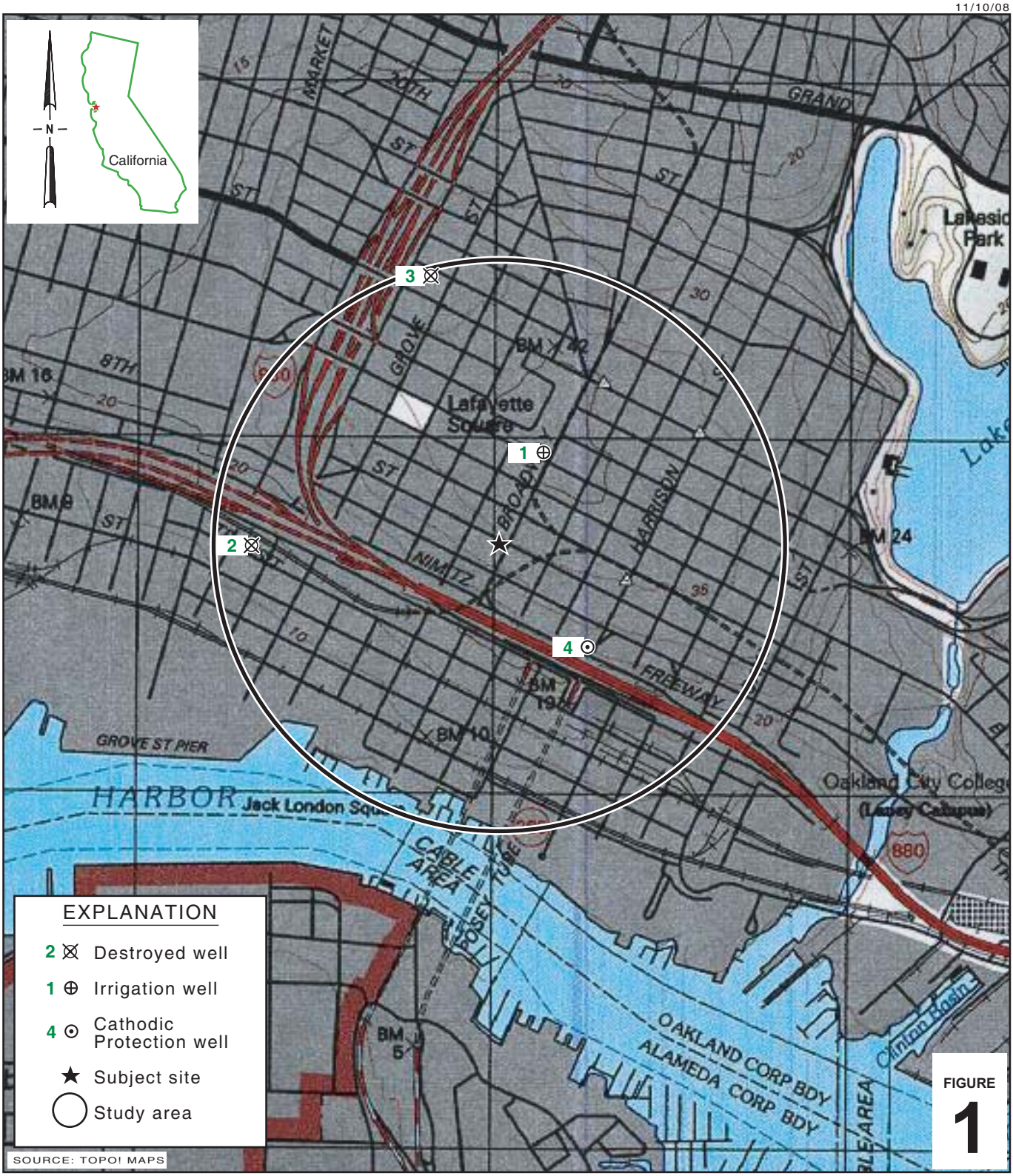
All of which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

11/10/08



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0 1/8 1/4 1/2 1

SCALE (MILES)

Former Shell Service Station
461 8th Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

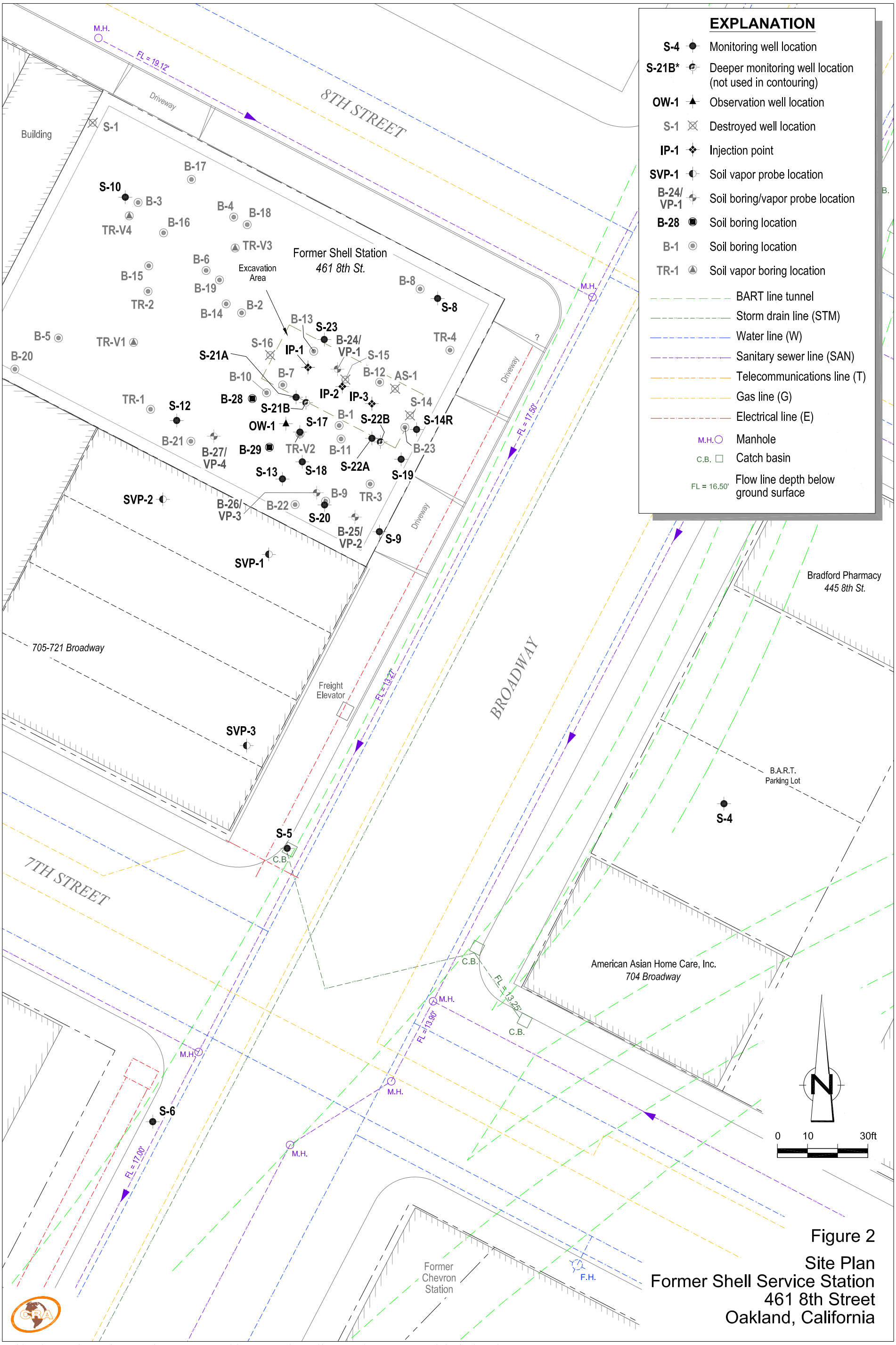

Figure 2

Site Plan
Former Shell Service Station
461 8th Street
Oakland, California

I:\Shell\6-chars\2415--\241501-Oakland 461 8th St\241501-FIGURES\241501 SITE PLAN.DWG (08/28/2014)

TABLE

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-4	10/26/1988	130	3.8	13	4.0	30	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	02/14/1989	<50	0.50	<1.0	<1.0	3.0	---	---	---	---	---	---	---	---	93.51	12.82	---	80.69	---	---
S-4	05/01/1989	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	16.48	---	77.03	---	---
S-4	07/27/1989	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.84	---	77.67	---	---
S-4	10/05/1989	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.98	---	77.53	---	---
S-4	01/09/1990	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.86	---	77.65	---	---
S-4	04/30/1990	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	93.51	14.48	---	79.03	---	---
S-4	07/31/1990	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	10/30/1990	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	05/06/1991	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.23	---	78.28	---	---
S-4	06/27/1991	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	93.51	13.54	---	79.97	---	---
S-4	09/24/1991	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.85	---	77.66	---	---
S-4	11/07/1991	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.60	---	77.91	---	---
S-4	02/13/1992	<50	<0.50	<0.50	<0.50	3.0	---	---	---	---	---	---	---	---	93.51	14.27	---	79.24	---	---
S-4	05/11/1992	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	12/03/1992	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	05/13/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.81	---	78.70	---	---
S-4	07/22/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.42	---	79.09	---	---
S-4	10/20/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	01/25/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.60	---	78.91	---	---
S-4	04/25/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.39	---	79.12	---	---
S-4	07/21/1994	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	93.51	22.29	---	71.22	---	---
S-4	10/24/1994	<500	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	93.51	22.72	---	70.79	---	---
S-4	12/22/1994	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	25.77	22.25	---	3.52	---	---
S-4	04/20/1995	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	25.77	21.16	---	4.61	---	---
S-4	10/04/1995	<50	1.2	0.70	<0.50	<0.50	---	---	---	---	---	---	---	---	25.77	22.25	---	3.52	---	---
S-4	01/03/1996	<50	0.60	<0.50	<0.50	1.7	---	---	---	---	---	---	---	---	25.77	23.28	---	2.49	---	---
S-4	04/11/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	21.58	---	4.19	---	---
S-4	07/11/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	21.60	---	4.17	---	---
S-4	10/02/1996	<50	<0.50	<0.50	<0.50	<0.50	2.6	---	---	---	---	---	---	---	25.77	22.46	---	3.31	---	---
S-4	01/22/1997	<50	0.73	<0.50	<0.50	0.63	<2.5	---	---	---	---	---	---	---	25.77	20.06	---	5.71	---	---
S-4	07/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	22.10	---	3.67	---	---
S-4	01/22/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	20.50	---	5.27	---	---
S-4	07/08/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	20.86	---	4.91	---	---
S-4	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.41	---	4.36	---	---
S-4	01/28/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	22.34	---	3.43	---	---
S-4	04/23/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.43	---	4.34	---	---
S-4	07/29/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	---	---	25.77	21.45	---	4.32	---	---
S-4	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	22.08	---	3.69	---	---
S-4	01/07/2000	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	22.29	---	3.48	---	---
S-4	04/11/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.11	---	4.66	---	---
S-4	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	25.77	21.19	---	4.58	---	---
S-4	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	22.22	---	3.55	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-4	01/09/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	25.77	22.17	---	3.60	---	---
S-4	04/06/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.50	---	4.27	---	---
S-4	07/25/2001	<50	2.0	0.52	<0.50	1.0	---	<5.0	---	---	---	---	---	---	25.77	21.50	---	4.27	---	---
S-4	11/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.95	---	3.82	---	---
S-4	01/17/2002	<50 d	<0.50 d	<0.50 d	<0.50 d	<0.50 d	---	<5.0 d	---	---	---	---	---	---	25.77	21.13	---	4.64	---	---
S-4	05/08/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.35	---	4.42	---	---
S-4	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.41	21.19	---	13.22	---	---
S-4	10/15/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.42	---	12.99	---	---
S-4	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.41	20.75	---	13.66	---	---
S-4	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.08	---	13.33	---	---
S-4	07/14/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.93	---	14.48	---	---
S-4	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.56	---	14.85	---	---
S-4	01/22/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.41	19.12	---	15.29	---	---
S-4	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.15	---	15.26	---	---
S-4	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.48	---	13.93	---	---
S-4	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.00	---	13.41	---	---
S-4	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.41	20.17	---	14.24	---	---
S-4	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.82	---	14.59	---	---
S-4	07/28/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.71	---	13.70	---	---
S-4	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.85	---	13.56	---	---
S-4	02/09/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	34.41	19.47	---	14.94	---	---
S-4	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.52	---	14.89	---	---
S-4	08/23/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.75	---	13.66	---	---
S-4	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.03	---	14.38	---	---
S-4	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.41	21.30	---	13.11	---	---
S-4	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.15	---	13.26	---	---
S-4	08/15/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.38	---	13.03	---	---
S-4	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.55	---	12.86	---	---
S-4	02/08/2008	64 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.41	22.75	---	11.66	---	---
S-4	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	22.18	---	12.23	---	---
S-4	08/14/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.77	---	12.64	---	---
S-4	11/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.68	---	13.73	---	---
S-4	01/05/2009	250	1.8	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.41	20.92	---	13.49	---	---
S-4	04/09/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.10	---	13.31	---	---
S-4	07/23/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.76	---	12.65	---	---
S-4	10/01/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	22.10	---	12.31	---	---
S-4	01/28/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	34.41	21.75	---	12.66	---	---
S-4	05/20/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.44	---	12.97	---	---
S-4	08/31/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.72	---	12.69	---	---
S-4	12/29/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.91	---	13.50	---	---
S-4	02/01/2011	<50	<0.50	<0.50	<0.50	1.1	---	---	---	---	---	---	---	---	34.41	21.19	---	13.22	1.84	157
S-4	04/25/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	17.32	---	17.09	---	---
S-4	07/28/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.92	---	13.49	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-4	10/28/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.35	---	13.06	---	---
S-4	05/07/2012	240	86	22	9.5	25	---	---	---	---	---	---	---	---	34.41	20.65	---	13.76	2.52	119
S-4	05/02/2013	55	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	34.41	21.45	---	12.96	---	---
S-4	**04/21/2014**	**380**	**88**	**58**	**14**	**42**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.41**	**21.70**	**---**	**12.71**	**---**	**---**
S-5	04/16/1987	130,000	15,000	16,000	a	14,000	---	---	---	---	---	---	---	---	99.36	---	---	---	---	---
S-5	10/26/1988	110,000	20,000	25,000	2,300	10,000	---	---	---	---	---	---	---	---	99.36	---	---	---	---	---
S-5	02/14/1989	94,000	16,000	21,000	1,800	10,000	---	---	---	---	---	---	---	---	99.36	19.87	---	79.49	---	---
S-5	05/01/1989	120,000	29,000	35,000	3,100	15,000	---	---	---	---	---	---	---	---	99.36	21.23	---	78.13	---	---
S-5	07/27/1989	110,000	20,000	29,000	2,400	14,000	---	---	---	---	---	---	---	---	99.36	20.41	---	78.95	---	---
S-5	10/05/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.43	0.01	78.94	---	---
S-5	01/09/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.16	0.01	78.21	---	---
S-5	04/30/1990	100,000	13,000	22,000	2,100	11,000	---	---	---	---	---	---	---	---	99.36	20.96	---	78.40	---	---
S-5	07/31/1990	53,000	8,300	14,000	1,200	7,400	---	---	---	---	---	---	---	---	99.36	20.88	---	78.48	---	---
S-5	10/30/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.96	0.03	77.42	---	---
S-5	05/06/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	23.00	0.13	76.46	---	---
S-5	06/27/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.53	0.03	78.85	---	---
S-5	09/24/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.40	0.06	78.01	---	---
S-5	11/07/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.33	0.25	78.23	---	---
S-5	02/13/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.52	0.31	77.09	---	---
S-5	05/11/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.46	0.58	77.36	---	---
S-5	12/03/1992	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	99.36	---	---	---	---	---
S-5	05/13/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.22	0.27	77.36	---	---
S-5	07/22/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.68	0.25	77.88	---	---
S-5	10/20/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.51	0.23	79.03	---	---
S-5	01/25/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.93	0.18	77.57	---	---
S-5	04/25/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.97	0.35	77.67	---	---
S-5	05/26/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.84	0.35	78.80	---	---
S-5	06/10/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.01	0.32	78.61	---	---
S-5	07/21/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.18	0.47	77.56	---	---
S-5	08/25/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.01	0.44	77.70	---	---
S-5	09/22/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.00	0.15	77.48	---	---
S-5	10/24/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.28	0.56	77.53	---	---
S-5	12/22/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.88	0.99	0.85	---	---
S-5	04/20/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	21.66	0.33	1.54	---	---
S-5	10/04/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.18	---	0.76	---	---
S-5	01/03/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.80	0.83	0.80	---	---
S-5	04/11/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	21.15	0.67	2.33	---	---
S-5	07/11/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.62	0.90	1.04	---	---
S-5	10/02/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	23.07	0.64	0.38	---	---
S-5	01/22/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	20.83	0.16	2.24	---	---
S-5	07/21/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	21.16	0.05	1.82	---	---
S-5	01/22/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	20.04	0.04	2.93	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-5	07/08/1998	220	14	40	5.8	34	3.3	---	---	---	---	---	---	---	22.94	18.61	---	4.33	---	---
S-5	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	17.31	---	5.63	---	---
S-5	01/28/1999	51,000	13,000	1,200	1,200	2,400	2,400	---	---	---	---	---	---	---	22.94	20.11	---	2.83	---	---
S-5	04/23/1999	65,600	2,540	7,300	1,790	9,840	<1,000	---	---	---	---	---	---	---	22.94	19.21	---	3.73	---	---
S-5	07/29/1999	61,400	3,320	6,980	1,520	7,700	<1,000	---	---	---	---	---	---	---	22.94	14.77	---	8.17	---	---
S-5	11/01/1999	48,200	2,700	5,740	1,290	7,850	<500	<40.0	---	---	---	---	---	---	22.94	15.56	---	7.38	---	---
S-5	01/07/2000	39,000	3,900	8,500	790	8,300	1,500	---	---	---	---	---	---	---	22.94	15.82	---	7.12	---	---
S-5	04/11/2000	29,300	1,680	5,060	1,130	6,220	<250	---	---	---	---	---	---	---	22.94	18.19	---	4.75	---	---
S-5	07/19/2000	6,420	2,110	207	252	681	355	253 b	---	---	---	---	---	---	22.94	19.01	---	3.93	---	---
S-5	10/12/2000	41,500	2,940	4,940	1,520	7,770	<250	<66.7	---	---	---	---	---	---	22.94	19.62	---	3.32	---	---
S-5	01/09/2001	142,000	7,030	9,550	2,340	12,600	779	---	---	---	---	---	---	---	22.94	19.94	---	3.00	---	---
S-5	04/06/2001	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	22.94	---	---	---	---	---
S-5	04/13/2001	59,800	4,810	10,800	1,950	10,100	842	<10.0	---	---	---	---	---	---	22.94	14.72	---	8.22	---	---
S-5	07/25/2001	71,000	2,900	6,800	1,700	9,100	---	<250	---	---	---	---	---	---	22.94	14.91	---	8.03	---	---
S-5	08/13/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	19.43	---	3.51	---	---
S-5	11/01/2001	Unable to locate		---	---	---	---	---	---	---	---	---	---	---	22.94	---	---	---	---	---
S-5	01/17/2002	58,000 d	460 d	3,300 d	1,900 d	8,400 d	---	<200 d	---	---	---	---	---	---	c	14.27	---	---	---	---
S-5	05/08/2002	60,000 d	d	2,700 d	1,800 d	8,800 d	---	<100 d	---	---	---	---	---	---	22.94	18.40	---	4.54	---	---
S-5	07/18/2002	53,000	240	1,200	1,500	6,400	---	<100	---	---	---	---	---	---	27.36	14.25	---	13.11	---	---
S-5	10/15/2002	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	27.36	---	---	---	---	---
S-5	10/17/2002	42,000	420	1,100	1,200	5,500	---	<10	---	---	---	---	---	---	27.36	14.90	---	12.46	---	---
S-5	01/02/2003	26,000	680	1,500	780	3,800	---	<5.0	---	---	---	---	---	---	27.36	14.72	---	12.64	---	---
S-5	04/15/2003	3,600	29	38	65	370	---	<5.0	---	---	---	---	---	---	e	14.45	---	---	---	---
S-5	07/14/2003	21,000	210	460	650	2,900	---	<10	---	---	---	---	---	---	e	14.10	---	---	---	---
S-5	10/20/2003	37,000	390	590	870	3,500	---	<13	---	---	---	---	---	---	e	14.63	---	---	---	---
S-5	01/22/2004	29,000	200	210	710	2,400	---	<13	---	---	---	---	---	---	e	14.08	---	---	---	---
S-5	04/19/2004	25,000	490	460	750	2,400	---	19	---	---	---	---	---	---	e	13.43	---	---	---	---
S-5	07/13/2004	28,000	300	280	690	2,400	---	<13	---	---	---	---	---	---	e	14.88	---	---	---	---
S-5	08/14/2008	31,000	1,700	1,600	1,400	3,350	---	<10	---	---	---	---	<5.0	<10	e	16.65	---	---	---	---
S-5	11/11/2008	37,000 i	2,500 i	1,300 i	2,000 i	3,490 i	---	<50 i	---	---	---	---	<25 i	<50 i	e	16.81	---	---	---	---
S-5	11/11/2008	40,000 j	2,300 j	1,400 j	1,900 j	3,630 j	---	<50 j	---	---	---	---	<25 j	<50 j	e	16.81	---	---	---	---
S-5	01/05/2009	57,000	2,300	1,400	1,500	2,900	---	<10	---	---	---	---	<5.0	<10	e	16.71	---	---	---	---
S-5	04/09/2009	52,000	2,100	3,500	1,900	5,400	---	<20	---	---	---	---	<10	<20	e	16.31	---	---	0.3	163
S-5	07/23/2009	37,000	1,800	1,900	1,400	3,800	---	---	---	---	---	---	---	---	e	16.62	---	---	1.48	-84
S-5	10/01/2009	36,000	1,800	1,900	1,400	3,700	---	---	---	---	---	---	---	---	27.24	16.35	---	10.89	0.86	-52
S-5	01/28/2010	35,000	1,200	1,900	1,500	3,600	---	---	---	---	---	---	---	---	27.24	16.35	---	10.89	---	---
S-5	05/20/2010	36,000	1,600	2,500	1,700	4,500	---	---	---	---	---	---	---	---	27.24	16.50	---	10.74	1.22	227
S-5	08/31/2010	32,000	1,300	1,100	1,600	3,400	---	---	---	---	---	---	---	---	27.24	16.95	---	10.29	0.58	-102
S-5	12/29/2010	26,000	970	1,500	1,500	3,200	---	---	---	---	---	---	---	---	27.24	16.25	---	10.99	1.18	233
S-5	02/01/2011	27,000	1,100	1,500	1,400	3,100	---	---	---	---	---	---	---	---	27.24	15.38	---	11.86	1.65	-83
S-5	04/25/2011	70,000	380	440	720	1,200	---	---	---	---	---	---	---	---	27.24	13.98	---	13.26	0.95	-109
S-5	07/28/2011	21,000	340	430	570	1,000	---	---	---	---	---	---	---	---	27.24	13.80	---	13.44	0.71	-95
S-5	10/28/2011	23,000	430	480	570	1,300	---	---	---	---	---	---	---	---	27.24	14.28	---	12.96	6.05	190

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-5	05/07/2012	16,000	150	200	350	760	---	---	---	---	---	---	---	---	27.24	13.82	---	13.42	3.61	120
S-5	08/31/2012	12,000	330	300	330	850	---	---	---	---	---	---	---	---	27.24	14.68	---	12.56	1.38	253
S-5	12/11/2012	14,000	420	700	550	1,500	---	---	---	---	---	---	---	---	27.24	16.00	---	11.24	1.07/1.29	162/63
S-5	01/24/2013	29,000	910	1,700	1,200	2,700	---	---	---	---	---	---	---	---	27.24	16.46	---	10.78	---	---
S-5	05/02/2013	35,000	650	1,500	1,400	4,500	---	---	---	---	---	---	---	---	27.24	18.59	---	8.65	---	---
S-5	08/09/2013	350,000	820	9,800	6,900	34,000	---	---	---	---	---	---	---	---	27.24	19.12	---	8.12	---	---
S-5	11/07/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	27.24	k	k	k	---	---
S-5	**01/31/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**19.87**	**0.91**	**8.10**	**---**	**---**
S-5	**03/14/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**19.98**	**1.15**	**8.18**	**---**	**---**
S-5	**04/21/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**19.80**	**1.14**	**8.35**	**---**	**---**
S-6	04/16/1987	81,000	16,000	9,000	a	6,400	---	---	---	---	---	---	---	---	100.58	---	---	---	---	---
S-6	10/26/1988	110,000	29,000	18,000	2,500	8,200	---	---	---	---	---	---	---	---	100.58	---	---	---	---	---
S-6	02/14/1989	54,000	18,000	4,500	1,400	4,000	---	---	---	---	---	---	---	---	100.58	20.87	---	79.71	---	---
S-6	05/01/1989	93,000	43,000	9,900	3,000	8,000	---	---	---	---	---	---	---	---	100.58	20.49	---	80.09	---	---
S-6	07/27/1989	52,000	20,000	3,200	1,700	5,500	---	---	---	---	---	---	---	---	100.58	21.01	---	79.57	---	---
S-6	10/05/1989	55,000	20,000	2,900	1,600	5,500	---	---	---	---	---	---	---	---	100.58	21.24	---	79.34	---	---
S-6	01/09/1990	76,000	35,000	9,100	2,300	8,600	---	---	---	---	---	---	---	---	100.58	22.62	Sheen	77.96	---	---
S-6	04/30/1990	39,000	13,000	2,300	900	2,800	---	---	---	---	---	---	---	---	100.58	22.10	---	78.48	---	---
S-6	07/31/1990	48,000	20,000	4,600	1,500	4,900	---	---	---	---	---	---	---	---	100.58	22.00	---	78.58	---	---
S-6	10/30/1990	27,000	7,400	900	600	1,400	---	---	---	---	---	---	---	---	100.58	22.14	---	78.44	---	---
S-6	05/06/1991	35,000	3,900	2,700	2,300	3,500	---	---	---	---	---	---	---	---	100.58	22.40	---	78.18	---	---
S-6	06/27/1991	51,000	19,000	5,600	1,700	6,300	---	---	---	---	---	---	---	---	100.58	21.21	---	79.37	---	---
S-6	09/24/1991	42,000	14,000	4,300	1,200	4,000	---	---	---	---	---	---	---	---	100.58	22.26	---	78.32	---	---
S-6	11/07/1991	39,000	11,000	2,000	800	2,300	---	---	---	---	---	---	---	---	100.58	22.35	---	78.23	---	---
S-6	02/13/1992	64,000	21,000	6,200	1,600	5,100	---	---	---	---	---	---	---	---	100.58	22.28	---	78.30	---	---
S-6	05/11/1992	57,000	22,000	7,600	2,200	7,700	---	---	---	---	---	---	---	---	100.58	22.10	---	78.48	---	---
S-6	12/03/1992	110,000	26,000	9,400	2,100	8,700	---	---	---	---	---	---	---	---	100.58	22.14	---	78.44	---	---
S-6	05/13/1993	58,000	21,000	6,800	2,500	9,800	---	---	---	---	---	---	---	---	100.58	22.16	---	78.42	---	---
S-6	07/22/1993	70,000	31,000	14,000	3,000	13,000	---	---	---	---	---	---	---	---	100.58	21.64	---	78.94	---	---
S-6	10/20/1993	48,000	28,000	9,800	3,200	12,000	---	---	---	---	---	---	---	---	100.58	21.62	---	78.96	---	---
S-6	01/25/1994	70,000	23,000	7,500	2,500	8,000	---	---	---	---	---	---	---	---	100.58	21.80	---	78.78	---	---
S-6	04/25/1994	61,000	16,000	4,000	1,800	5,100	---	---	---	---	---	---	---	---	100.58	21.68	---	78.90	---	---
S-6	07/21/1994	44,000	8,200	3,600	1,400	3,900	---	---	---	---	---	---	---	---	100.58	21.78	---	78.80	---	---
S-6 (D)	07/21/1994	32,000	7,800	3,400	1,300	3,700	---	---	---	---	---	---	---	---	100.58	---	---	---	---	---
S-6	10/24/1994	2,936	1,184	440.6	163.4	648.4	---	---	---	---	---	---	---	---	100.58	22.06	---	78.52	---	---
S-6 (D)	10/24/1994	2,968	770.8	325.3	144.1	622	---	---	---	---	---	---	---	---	22.08*	---	---	---	---	---
S-6	12/22/1994	32,000	7,000	2,900	790	2,400	---	---	---	---	---	---	---	---	22.08	21.91	---	0.17	---	---
S-6 (D)	12/22/1994	32,000	8,000	3,800	1,100	3,400	---	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	04/20/1995	56,000	15,000	3,800	1,900	4,900	---	---	---	---	---	---	---	---	22.08	21.38	---	0.70	---	---
S-6 (D)	04/20/1995	49,000	13,000	3,500	1,800	4,700	---	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	10/04/1995	49,000	8,400	4,700	1,800	4,800	---	---	---	---	---	---	---	---	22.08	21.80	---	0.28	---	---
S-6 (D)	10/04/1995	41,000	8,400	4,100	1,400	4,400	---	---	---	---	---	---	---	---	22.08	---	---	---	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-6	01/03/1996	52,000	9,100	7,100	1,800	5,800	---	---	---	---	---	---	---	---	22.08	21.70	---	0.38	---	---
S-6	04/11/1996	59,000	11,000	7,100	2,100	6,400	<500	---	---	---	---	---	---	---	22.08	21.62	---	0.46	---	---
S-6 (D)	04/11/1996	59,000	11,000	6,800	1,900	6,400	<500	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	07/11/1996	72,000	18,000	6,600	2,500	8,400	<1,000	---	---	---	---	---	---	---	22.08	21.65	---	0.43	---	---
S-6	10/02/1996	57,000	11,000	6,500	1,500	5,100	<500	---	---	---	---	---	---	---	22.08	21.80	---	0.28	---	---
S-6	01/22/1997	67,000	15,000	5,000	1,800	5,400	<1,000	---	---	---	---	---	---	---	22.08	19.95	---	2.13	---	---
S-6 (D)	01/22/1997	63,000	15,000	4,800	1,800	5,200	<1,000	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	07/21/1997	61,000	15,000	2,100	1,100	3,500	1,900	---	---	---	---	---	---	---	22.08	20.61	---	1.47	---	---
S-6	01/22/1998	46,000	14,000	3,200	1,300	3,400	<500	---	---	---	---	---	---	---	22.08	19.82	---	2.26	---	---
S-6	07/08/1998	74,000	26,000	7,500	2,200	6,200	<1,000	---	---	---	---	---	---	---	22.08	18.20	---	3.88	---	---
S-6	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	22.08	18.81	---	3.27	---	---
S-6	01/28/1999	120,000	9,000	14,000	2,700	14,000	3,700	---	---	---	---	---	---	---	22.08	19.73	---	2.35	---	---
S-6	04/23/1999	58,500	15,900	1,360	1,640	3,030	<2500	---	---	---	---	---	---	---	22.08	17.58	---	4.50	---	---
S-6	07/29/1999	36,200	10,300	760	930	1,360	<1,000	---	---	---	---	---	---	---	22.08	21.35	---	0.73	---	---
S-6	11/01/1999	36,000	11,700	767	865	1,670	<1,250	<40.0	---	---	---	---	---	---	22.08	19.23	---	2.85	---	---
S-6	01/07/2000	36,000	7,600	4,600	840	3,600	<1,000	---	---	---	---	---	---	---	22.08	19.53	---	2.55	---	---
S-6	04/11/2000	14,600	7,540	205	306	609	621	---	---	---	---	---	---	---	22.08	18.16	---	3.92	---	---
S-6	07/19/2000	2,590	629	63.9	99.6	267	124	72.7 b	---	---	---	---	---	---	22.08	18.40	---	3.68	---	---
S-6	10/12/2000	32,900	14,200	966	1,060	1,790	<500	<100	---	---	---	---	---	---	22.08	19.52	---	2.56	---	---
S-6	01/09/2001	27,600	11,200	675	666	1,580	1,430	<10.0 b	---	---	---	---	---	---	22.08	19.69	---	2.39	---	---
S-6	02/05/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	22.08	19.20	---	2.88	---	---
S-6	04/06/2001	16,900	7,800	343	172	966	809	<20.0	---	---	---	---	---	---	22.08	18.25	---	3.83	---	---
S-6	07/25/2001	29,000	9,800	1,700	1,000	1,800	---	<250	---	---	---	---	---	---	22.08	18.27	---	3.81	---	---
S-6	11/01/2001	41,000	15,000	2,400	1,100	2,500	---	<500	---	---	---	---	---	---	22.08	19.30	---	2.78	---	---
S-6	01/17/2002	38,000 d	11,000 d	1,700 d	990 d	2,200 d	---	<500 d	---	---	---	---	---	---	22.08	18.51	---	3.57	---	---
S-6	05/08/2002	72,000	21,000	4,400	2,200	5,300	---	<1,000	---	---	---	---	---	---	22.08	18.30	---	3.78	---	---
S-6	07/18/2002	71,000	17,000	4,300	1,700	4,800	---	<1,000	---	---	---	---	---	---	30.56	18.19	---	12.37	---	---
S-6	10/15/2002	55,000	16,000	4,600	1,500	4,600	---	<100	---	---	---	---	---	---	30.56	18.77	---	11.79	---	---
S-6	01/02/2003	75,000	21,000	5,000	2,400	6,400	---	<50	---	---	---	---	---	---	30.56	18.60	---	11.96	---	---
S-6	04/15/2003	64,000	29,000	6,400	2,700	5,600	---	<1,000	---	---	---	---	---	---	30.56	18.27	---	12.29	---	---
S-6	07/14/2003	47,000	19,000	4,300	1,500	4,300	---	<100	---	---	---	---	---	---	30.56	18.05	---	12.51	---	---
S-6	10/20/2003	63,000	21,000	5,800	1,900	5,200	---	<130	---	---	---	---	---	---	30.56	18.55	Sheen	12.01	---	---
S-6	01/22/2004	41,000	21,000	4,300	1,800	4,000	---	<130	---	---	---	---	---	---	30.56	18.18	Sheen	12.38	---	---
S-6	04/19/2004	58,000	23,000	4,200	2,200	3,900	---	<130	---	---	---	---	---	---	30.56	17.32	---	13.24	---	---
S-6	05/03/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	30.56	17.30	---	13.26	---	---
S-6	06/17/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	30.56	17.70	---	12.86	---	---
S-6	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	30.56	17.85	---	12.71	---	---
S-6	10/28/2004	45,000	21,000	3,600	1,700	3,300	---	<130	---	---	---	---	---	---	30.56	18.45	---	12.11	---	---
S-6	01/17/2005	61,000	21,000	3,500	1,600	3,200	---	<130	---	---	---	---	---	---	30.56	17.52	---	13.04	---	---
S-6	04/14/2005	36,000	12,000	6,200	850	4,800	---	<50	---	---	---	---	---	---	30.56	22.49	---	8.07	---	---
S-6	07/28/2005	54,000	16,000	9,100	1,800	5,900	---	<130	---	---	---	---	---	---	30.56	19.38	---	11.18	---	---
S-6	10/05/2005	59,000	14,000	7,500	1,400	5,000	---	<50	---	---	---	---	---	---	30.56	18.32	---	12.24	---	---
S-6	02/09/2006	41,100	7,060	3,900	673	2,380	---	<0.500	---	---	---	---	---	---	30.56	17.11	---	13.45	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-6	05/15/2006	188,000	24,800	20,700	2,540	12,400	---	<25.0	---	---	---	---	---	---	30.56	19.80	---	10.76	---	---
S-6	08/23/2006	133,000	24,900	16,100	2,280	10,500	---	<0.500	---	---	---	---	---	---	30.56	20.45	---	10.11	---	---
S-6	11/15/2006	66,000	19,000	8,400	1,900	7,400	---	<400	---	---	---	---	---	---	30.56	20.41	---	10.15	---	---
S-6	01/30/2007	88,000	18,000	9,600	1,900	7,200	---	<100	---	---	---	---	---	---	30.56	20.47	---	10.09	---	---
S-6	05/29/2007	56,000 f	17,000	6,700	1,700	5,400	---	<20	---	---	---	---	---	---	30.56	20.40	---	10.16	---	---
S-6	08/15/2007	57,000 f,g	15,000	6,800	1,600	6,100	---	<100	---	---	---	---	---	---	30.56	20.49	---	10.07	---	---
S-6	11/28/2007	42,000 f	13,000	5,000	1,300	5,000	---	<100	---	---	---	---	---	---	30.56	20.65	---	9.91	---	---
S-6	02/08/2008	35,000 f	12,000	5,000	1,200	4,050	---	<100	---	---	---	---	<50	<100	30.56	20.31	---	10.25	---	---
S-6	05/08/2008	45,000 f	15,000	6,100	1,400	5,000	---	<100	---	---	---	---	<50	<100	30.56	20.63	---	9.93	---	---
S-6	08/14/2008	37,000	11,000	5,200	1,200	4,600	---	<100	---	---	---	---	<50	<100	30.56	20.65	---	9.91	---	---
S-6	11/11/2008	37,000 i	15,000 i	6,200 i	1,200 i	3,390 i	---	<10 i	---	---	---	---	<5.0 i	<10 i	30.56	20.79	---	9.77	---	---
S-6	11/11/2008	14,000 j	5,200 j	680 j	400 j	1,060 j	---	<50 j	---	---	---	---	<25 j	<50 j	30.56	20.79	---	9.77	---	---
S-6	01/05/2009	53,000	9,400	3,600	890	3,100	---	<100	---	---	---	---	<50	<100	30.56	21.66	---	8.90	---	---
S-6	04/09/2009	Unable to sample		---	---	---	---	---	---	---	---	---	---	---	30.56	---	---	---	---	---
S-6	04/21/2009	13,000	3,700	1,100	270	750	---	<100	---	---	---	---	<50	<100	30.56	20.20	---	10.36	---	---
S-6	07/23/2009	15,000	4,400	1,100	360	1,000	---	---	---	---	---	---	---	---	30.56	20.66	---	9.90	1.13	-73
S-6	10/01/2009	21,000	5,100	1,300	420	1,200	---	---	---	---	---	---	---	---	30.56	20.86	---	9.70	0.58	16
S-6	01/28/2010	8,700	2,600	250	200	400	---	---	---	---	---	---	---	---	30.56	20.36	---	10.20	---	---
S-6	05/20/2010	4,400	1,600	82	85	150	---	---	---	---	---	---	---	---	30.56	20.68	---	9.88	1.08	64
S-6	08/31/2010	19,000	4,700	1,300	560	1,600	---	---	---	---	---	---	---	---	30.56	20.78	---	9.78	1.55	-88
S-6	12/29/2010	15,000	3,900	1,500	520	1,800	---	---	---	---	---	---	---	---	30.56	19.92	---	10.64	2.35	123
S-6	02/01/2011	16,000	4,000	1,700	600	1,800	---	---	---	---	---	---	---	---	30.56	19.05	---	11.51	0.61	-143
S-6	04/25/2011	23,000	7,800	3,500	960	3,000	---	---	---	---	---	---	---	---	30.56	17.73	---	12.83	0.76	-112
S-6	07/28/2011	17,000	5,500	1,500	600	1,600	---	---	---	---	---	---	---	---	30.56	17.62	---	12.94	0.77	-26
S-6	10/28/2011	42,000	11,000	4,500	1,600	5,900	---	---	---	---	---	---	---	---	30.56	18.12	---	12.44	4.64	-9
S-6	05/07/2012	38,000	14,000	4,800	1,300	4,400	---	---	---	---	---	---	---	---	30.56	17.50	---	13.06	2.32	116
S-6	08/31/2012	96,000	6,700	2,500	1,900	6,200	---	---	---	---	---	---	---	---	30.56	18.42	---	12.14	0.62	146
S-6	12/11/2012	31,000	8,300	3,700	1,000	3,700	---	---	---	---	---	---	---	---	30.56	20.00	---	10.56	0.92/0.65	102/-16
S-6	01/24/2013	29,000	9,100	2,500	950	2,600	---	---	---	---	---	---	---	---	30.56	20.43	---	10.13	---	---
S-6	05/02/2013	10,000	1,800	1,100	430	1,100	---	---	---	---	---	---	---	---	30.56	22.98	---	7.58	---	---
S-6	08/09/2013	45,000	3,800	8,000	1,800	6,500	---	---	---	---	---	---	---	---	30.56	23.21	---	7.35	---	---
S-6	11/07/2013	33,000	3,600	3,800	1,000	3,700	---	---	---	---	---	---	---	---	30.56	25.24	---	5.32	---	---
S-6	**01/31/2014**	**16,000**	**1,200**	**2,700**	**710**	**2,500**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**30.56**	**23.30**	**---**	**7.26**	**---**	**---**
S-6	**04/21/2014**	**15,000**	**1,100**	**3,100**	**650**	**2,300**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**30.56**	**22.98**	**---**	**7.58**	**---**	**---**
S-8	12/22/1994	600	120	32	5.2	34	---	---	---	---	---	---	---	---	27.21	24.87	---	2.34	---	---
S-8	04/20/1995	460	180	23	5.2	21	---	---	---	---	---	---	---	---	27.21	23.90	---	3.31	---	---
S-8	10/04/1995	830	210	38	11	42	---	---	---	---	---	---	---	---	27.21	24.48	---	2.73	---	---
S-8	01/03/1996	350	61	12	2.5	12	---	---	---	---	---	---	---	---	27.21	24.62	---	2.59	---	---
S-8 (D)	01/03/1996	340	54	12	2.4	12	---	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	04/11/1996	570	140	37	12	47	<6.2	---	---	---	---	---	---	---	27.21	24.32	---	2.89	---	---
S-8	07/11/1996	980	98	32	9.1	160	<12	---	---	---	---	---	---	---	27.21	24.10	---	3.11	---	---
S-8	10/02/1996	280	62	13	3.3	25	15	---	---	---	---	---	---	---	27.21	25.38	---	1.83	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-8 (D)	10/02/1996	490	110	24	7.0	45	22	<2.0	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	01/22/1997	400	90	13	4.9	25	12	---	---	---	---	---	---	---	27.21	23.91	---	3.30	---	---
S-8	07/21/1997	2,900	380	110	26	260	85	---	---	---	---	---	---	---	27.21	23.62	---	3.59	---	---
S-8 (D)	07/21/1997	3,200	420	120	32	300	130	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	01/22/1998	3,800	790	140	42	330	160	---	---	---	---	---	---	---	27.21	23.52	---	3.69	---	---
S-8 (D)	01/22/1998	3,500	780	120	33	300	160	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	07/08/1998	3,600	1,800	<25	<25	<25	<125	---	---	---	---	---	---	---	27.21	21.52	---	5.69	---	---
S-8 (D)	07/08/1998	4,000	1,800	<25	<25	31	<125	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	27.21	22.01	---	5.20	---	---
S-8	01/28/1999	2,000	630	6.2	24	51	43	---	---	---	---	---	---	---	27.21	23.03	---	4.18	---	---
S-8	04/23/1999	1,050	408	<5.00	<5.00	6.65	<50.0	---	---	---	---	---	---	---	27.21	22.15	---	5.06	---	---
S-8	07/29/1999	955	344	<2.50	6.90	16.2	<25.0	---	---	---	---	---	---	---	27.21	21.95	---	5.26	---	---
S-8	11/01/1999	1,800	550	6.45	15.0	40.4	<50.0	---	---	---	---	---	---	---	27.21	22.55	---	4.66	---	---
S-8	01/07/2000	1,300	600	11	29	48	<13	---	---	---	---	---	---	---	27.21	22.87	---	4.34	---	---
S-8	04/11/2000	342	101	4.42	4.24	14.7	21.4	---	---	---	---	---	---	---	27.21	21.86	---	5.35	---	---
S-8	07/19/2000	579	228	6.37	6.45	25	<12.5	---	---	---	---	---	---	---	27.21	21.93	---	5.28	---	---
S-8	10/12/2000	947	340	8.64	3.26	38.3	<12.5	<2.00	---	---	---	---	---	---	27.21	22.92	---	4.29	---	---
S-8	01/09/2001	1,090	394	<10.0	<10.0	33.3	57.6	---	---	---	---	---	---	---	27.21	23.19	---	4.02	---	---
S-8	04/06/2001	671	182	12.5	16.4	47.1	42.5	---	---	---	---	---	---	---	27.21	22.46	---	4.75	---	---
S-8	07/25/2001	500	70	6.7	11	23	---	<5.0	---	---	---	---	---	---	27.21	22.50	---	4.71	---	---
S-8	11/01/2001	1,900	250	28	39	180	---	<5.0	---	---	---	---	---	---	27.21	22.44	---	4.77	---	---
S-8	01/17/2002	830 d	140 d	11 d	12 d	89 d	---	<5.0 d	---	---	---	---	---	---	27.21	21.82	---	5.39	---	---
S-8	05/08/2002	210 d	34 d	1.7 d	4.1 d	15 d	---	<5.0 d	---	---	---	---	---	---	27.21	21.35	---	5.86	---	---
S-8	07/18/2002	650	68	2.8	9.7	42	---	<5.0	---	---	---	---	---	---	35.85	21.53	---	14.32	---	---
S-8	10/15/2002	1,000	160	4.2	7.7	74	---	<0.50	---	---	---	---	---	---	35.85	21.97	---	13.88	---	---
S-8	01/02/2003	440	55	1.8	2.9	31	---	<0.50	---	---	---	---	---	---	35.85	21.95	---	13.90	---	---
S-8	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.73	---	14.12	---	---
S-8	07/14/2003	60	6.8	<0.50	0.98	4.9	---	<0.50	---	---	---	---	---	---	35.85	21.40	---	14.45	---	---
S-8	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.94	---	13.91	---	---
S-8	01/22/2004	210	19	0.52	3.6	17	---	<0.50	---	---	---	---	---	---	35.85	21.40	---	14.45	---	---
S-8	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	20.83	---	15.02	---	---
S-8	07/13/2004	420	77	0.82	14	31	---	<0.50	---	---	---	---	---	---	35.85	21.05	---	14.80	---	---
S-8	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.77	---	14.08	---	---
S-8	01/17/2005	490	85	0.89	13	28	---	<0.50	---	---	---	---	---	---	35.85	20.92	---	14.93	---	---
S-8	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.57	---	14.28	---	---
S-8	07/28/2005	64	12	<0.50	1.5	1.6	---	<0.50	---	---	---	---	---	---	35.85	21.62	---	14.23	---	---
S-8	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.11	---	14.74	---	---
S-8	02/09/2006	<50.0	2.79	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	35.85	20.18	---	15.67	---	---
S-8	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	20.53	---	15.32	---	---
S-8	08/23/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	35.85	21.49	---	14.36	---	---
S-8	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	22.05	---	13.80	---	---
S-8	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	35.85	22.41	---	13.44	---	---
S-8	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	22.65	---	13.20	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-8	08/15/2007	65 f,g	7.4	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	---	---	35.85	22.88	---	12.97	---	---
S-8	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	23.20	---	12.65	---	---
S-8	02/08/2008	350 f	22	<1.0	4.8	2.6	---	1.2	---	---	---	---	<0.50	<1.0	35.85	22.72	---	13.13	---	---
S-8	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	22.91	---	12.94	---	---
S-8	08/14/2008	420	28	<1.0	6.3	1.4	---	<1.0	---	---	---	---	<0.50	<1.0	35.85	23.12	---	12.73	---	---
S-8	11/11/2008	330 i	37 i	<1.0 i	5.1 i	<1.0 i	---	<1.0 i	---	---	---	---	<0.50 i	<1.0 i	35.85	23.37	---	12.48	1.6	28
S-8	11/11/2008	480 j	29 j	<1.0 j	5.4 j	<1.0 j	---	---	---	---	---	---	---	---	35.85	23.37	---	12.48	2.2	103
S-8	12/18/2008	340	38	<1.0	5.4	<1.0	---	---	---	---	---	---	---	---	35.83	23.31	---	12.52	---	---
S-8	01/05/2009	170	15	<1.0	1.2	<1.0	---	---	---	---	---	---	---	---	35.83	23.28	---	12.55	---	---
S-8	01/15/2009	260	45	<1.0	3.2	<1.0	---	---	---	---	---	---	---	---	35.83	23.05	---	12.78	---	---
S-8	02/12/2009	88	7.2	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.34	---	12.49	---	---
S-8	03/12/2009	12,000	1,700	2,100	200	2,400	---	---	---	---	---	---	---	---	35.83	22.90	---	12.93	---	---
S-8	04/09/2009	170	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.10	---	12.73	---	594
S-8	07/23/2009	140	0.55	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.02	---	12.81	2.38	-54
S-8	10/01/2009	140	0.68	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.31	---	12.52	4.34	359
S-8	01/28/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	22.80	---	13.03	---	---
S-8	05/20/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.55	---	12.28	0.64	42
S-8	08/31/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.48	---	12.35	0.54	-72
S-8	12/29/2010	79	0.83	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.18	---	12.65	0.74	133
S-8	02/01/2011	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	22.57	---	13.26	1.68	104
S-8	04/25/2011	<50	1.1	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	21.26	---	14.57	1.78	12
S-8	07/28/2011	50	2.4	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	20.94	---	14.89	0.89	186
S-8	10/28/2011	<50	0.61	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	21.09	---	14.74	2.78	349
S-8	05/07/2012	<50	4.3	1.4	0.59	1.0	---	---	---	---	---	---	---	---	35.83	21.23	---	14.60	2.42	209
S-8	05/02/2013	53	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	24.65	---	11.18	---	---
S-8	**04/21/2014**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.83**	**25.28**	**---**	**10.55**	**---**	**---**
S-9	12/22/1994	2,600	400	150	42	310	---	---	---	---	---	---	---	---	26.06	24.37	---	1.69	---	---
S-9	04/20/1995	1,900	400	130	51	200	---	---	---	---	---	---	---	---	26.06	23.49	---	2.57	---	---
S-9	10/04/1995	3,200	590	260	68	280	---	---	---	---	---	---	---	---	26.06	24.01	---	2.05	---	---
S-9	01/03/1996	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	04/11/1996	2,100	440	1,500	42	210	<25	---	---	---	---	---	---	---	26.06	23.61	---	2.45	---	---
S-9	07/11/1996	5,200	940	450	120	520	<50	---	---	---	---	---	---	---	26.06	23.78	---	2.28	---	---
S-9 (D)	07/11/1996	4,800	890	430	110	500	<50	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	10/02/1996	3,000	680	220	56	270	<62	---	---	---	---	---	---	---	26.06	24.31	---	1.75	---	---
S-9	01/22/1997	1,500	230	71	36	130	<12	---	---	---	---	---	---	---	26.06	23.08	---	2.98	---	---
S-9	07/21/1997	3,400	590	57	19	210	96	---	---	---	---	---	---	---	26.06	22.83	---	3.23	---	---
S-9	01/22/1998	2,600	300	46	<10	270	62	---	---	---	---	---	---	---	26.06	21.96	---	4.10	---	---
S-9	07/08/1998	820	150	6.2	7.5	57	<10	---	---	---	---	---	---	---	26.06	20.85	---	5.21	---	---
S-9	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.39	---	4.67	---	---
S-9	01/28/1999	<50	1.0	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	26.06	22.32	---	3.74	---	---
S-9	04/23/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.41	---	4.65	---	---
S-9	07/29/1999	117	7.77	0.817	0.683	5.05	<5.00	---	---	---	---	---	---	---	26.06	21.25	---	4.81	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-9	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.92	---	4.14	---	---
S-9	01/07/2000	<50	1.2	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	26.06	22.11	---	3.95	---	---
S-9	04/11/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.14	---	4.92	---	---
S-9	07/19/2000	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	22.24	---	3.82	---	---
S-9	01/09/2001	<50.0	1.45	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	26.06	22.52	---	3.54	---	---
S-9	04/06/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	23.61	---	2.45	---	---
S-9	07/25/2001	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	08/13/2001	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	11/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.78	---	4.28	---	---
S-9	01/17/2002	<50 d	<0.50 d	<0.50 d	<0.50 d	<0.50 d	---	<5.0 d	---	---	---	---	---	---	26.06	21.15	---	4.91	---	---
S-9	05/08/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	20.56	---	5.50	---	---
S-9	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.70	20.88	---	13.82	---	---
S-9	10/15/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.41	---	13.29	---	---
S-9	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.70	21.35	---	13.35	---	---
S-9	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.14	---	13.56	---	---
S-9	07/14/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.80	---	13.90	---	---
S-9	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.33	---	13.37	---	---
S-9	01/22/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.77	---	13.93	---	---
S-9	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	20.06	---	14.64	---	---
S-9	07/13/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.44	---	14.26	---	---
S-9	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.02	---	13.68	---	---
S-9	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.18	---	14.52	---	---
S-9	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.85	---	12.85	---	---
S-9	07/28/2005	360	190	1.8	1.1	3.9	---	<0.50	<5.0	<2.0	<2.0	<2.0	---	---	34.70	21.22	---	13.48	---	---
S-9	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	20.63	---	14.07	---	---
S-9	02/09/2006	<50.0	0.94	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	34.70	19.23	---	15.47	---	---
S-9	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	20.28	---	14.42	---	---
S-9	08/23/2006	7,000	1,740	55.6	193	278	---	<0.500	<10.0	<0.500	<0.500	<0.500	---	---	34.70	21.31	---	13.39	---	---
S-9	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.79	---	12.91	---	---
S-9	01/30/2007	12,000	2,200	250	480	980	---	<0.50	---	---	---	---	---	---	34.70	22.08	---	12.62	---	---
S-9	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	22.22	---	12.48	---	---
S-9	08/15/2007	9,800 f,g	2,400	100	410	602	---	<10	<100	<20	<20	<20	---	---	34.70	22.43	---	12.27	---	---
S-9	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	22.75	---	11.95	---	---
S-9	02/08/2008	69 f	2.2	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.70	22.31	---	12.39	---	---
S-9	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	22.49	---	12.21	---	---
S-9	08/14/2008	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.70	22.70	---	12.00	---	---
S-9	11/11/2008	<50 i	2.4 i	<1.0 i	<1.0 i	<1.0 i	---	<1.0 i	---	---	---	---	<0.50 i	<1.0 i	34.70	22.90	---	11.80	1.1	92
S-9	11/11/2008	550 j	74 j	12 j	22 j	55.3 j	---	---	---	---	---	---	---	---	34.70	22.90	---	11.80	3.6	98
S-9	12/18/2008	1,500	280	43	71	182	---	---	---	---	---	---	---	---	34.34	22.81	---	11.53	---	---
S-9	01/05/2009	1,000	230	24	45	64	---	---	---	---	---	---	---	---	34.34	22.75	---	11.59	---	---
S-9	01/15/2009	2,100	560	75	100	245	---	---	---	---	---	---	---	---	34.34	22.37	---	11.97	---	---
S-9	02/12/2009	500	120	19	26	50	---	---	---	---	---	---	---	---	34.34	22.61	---	11.73	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-9	03/12/2009	810	200	30	50	110	---	---	---	---	---	---	---	---	34.34	22.22	---	12.12	---	---
S-9	04/09/2009	2,300	450	60	110	260	---	---	---	---	---	---	---	---	34.34	22.12	---	12.22	0.65	79
S-9	05/18/2009	1,500	200	35	61	180	---	---	---	---	---	---	---	---	34.34	22.09	---	12.25	2.71	173
S-9	07/23/2009	1,700	430	49	110	190	---	---	---	---	---	---	---	---	34.34	22.48	---	11.86	0.21	346
S-9	10/01/2009	1,200	180	12	58	93	---	---	---	---	---	---	---	---	34.34	22.84	---	11.50	1.37	146
S-9	11/09/2009	1,400	260	21	67	81	---	---	---	---	---	---	---	---	34.34	22.63	---	11.71	0.42	---
S-9	12/01/2009	1,100	110	11	26	59	---	---	---	---	---	---	---	---	34.34	22.44	---	11.90	1.09	133
S-9	01/28/2010	860	130	9.3	38	79	---	---	---	---	---	---	---	---	34.34	22.35	---	11.99	1.95	---
S-9	05/20/2010	1,900	340	27	100	210	---	---	---	---	---	---	---	---	34.34	22.40	---	11.94	0.17	138
S-9	06/22/2010	1,400	240	30	65	130	---	---	---	---	---	---	---	---	34.34	22.64	---	11.70	2.16	577
S-9	08/31/2010	760	130	13	54	110	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	34.34	22.92	---	11.42	1.53	415
S-9	12/29/2010	290	55	3.3	18	41	---	---	---	---	---	---	---	---	34.34	22.62	---	11.72	1.64	163
S-9	02/01/2011	640	99	7.8	38	72	---	---	---	---	---	---	---	---	34.34	21.88	---	12.46	1.34	0
S-9	04/25/2011	590	120	9.1	29	77	---	---	---	---	---	---	---	---	34.34	20.34	---	14.00	0.62	98
S-9	07/28/2011	1,700	280	47	88	230	---	<1.0	<10	<1.0	<1.0	<1.0	---	---	34.34	20.10	---	14.24	2.17	73
S-9	10/28/2011	1,900	370	32	110	260	---	---	---	---	---	---	---	---	34.34	20.54	---	13.80	2.18	122
S-9	05/07/2012	970	200	14	46	100	---	<2.5	<50	<2.5	<2.5	<2.5	---	---	34.34	20.49	---	13.85	0.91	78
S-9	12/11/2012	610	160	22	32	95	---	---	---	---	---	---	---	---	34.34	22.28	---	12.06	1.28/1.53	93/76
S-9	05/02/2013	1,400	230	53	65	160	---	<2.5	<50	<2.5	<2.5	<2.5	---	---	34.34	24.36	---	9.98	---	---
S-9	11/07/2013	1,200	150	15	32	84	---	---	---	---	---	---	---	---	34.34	24.92	---	9.42	---	---
S-9	**04/21/2014**	**1,100**	**120**	**25**	**33**	**83**	**---**	**<1.3**	**<25**	**<1.3**	**<1.3**	**<1.3**	**---**	**---**	**34.34**	**24.90**	**---**	**9.44**	**---**	**---**
S-10	12/22/1994	420	27	8.0	18	45	---	---	---	---	---	---	---	---	28.04	25.84	---	2.20	---	---
S-10	04/20/1995	820	49	3.7	97	52	---	---	---	---	---	---	---	---	28.04	24.92	---	3.12	---	---
S-10	10/04/1995	240	6.5	1.1	16	12	---	---	---	---	---	---	---	---	28.04	25.47	---	2.57	---	---
S-10	01/03/1996	1,100	27	4.9	110	70	---	---	---	---	---	---	---	---	28.04	25.60	---	2.44	---	---
S-10	04/11/1996	530	19	1.6	82	52	<5.0	---	---	---	---	---	---	---	28.04	25.27	---	2.77	---	---
S-10	07/11/1996	570	16	3.2	53	53	<2.5	---	---	---	---	---	---	---	28.04	25.46	---	2.58	---	---
S-10	10/02/1996	270	8.2	0.77	24	23	3.3	---	---	---	---	---	---	---	28.04	25.81	---	2.23	---	---
S-10	01/22/1997	160	4.8	0.73	16	11	<2.5	---	---	---	---	---	---	---	28.04	24.74	---	3.30	---	---
S-10	07/21/1997	530	5.7	0.70	29	69	<2.5	---	---	---	---	---	---	---	28.04	24.50	---	3.54	---	---
S-10	01/22/1998	1,500	15	<5.0	88	130	<25	---	---	---	---	---	---	---	28.04	24.44	---	3.60	---	---
S-10	07/08/1998	530	4.8	1.1	47	51	<2.5	---	---	---	---	---	---	---	28.04	22.36	---	5.68	---	---
S-10	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.81	---	5.23	---	---
S-10	01/28/1999	630	4.6	0.98	<0.50	59	<2.5	---	---	---	---	---	---	---	28.04	23.82	---	4.22	---	---
S-10	04/23/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.96	---	5.08	---	---
S-10	07/29/1999	728	3.4	<1.00	41.8	38.0	<10.0	---	---	---	---	---	---	---	28.04	22.63	---	5.41	---	---
S-10	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	23.02	---	5.02	---	---
S-10	01/07/2000	870	8.5	1.3	110	110	<2.5	---	---	---	---	---	---	---	28.04	23.33	---	4.71	---	---
S-10	04/11/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.64	---	5.40	---	---
S-10	07/19/2000	612	3.75	<0.500	41.6	43.6	<2.50	---	---	---	---	---	---	---	28.04	23.04	---	5.00	---	---
S-10	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	23.92	---	4.12	---	---
S-10	01/09/2001	647	7.62	1.01	66.2	42.4	<2.50	---	---	---	---	---	---	---	28.04	24.13	---	3.91	---	---

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-10	04/06/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	25.37	---	2.67	---	---
S-10	07/25/2001	340	1.5	<0.50	42	19	---	<5.0	---	---	---	---	---	---	28.04	25.35	---	2.69	---	---
S-10	11/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	23.22	---	4.82	---	---
S-10	01/17/2002	1,100 d	3.5 d	<0.50 d	55 d	46 d	---	<5.0 d	---	---	---	---	---	---	28.04	22.72	---	5.32	---	---
S-10	05/08/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.35	---	5.69	---	---
S-10	07/18/2002	750	1.8	<0.50	42	26	---	<5.0	---	---	---	---	---	---	36.35	22.05	---	14.30	---	---
S-10	10/15/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.51	---	13.84	---	---
S-10	01/02/2003	440	1.8	<0.50	14	24	---	<5.0	---	---	---	---	---	---	36.35	22.50	---	13.85	---	---
S-10	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.32	---	14.03	---	---
S-10	07/14/2003	210	0.86	<0.50	13	12	---	<0.50	---	---	---	---	---	---	36.35	21.99	---	14.36	---	---
S-10	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.53	---	13.82	---	---
S-10	01/22/2004	280	0.88	<0.50	10	11	---	<0.50	---	---	---	---	---	---	36.35	22.02	---	14.33	---	---
S-10	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	21.43	---	14.92	---	---
S-10	07/13/2004	770	1.5	<0.50	70	42	---	<0.50	---	---	---	---	---	---	36.35	21.68	---	14.67	---	---
S-10	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.37	---	13.98	---	---
S-10	01/17/2005	1,100	1.5	<0.50	73	51	---	<0.50	---	---	---	---	---	---	36.35	21.45	---	14.90	---	---
S-10	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.18	---	14.17	---	---
S-10	07/28/2005	260	<0.50	<0.50	19	9.7	---	<0.50	<5.0	<2.0	<2.0	<2.0	---	---	36.35	22.25	---	14.10	---	---
S-10	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	21.70	---	14.65	---	---
S-10	02/09/2006	630	<0.500	<0.500	13.8	13.8	---	<0.500	---	---	---	---	---	---	36.35	20.37	---	15.98	---	---
S-10	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	21.31	---	15.04	---	---
S-10	08/23/2006	<50.0	<0.500	<0.500	14.5	3.4	---	<0.500	<10.0	<0.500	<0.500	<0.500	---	---	36.35	22.12	---	14.23	---	---
S-10	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.68	---	13.67	---	---
S-10	01/30/2007	120	<0.50	<0.50	7.0	3.3	---	<0.50	---	---	---	---	---	---	36.35	23.09	---	13.26	---	---
S-10	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.20	---	13.15	---	---
S-10	08/15/2007	64 f,g	0.15 h	<1.0	1.4	0.72 h	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	36.35	23.48	---	12.87	---	---
S-10	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.82	---	12.53	---	---
S-10	02/08/2008	61 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.35	23.31	---	13.04	---	---
S-10	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.55	---	12.80	---	---
S-10	08/14/2008	58	<0.50	<1.0	2.7	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.35	23.75	---	12.60	---	---
S-10	11/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.08	---	13.27	---	---
S-10	12/18/2008	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.35	24.00	---	12.35	---	---
S-10	01/05/2009	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.35	23.87	---	12.48	---	---
S-10	01/15/2009	<50	<0.50	<1.0	1.1	<1.0	---	---	---	---	---	---	---	---	36.35	23.66	---	12.69	---	---
S-10	02/12/2009	56	<0.50	<1.0	3.4	<1.0	---	---	---	---	---	---	---	---	36.35	23.96	---	12.39	---	---
S-10	03/12/2009	53	<0.50	<1.0	4.9	<1.0	---	---	---	---	---	---	---	---	36.35	23.44	---	12.91	---	---
S-10	04/09/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.26	---	13.09	---	---
S-10	07/23/2009	66	<0.50	<1.0	5.7	<1.0	---	---	---	---	---	---	---	---	36.35	23.56	---	12.79	0.06	112
S-10	10/01/2009	76	<0.50	<1.0	4.6	<1.0	---	---	---	---	---	---	---	---	36.35	23.80	---	12.55	1.26	206
S-10	01/28/2010	100	<0.50	<1.0	3.6	<1.0	---	---	---	---	---	---	---	---	36.35	23.30	---	13.05	---	---
S-10	05/20/2010	52	<0.50	<1.0	1.9	<1.0	---	---	---	---	---	---	---	---	36.35	24.04	---	12.31	0.68	59
S-10	08/31/2010	<50	0.69	<1.0	1.4	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	36.35	24.24	---	12.11	0.51	-3
S-10	12/29/2010	95	<0.50	<1.0	3.4	1.4	---	---	---	---	---	---	---	---	36.35	23.89	---	12.46	0.43	87

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-10	02/01/2011	69	<0.50	<0.50	2.2	<1.0	---	---	---	---	---	---	---	---	36.35	23.25	---	13.10	2.08	117
S-10	04/25/2011	55	0.51	<0.50	2.9	<1.0	---	---	---	---	---	---	---	---	36.35	21.87	---	14.48	1.32	21
S-10	07/28/2011	<50	<0.50	<1.0	0.92	<1.0	---	<1.0	<10	<1.0	<1.0	<1.0	---	---	36.35	21.39	---	14.96	0.32	227
S-10	10/28/2011	52	<0.50	<0.50	2.7	<1.0	---	---	---	---	---	---	---	---	36.35	21.68	---	14.67	2.68	327
S-10	05/07/2012	50	0.84	<0.50	1.5	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.35	22.00	---	14.35	2.51	220
S-10	05/02/2013	100	<0.50	<0.50	0.77	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.35	25.53	---	10.82	---	---
S-10	**04/21/2014**	**180**	**<0.50**	**<0.50**	**0.71**	**<1.0**	**---**	**<0.50**	**<10**	**<0.50**	**<0.50**	**<0.50**	**---**	**---**	**36.35**	**26.20**	**---**	**10.15**	**---**	**---**
S-12	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.44	24.58	---	11.86	---	---
S-12	02/08/2008	55 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.44	24.32	---	12.12	---	---
S-12	05/08/2008	<50 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.44	24.51	---	11.93	---	---
S-12	08/14/2008	<50	1.0	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.44	24.63	---	11.81	---	---
S-12	11/11/2008	<50 i	0.95 i	<1.0 i	<1.0 i	<1.0 i	---	<1.0 i	---	---	---	---	<0.50 i	<1.0 i	36.44	24.85	---	11.59	0.2	37
S-12	11/11/2008	65 j	8.1 j	2.2 j	4.8 j	1.5 j	---	---	---	---	---	---	---	---	36.44	24.85	---	11.59	0.2	45
S-12	12/18/2008	<50	8.3	<1.0	1.8	<1.0	---	---	---	---	---	---	---	---	36.44	24.81	---	11.63	---	---
S-12	01/05/2009	95	16	<1.0	3.2	<1.0	---	---	---	---	---	---	---	---	36.44	24.75	---	11.69	---	---
S-12	01/15/2009	140	36	<1.0	12	<1.0	---	---	---	---	---	---	---	---	36.44	24.54	---	11.90	---	---
S-12	02/12/2009	<50	5.0	<1.0	1.6	<1.0	---	---	---	---	---	---	---	---	36.44	24.81	---	11.63	---	---
S-12	03/12/2009	<50	4.8	<1.0	1.5	<1.0	---	---	---	---	---	---	---	---	36.44	24.41	---	12.03	---	---
S-12	04/09/2009	59	6.0	<1.0	1.6	<1.0	---	---	---	---	---	---	---	---	36.44	24.23	---	12.21	0.50	-3
S-12	07/23/2009	130	29	<1.0	13	<1.0	---	---	---	---	---	---	---	---	36.44	24.50	---	11.94	0.07	142
S-12	10/01/2009	130	25	<1.0	15	<1.0	---	---	---	---	---	---	---	---	36.44	24.76	---	11.68	0.74	135
S-12	01/28/2010	110	14	<1.0	19	<1.0	---	---	---	---	---	---	---	---	36.44	24.28	---	12.16	---	---
S-12	05/20/2010	75	8.5	<1.0	7.0	<1.0	---	---	---	---	---	---	---	---	36.44	24.71	---	11.73	0.14	740
S-12	08/31/2010	<50	0.56	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.44	25.08	---	11.36	1.18	180
S-12	12/29/2010	<50	0.98	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.44	24.60	---	11.84	1.27	121
S-12	02/01/2011	<50	1.8	<0.50	2.8	<1.0	---	---	---	---	---	---	---	---	36.44	23.94	---	12.50	2.06	-2
S-12	04/25/2011	<50	0.82	<0.50	1.7	<1.0	---	---	---	---	---	---	---	---	36.44	22.53	---	13.91	0.28	196
S-12	07/28/2011	<50	0.96	<0.50	2.8	<1.0	---	---	---	---	---	---	---	---	36.44	22.05	---	14.39	3.01	163
S-12	10/28/2011	99	15	<0.50	14	<1.0	---	---	---	---	---	---	---	---	36.44	22.50	---	13.94	3.67	91
S-12	05/07/2012	180	25	<0.50	19	1.0	---	---	---	---	---	---	---	---	36.44	22.50	---	13.94	0.88	66
S-12	05/02/2013	190	1.2	0.64	0.71	3.8	---	---	---	---	---	---	---	---	36.44	26.48	---	9.96	---	---
S-12	**04/21/2014**	**1,100**	**5.0**	**3.3**	**9.5**	**38**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**36.44**	**27.08**	**---**	**9.36**	**---**	**---**
S-13	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.16	23.33	---	11.83	---	---
S-13	02/08/2008	14,000 f	1,900	1,300	280	3,000	---	<10	---	---	---	---	<5.0	<10	35.16	23.01	---	12.15	---	---
S-13	05/08/2008	18,000 f	2,800	3,400	550	3,500	---	<10	---	---	---	---	<5.0	<10	35.16	23.31	---	11.85	---	---
S-13	08/14/2008	16,000	2,400	3,100	580	3,100	---	<20	---	---	---	---	<10	<20	35.16	23.31	---	11.85	---	---
S-13	11/11/2008	16,000 i	2,400 i	2,800 i	270 i	2,500 i	---	<50 i	---	---	---	---	<25 i	<50 i	35.16	23.60	---	11.56	0.8	-48
S-13	11/11/2008	4,400 j	560 j	630 j	88 j	530 j	---	---	---	---	---	---	---	---	35.16	23.60	---	11.56	1.2	-60
S-13	12/18/2008	3,900	530	560	76	510	---	---	---	---	---	---	---	---	35.05	23.61	---	11.44	---	---
S-13	01/05/2009	8,200	700	670	67	1,000	---	---	---	---	---	---	---	---	35.05	23.54	---	11.51	---	---
S-13	01/15/2009	5,400	610	610	48	950	---	---	---	---	---	---	---	---	35.05	23.10	---	11.95	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-13	02/12/2009	6,300	800	1,000	110	870	---	---	---	---	---	---	---	---	35.05	22.36	---	12.69	---	---
S-13	03/12/2009	14,000	1,700	2,300	190	2,400	---	---	---	---	---	---	---	---	35.05	23.20	---	11.85	---	---
S-13	04/09/2009	35,000	510	7,800	1,000	4,300	---	---	---	---	---	---	---	---	35.05	23.02	---	12.03	25.9	433
S-13	05/18/2009	35,000	820	7,000	1,100	6,600	---	---	---	---	---	---	---	---	35.05	23.07	---	11.98	5.21	83
S-13	07/23/2009	18,000	1,800	3,000	480	2,500	---	---	---	---	---	---	---	---	35.05	23.51	---	11.54	1.23	148
S-13	10/01/2009	2,000	330	87	33	5.2	---	---	---	---	---	---	---	---	35.05	23.61	---	11.44	1.23	413
S-13	11/09/2009	15,000	1,100	1,500	300	1,800	---	---	---	---	---	---	---	---	35.05	23.41	---	11.64	0.71	---
S-13	12/01/2009	1,600	210	190	34	36	---	---	---	---	---	---	---	---	35.05	23.15	---	11.90	16.3	231
S-13	01/28/2010	5,900	370	930	100	680	---	---	---	---	---	---	---	---	35.05	22.94	---	12.11	2.18	---
S-13	05/20/2010	400	35	120	9.5	52	---	---	---	---	---	---	---	---	35.05	23.36	---	11.69	0.31	211
S-13	06/22/2010	16,000	570	3,000	260	2,000	---	---	---	---	---	---	---	---	35.05	23.20	---	11.85	1.10	412
S-13	08/31/2010	3,000	140	490	83	540	---	---	---	---	---	---	---	---	35.05	24.00	---	11.05	0.90	400
S-13	12/29/2010	8,700	600	1,700	260	1,700	---	---	---	---	---	---	---	---	35.05	23.48	---	11.57	0.69	231
S-13	02/01/2011	2,100	170	390	75	410	---	---	---	---	---	---	---	---	35.05	22.71	---	12.34	1.10	248
S-13	04/25/2011	6,000	600	1,800	270	1,300	---	---	---	---	---	---	---	---	35.05	21.15	---	13.90	0.19	69
S-13	07/28/2011	3,700	320	430	160	790	---	---	---	---	---	---	---	---	35.05	20.64	---	14.41	2.65	44
S-13	10/28/2011	8,100	600	830	380	1,700	---	---	---	---	---	---	---	---	35.05	21.47	---	13.58	3.67	1
S-13	05/07/2012	5,100	540	670	320	1,100	---	---	---	---	---	---	---	---	35.05	21.35	---	13.70	0.60	-176
S-13	12/11/2012	5,900	420	580	260	950	---	---	---	---	---	---	---	---	35.05	22.91	---	12.14	1.07/0.80	-70/-63
S-13	05/02/2013	1,300	130	95	49	85	---	---	---	---	---	---	---	---	35.05	25.24	---	9.81	---	---
S-13	11/07/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	35.05	k	k	k	---	---
S-13	**03/14/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**26.22**	**0.25**	**9.03**	**---**	**---**
S-13	**04/21/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**26.09**	**0.39**	**9.27**	**---**	**---**
S-14	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.94	22.68	---	12.26	---	---
S-14	02/08/2008	5,300 f	380	300	34	970	---	<10	---	---	---	---	<5.0	<10	34.94	22.82	---	12.12	---	---
S-14	05/08/2008	4,300 f	750	270	30	520	---	<10	---	---	---	---	<5.0	<10	34.94	22.41	---	12.53	---	---
S-14	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-14R	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.19	22.91	---	12.28	---	---
S-14R	11/11/2008	8,500 i	680 i	270 i	<25 i	1,110 i	---	---	---	---	---	---	---	---	35.19	23.13	---	12.06	0.60	115
S-14R	11/11/2008	4,300 j	270 j	190 j	43 j	470 j	---	---	---	---	---	---	---	---	35.19	23.13	---	12.06	1.5	116
S-14R	12/18/2008	7,800	530	640	79	1,010	---	---	---	---	---	---	---	---	34.95	22.80	---	12.15	---	---
S-14R	01/05/2009	2,100	89	86	19	140	---	---	---	---	---	---	---	---	34.95	22.80	---	12.15	---	---
S-14R	01/15/2009	4,800	430	540	83	730	---	---	---	---	---	---	---	---	34.95	22.57	---	12.38	---	---
S-14R	02/12/2009	1,000	40	29	7.3	55	---	---	---	---	---	---	---	---	34.95	22.89	---	12.06	---	---
S-14R	03/12/2009	350	22	18	3.3	29	---	---	---	---	---	---	---	---	34.95	22.39	---	12.56	---	---
S-14R	04/09/2009	2,300	230	240	47	250	---	---	---	---	---	---	---	---	34.95	22.35	---	12.60	0.30	430
S-14R	05/18/2009	750	51	48	17	67	---	---	---	---	---	---	---	---	34.95	22.20	---	12.75	5.63	93
S-14R	07/23/2009	600	81	57	19	47	---	---	---	---	---	---	---	---	34.95	22.56	---	12.39	0.05	246
S-14R	10/01/2009	230	12	10	5.3	23	---	---	---	---	---	---	---	---	34.95	22.90	---	12.05	2.22	201
S-14R	11/09/2009	330	47	21	11	39	---	---	---	---	---	---	---	---	34.95	22.68	---	12.27	0.75	---
S-14R	12/01/2009	420	38	27	12	39	---	---	---	---	---	---	---	---	34.95	22.62	---	12.33	0.45	110

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-14R	01/28/2010	270	45	27	11	32	---	---	---	---	---	---	---	---	34.95	22.38	---	12.57	3.75	---
S-14R	05/20/2010	330	17	10	2.7	13	---	---	---	---	---	---	---	---	34.95	22.72	---	12.23	0.96	102
S-14R	08/31/2010	130	5.8	3.5	1.4	6.1	---	---	---	---	---	---	---	---	34.95	23.12	---	11.83	1.55	-13
S-14R	12/29/2010	480	56	30	13	52	---	---	---	---	---	---	---	---	34.95	22.75	---	12.20	0.48	375
S-14R	02/01/2011	570	56	32	20	59	---	---	---	---	---	---	---	---	34.95	22.10	---	12.85	0.58	143
S-14R	04/25/2011	860	100	59	41	97	---	---	---	---	---	---	---	---	34.95	20.80	---	14.15	0.81	-37
S-14R	07/28/2011	970	100	80	51	110	---	---	---	---	---	---	---	---	34.95	20.36	---	14.59	0.56	151
S-14R	10/28/2011	420	47	38	25	67	---	---	---	---	---	---	---	---	34.95	20.68	---	14.27	3.97	321
S-14R	05/07/2012	630	68	62	40	120	---	---	---	---	---	---	---	---	34.95	20.77	---	14.18	2.47	238
S-14R	05/02/2013	3,200	200	130	95	200	---	---	---	---	---	---	---	---	34.95	24.49	---	10.46	---	---
S-14R	**04/21/2014**	**3,700**	**190**	**160**	**99**	**290**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.95**	**24.99**	**---**	**9.96**	**---**	**---**
S-15	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.34	23.00	---	12.34	---	---
S-15	02/08/2008	55,000 f	6,700	13,000	1,100	9,800	---	<10	---	---	---	---	<5.0	<10	35.34	22.71	---	12.63	---	---
S-15	05/08/2008	53,000 f	6,300	13,000	1,500	7,500	---	<200	---	---	---	---	<100	<200	35.34	22.91	---	12.43	---	---
S-15	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-16	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.08	23.88	---	12.20	---	---
S-16	02/08/2008	6,000 f	670	730	88	1,290	---	<5.0	---	---	---	---	<2.5	<5.0	36.08	23.52	---	12.56	---	---
S-16	05/08/2008	3,200 f	670	320	18	580	---	<10	---	---	---	---	<5.0	<10	36.08	23.69	---	12.39	---	---
S-16	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-17	06/19/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.49	23.30	---	12.19	---	---
S-17	06/25/2008	21,000	1,300	1,300	160	2,850	---	<5.0	---	---	---	---	<2.5	<5.0	35.49	23.33	---	12.16	---	---
S-17	08/14/2008	14,000	1,700	1,700	310	2,250	---	<10	---	---	---	---	<5.0	<10	35.49	23.50	---	11.99	---	---
S-17	11/11/2008	7,200 i	1,600 i	820 i	140 i	760 i	---	<5.0 i	---	---	---	---	<2.5 i	<5.0 i	35.49	23.70	---	11.79	---	---
S-17	11/11/2008	32,000 j	2,500 j	3,100 j	820 j	4,000 j	---	<25 j	---	---	---	---	<12 j	<25 j	35.49	23.70	---	11.79	---	---
S-17	01/05/2009	15,000	790	700	150	1,200	---	<10	---	---	---	---	<5.0	<10	35.50	23.66	---	11.84	---	---
S-17	01/15/2009	2,300	220	170	19	300	---	---	---	---	---	---	---	---	35.50	23.37	---	12.13	---	---
S-17	02/12/2009	4,700	750	200	37	23	---	---	---	---	---	---	---	---	35.50	23.66	---	11.84	---	---
S-17	03/12/2009	3,300	640	370	81	290	---	---	---	---	---	---	---	---	35.50	23.24	---	12.26	---	---
S-17	04/09/2009	1,300	200	110	37	100	---	---	---	---	---	---	---	---	35.50	23.20	---	12.30	0.69	429
S-17	05/18/2009	630	97	44	17	25	---	---	---	---	---	---	---	---	35.50	23.21	---	12.29	5.93	442
S-17	07/23/2009	3,900	480	410	160	480	---	---	---	---	---	---	---	---	35.50	23.70	---	11.80	0.15	34
S-17	10/01/2009	1,300	32	24	3.1	72	---	---	---	---	---	---	---	---	35.50	23.64	---	11.86	1.30	204
S-17	11/09/2009	5,300	260	330	56	500	---	---	---	---	---	---	---	---	35.50	23.52	---	11.98	0.18	---
S-17	12/01/2009	3,300	190	210	52	240	---	---	---	---	---	---	---	---	35.50	23.41	---	12.09	0.95	450
S-17	01/28/2010	3,500	260	250	85	310	---	---	---	---	---	---	---	---	35.50	23.21	---	12.29	1.93	---
S-17	05/20/2010	370	18	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.50	23.65	---	11.85	1.31	544
S-17	08/31/2010	1,900	120	110	52	260	---	---	---	---	---	---	---	---	35.50	23.92	---	11.58	1.32	370
S-17	12/29/2010	2,600	200	150	91	280	---	---	---	---	---	---	---	---	35.50	23.60	---	11.90	1.37	131
S-17	02/01/2011	950	100	72	47	130	---	---	---	---	---	---	---	---	35.50	22.91	---	12.59	1.40	136
S-17	04/25/2011	2,000	150	71	77	210	---	---	---	---	---	---	---	---	35.50	21.44	---	14.06	0.23	82

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-17	07/28/2011	3,400	270	98	170	370	---	---	---	---	---	---	---	---	35.50	21.06	---	14.44	1.45	70
S-17	10/28/2011	270	58	5.3	23	28	---	---	---	---	---	---	---	---	35.50	21.51	---	13.99	1.19	221
S-17	05/07/2012	980	110	3.6	66	100	---	---	---	---	---	---	---	---	35.50	21.50	---	14.00	0.62	84
S-17	05/02/2013	570	62	20	19	49	---	---	---	---	---	---	---	---	35.50	25.49	---	10.01	---	---
S-17	**04/21/2014**	**2,500**	**140**	**120**	**98**	**310**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.50**	**25.91**	**---**	**9.59**	**---**	**---**
S-18	06/19/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.04	22.94	---	12.10	---	---
S-18	06/25/2008	58,000	2,200	5,600	880	10,200	---	<10	---	---	---	---	<5.0	<10	35.04	22.92	---	12.12	---	---
S-18	08/14/2008	25,000	2,500	4,500	860	5,800	---	<50	---	---	---	---	<25	<50	35.04	23.08	---	11.96	---	---
S-18	11/11/2008	24,000 i	2,400 i	3,300 i	820 i	3,800 i	---	<25 i	---	---	---	---	<12 i	<25 i	35.04	23.30	---	11.74	---	---
S-18	11/11/2008	43,000 j	3,900 j	5,500 j	1,300 j	6,500 j	---	<50 j	---	---	---	---	<25 j	<50 j	35.04	23.30	---	11.74	---	---
S-18	01/05/2009	20,000	830	1,000	290	1,400	---	<50	---	---	---	---	<25	<50	35.03	23.16	---	11.87	---	---
S-18	01/15/2009	8,200	690	790	150	1,230	---	---	---	---	---	---	---	---	35.03	22.97	---	12.06	---	---
S-18	02/12/2009	13,000	1,200	1,400	330	940	---	---	---	---	---	---	---	---	35.03	23.29	---	11.74	---	---
S-18	03/12/2009	52,000	5,300	9,000	1,600	10,000	---	---	---	---	---	---	---	---	35.03	22.85	---	12.18	---	---
S-18	04/09/2009	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	35.03	22.79	---	12.24	---	---
S-18	05/18/2009	6,700	320	1,100	200	1,000	---	---	---	---	---	---	---	---	35.03	22.81	---	12.22	6.51	377
S-18	07/23/2009	8,900	500	890	290	1,600	---	---	---	---	---	---	---	---	35.03	22.91	---	12.12	0.20	---
S-18	10/01/2009	1,800	49	5.5	5.3	<5.0	---	---	---	---	---	---	---	---	35.03	23.65	---	11.38	6.25	557
S-18	11/09/2009	1,100	79	8.9	5.3	1.1	---	---	---	---	---	---	---	---	35.03	23.19	---	11.84	0.26	---
S-18	12/01/2009	570	50	7.5	2.7	1.2	---	---	---	---	---	---	---	---	35.03	23.12	---	11.91	4.07	460
S-18	01/28/2010	1,200	170	91	18	68	---	---	---	---	---	---	---	---	35.03	22.86	---	12.17	1.90	---
S-18	05/20/2010	3,900	500	690	79	240	---	---	---	---	---	---	---	---	35.03	23.12	---	11.91	1.77	169
S-18	06/22/2010	13,000	1,700	2,800	200	1,000	---	---	---	---	---	---	---	---	35.03	23.10	---	11.93	0.58	499
S-18	08/31/2010	6,600	970	1,100	230	1,000	---	---	---	---	---	---	---	---	35.03	23.55	---	11.48	1.23	258
S-18	12/29/2010	8,500	1,000	750	410	1,800	---	---	---	---	---	---	---	---	35.03	23.23	---	11.80	0.79	70
S-18	02/01/2011	2,100	210	190	87	180	---	---	---	---	---	---	---	---	35.03	22.52	---	12.51	1.13	220
S-18	04/25/2011	13,000	2,100	2,000	470	2,300	---	---	---	---	---	---	---	---	35.03	21.00	---	14.03	0.52	85
S-18	07/28/2011	8,200	1,200	1,000	290	1,200	---	---	---	---	---	---	---	---	35.03	20.56	---	14.47	1.57	27
S-18	10/28/2011	9,000	1,200	480	430	1,900	---	---	---	---	---	---	---	---	35.03	21.11	---	13.92	1.45	147
S-18	05/07/2012	4,700	710	310	310	870	---	---	---	---	---	---	---	---	35.03	21.20	---	13.83	0.55	-68
S-18	05/02/2013	5,000	720	280	220	480	---	---	---	---	---	---	---	---	35.03	24.95	---	10.08	---	---
S-18	**04/21/2014**	**1,400**	**240**	**190**	**70**	**230**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.03**	**25.61**	**---**	**9.42**	**---**	**---**
S-19	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.78	22.73	---	12.05	---	---
S-19	11/11/2008	7,100 i	500 i	600 i	25 i	1,010 i	---	---	---	---	---	---	---	---	34.78	22.87	---	11.91	1.0	62
S-19	11/11/2008	2,300 j	110 j	160 j	43 j	280 j	---	---	---	---	---	---	---	---	34.78	22.87	---	11.91	1.3	71
S-19	12/18/2008	2,900	190	300	41	420	---	---	---	---	---	---	---	---	34.57	22.60	---	11.97	---	---
S-19	01/05/2009	3,400	230	250	50	380	---	---	---	---	---	---	---	---	34.57	22.56	---	12.01	---	---
S-19	01/15/2009	3,100	340	540	70	440	---	---	---	---	---	---	---	---	34.57	22.31	---	12.26	---	---
S-19	02/12/2009	1,300	130	180	37	190	---	---	---	---	---	---	---	---	34.57	22.58	---	11.99	---	---
S-19	03/12/2009	880	110	150	30	160	---	---	---	---	---	---	---	---	34.57	22.44	---	12.13	---	---
S-19	04/09/2009	1,300	140	190	32	190	---	---	---	---	---	---	---	---	34.57	22.02	---	12.55	0.57	106

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-19	05/18/2009	780	69	87	17	100	---	---	---	---	---	---	---	---	34.57	22.04	---	12.53	6.47	75
S-19	07/23/2009	400	77	59	15	38	---	---	---	---	---	---	---	---	34.57	22.40	---	12.17	0.06	31
S-19	10/01/2009	1,500	160	170	33	120	---	---	---	---	---	---	---	---	34.57	22.66	---	11.91	0.52	301
S-19	11/09/2009	1,600	140	160	41	160	---	---	---	---	---	---	---	---	34.57	22.44	---	12.13	0.26	---
S-19	12/01/2009	1,600	150	180	45	170	---	---	---	---	---	---	---	---	34.57	22.62	---	11.95	0.79	161
S-19	01/28/2010	2,600	230	280	71	300	---	---	---	---	---	---	---	---	34.57	22.29	---	12.28	1.71	---
S-19	05/20/2010	850	110	55	11	4.6	---	---	---	---	---	---	---	---	34.57	22.49	---	12.08	1.77	118
S-19	08/31/2010	580	79	92	22	50	---	---	---	---	---	---	---	---	34.57	22.86	---	11.71	1.02	297
S-19	12/29/2010	920	120	120	54	150	---	---	---	---	---	---	---	---	34.57	22.48	---	12.09	1.12	150
S-19	02/01/2011	1,800	210	270	100	320	---	---	---	---	---	---	---	---	34.57	21.78	---	12.79	1.08	21
S-19	04/25/2011	2,100	290	360	140	470	---	---	---	---	---	---	---	---	34.57	20.42	---	14.15	0.25	115
S-19	07/28/2011	2,400	240	380	140	450	---	---	---	---	---	---	---	---	34.57	20.16	---	14.41	1.17	80
S-19	10/28/2011	3,600	210	420	190	750	---	---	---	---	---	---	---	---	34.57	20.41	---	14.16	1.73	160
S-19	05/07/2012	3,400	220	480	210	880	---	---	---	---	---	---	---	---	34.57	20.51	---	14.06	2.54	244
S-19	12/11/2012	1,700	110	240	100	440	---	---	---	---	---	---	---	---	34.57	22.05	---	12.52	0.89/2.21	81/52
S-19	05/02/2013	1,500	88	89	55	160	---	---	---	---	---	---	---	---	34.57	24.15	---	10.42	---	---
S-19	11/07/2013	170,000	1,200	7,300	3,800	22,000	---	---	---	---	---	---	---	---	34.57	k	k	k	---	---
S-19	**04/21/2014**	**32,000**	**580**	**1,400**	**940**	**4,300**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.57**	**24.95**	**---**	**9.62**	**---**	**---**
S-20	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.50	22.80	---	11.70	---	---
S-20	11/11/2008	13,000 i	1,300 i	1,600 i	80 i	1,920 i	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	0.8	-39
S-20	11/11/2008	16,000 j	1,100 j	1,800 j	220 j	1,930 j	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	2.6	-64
S-20	01/05/2009	17,000	1,500	1,700	320	1,900	---	---	---	---	---	---	---	---	34.50	22.78	---	11.72	---	---
S-20	02/12/2009	11,000	1,300	1,400	230	1,600	---	---	---	---	---	---	---	---	34.50	22.80	---	11.70	2.6	-64
S-20	03/12/2009	19,000	2,700	3,200	390	3,100	---	---	---	---	---	---	---	---	34.50	22.40	---	12.10	---	---
S-20	04/09/2009	8,200	80	480	220	490	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	13.80	578
S-20	05/18/2009	21,000	970	1,500	630	4,800	---	---	---	---	---	---	---	---	34.50	22.42	---	12.08	4.58	197
S-20	07/23/2009	41,000	4,900	2,900	990	7,300	---	---	---	---	---	---	---	---	34.50	22.73	---	11.77	0.27	419
S-20	10/01/2009	1,800	140	39	33	39	---	---	---	---	---	---	---	---	34.50	23.00	---	11.50	0.85	533
S-20	11/09/2009	21,000	1,600	740	300	2,500	---	---	---	---	---	---	---	---	34.50	22.72	---	11.78	1.67	---
S-20	12/01/2009	12,000	1,100	450	160	1,200	---	---	---	---	---	---	---	---	34.50	22.61	---	11.89	1.38	347
S-20	01/28/2010	20,000	2,000	1,600	260	2,000	---	---	---	---	---	---	---	---	34.50	22.51	---	11.99	4.40	---
S-20	05/20/2010	4,300	1,100	110	26	61	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	8.96	555
S-20	06/22/2010	7,100	1,300	550	120	550	---	---	---	---	---	---	---	---	34.50	23.19	---	11.31	11.64	637
S-20	08/31/2010	9,600	1,800	1,400	230	580	---	---	---	---	---	---	---	---	34.50	23.13	---	11.37	0.94	529
S-20	12/29/2010	19,000	2,000	3,100	860	3,200	---	---	---	---	---	---	---	---	34.50	22.72	---	11.78	0.92	193
S-20	02/01/2011	26,000	3,900	7,100	1,300	5,800	---	---	---	---	---	---	---	---	34.50	22.04	---	12.46	1.03	390
S-20	04/25/2011	41,000	6,600	11,000	2,000	9,800	---	---	---	---	---	---	---	---	34.50	20.60	---	13.90	0.43	156
S-20	07/28/2011	34,000	4,200	5,300	1,400	6,300	---	---	---	---	---	---	---	---	34.50	20.30	---	14.20	1.25	-15
S-20	10/28/2011	17,000	1,500	1,900	1,000	3,400	---	---	---	---	---	---	---	---	34.50	20.78	---	13.72	1.28	431
S-20	05/07/2012	9,900	760	1,200	790	2,000	---	---	---	---	---	---	---	---	34.50	20.54	---	13.96	1.92	-106
S-20	12/11/2012	9,700	630	1,000	720	1,500	---	---	---	---	---	---	---	---	34.50	22.29	---	12.21	0.82/1.67	-11/-43
S-20	05/02/2013	4,500	380	220	240	300	---	---	---	---	---	---	---	---	34.50	24.50	---	10.00	---	---

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-20	11/07/2013	4,000	420	290	60	330	---	---	---	---	---	---	---	---	34.50	25.24	---	9.26	---	---
S-20	**04/21/2014**	**3,800**	**480**	**350**	**50**	**350**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.50**	**25.15**	**---**	**9.35**	**---**	**---**
S-21A	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.81	23.73	---	12.08	---	---
S-21A	11/11/2008	96,000 i	6,100 i	11,000 i	1,700 i	10,500 i	---	---	---	---	---	---	---	---	35.81	23.86	---	11.95	1.6	-42
S-21A	11/11/2008	87,000 j	6,300 j	13,000 j	1,700 j	10,300 j	---	---	---	---	---	---	---	---	35.81	23.86	---	11.95	1.8	-51
S-21A	12/18/2008	17,000	3,700	1,200	170	47	---	---	---	---	---	---	---	---	35.80	23.91	---	11.89	---	---
S-21A	01/05/2009	28,000	3,100	2,900	450	1,100	---	---	---	---	---	---	---	---	35.80	23.78	---	12.02	---	---
S-21A	01/15/2009	9,700	2,100	290	45	<25	---	---	---	---	---	---	---	---	35.80	23.53	---	12.27	---	---
S-21A	02/12/2009	19,000	3,100	2,500	330	500	---	---	---	---	---	---	---	---	35.80	23.83	---	11.97	---	---
S-21A	03/12/2009	31,000	2,600	3,800	810	3,700	---	---	---	---	---	---	---	---	35.80	23.35	---	12.45	---	---
S-21A	04/09/2009	7,800	700	750	130	<25	---	---	---	---	---	---	---	---	35.80	24.00	---	11.80	0.91	304
S-21A	05/18/2009	15,000	1,800	2,200	390	1,900	---	---	---	---	---	---	---	---	35.80	23.46	---	12.34	2.37	529
S-21A	07/23/2009	51,000	4,800	7,100	1,100	7,000	---	---	---	---	---	---	---	---	35.80	23.85	---	11.95	0.14	-3
S-21A	10/01/2009	18,000	2,300	2,200	310	2,400	---	---	---	---	---	---	---	---	35.80	24.06	---	11.74	7.92	575
S-21A	11/09/2009	41,000	3,500	5,800	600	4,800	---	---	---	---	---	---	---	---	35.80	23.73	---	12.07	0.34	---
S-21A	12/01/2009	43,000	3,100	6,700	640	4,900	---	---	---	---	---	---	---	---	35.80	23.60	---	12.20	2.55	350
S-21A	01/28/2010	65,000	3,900	9,900	970	6,600	---	---	---	---	---	---	---	---	35.80	23.54	---	12.26	1.43	---
S-21A	05/20/2010	6,000	670	760	110	150	---	---	---	---	---	---	---	---	35.80	23.92	---	11.88	1.37	541
S-21A	06/22/2010	16,000	690	2,000	370	2,300	---	---	---	---	---	---	---	---	35.80	23.87	---	11.93	2.33	439
S-21A	08/31/2010	5,000	230	420	190	990	---	---	---	---	---	---	---	---	35.80	24.13	---	11.67	0.73	392
S-21A	12/29/2010	5,100	500	430	230	810	---	---	---	---	---	---	---	---	35.80	23.84	---	11.96	0.95	464
S-21A	02/01/2011	9,200	840	750	370	1,300	---	---	---	---	---	---	---	---	35.80	23.18	---	12.62	0.84	110
S-21A	04/25/2011	22,000	3,800	4,000	960	4,800	---	---	---	---	---	---	---	---	35.80	21.71	---	14.09	0.36	336
S-21A	07/28/2011	27,000	3,400	3,600	1,000	4,300	---	---	---	---	---	---	---	---	35.80	21.48	---	14.32	1.02	223
S-21A	10/28/2011	20,000	2,400	3,000	840	3,600	---	---	---	---	---	---	---	---	35.80	21.65	---	14.15	2.06	213
S-21A	05/07/2012	12,000	2,200	1,900	510	2,100	---	---	---	---	---	---	---	---	35.80	21.90	---	13.90	1.01	107
S-21A	12/11/2012	13,000	3,300	2,200	610	1,300	---	---	---	---	---	---	---	---	35.80	22.60	---	13.20	1.35/1.49	82/80
S-21A	05/02/2013	6,800	1,000	470	270	480	---	---	---	---	---	---	---	---	35.80	25.48	---	10.32	---	---
S-21A	11/07/2013	32,000	4,100	3,000	940	2,900	---	---	---	---	---	---	---	---	35.80	26.28	---	9.52	---	---
S-21A	**04/21/2014**	**Insufficient water**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.80**	**26.29**	**---**	**9.51**	**---**	**---**
S-21B	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.79	23.68	---	12.11	---	---
S-21B	11/11/2008	3,200 i	49 i	300 i	93 i	510 i	---	---	---	---	---	---	---	---	35.79	23.80	---	11.99	0.4	-108
S-21B	11/11/2008	7,500 j	67 j	470 j	150 j	960 j	---	---	---	---	---	---	---	---	35.79	23.80	---	11.99	5.6	-135
S-21B	12/18/2008	5,300	36	310	120	770	---	---	---	---	---	---	---	---	35.76	23.72	---	12.04	---	---
S-21B	01/05/2009	5,400	35	200	93	600	---	---	---	---	---	---	---	---	35.76	23.70	---	12.06	---	---
S-21B	01/15/2009	3,300	30	150	78	470	---	---	---	---	---	---	---	---	35.76	23.43	---	12.33	---	---
S-21B	02/12/2009	2,800	12	100	69	450	---	---	---	---	---	---	---	---	35.76	23.81	---	11.95	---	---
S-21B	03/12/2009	2,300	9.4	72	50	320	---	---	---	---	---	---	---	---	35.76	23.32	---	12.44	---	---
S-21B	04/09/2009	890	14	55	19	140	---	---	---	---	---	---	---	---	35.76	23.20	---	12.56	0.56	453
S-21B	05/18/2009	390	6.8	14	12	27	---	---	---	---	---	---	---	---	35.76	23.24	---	12.52	1.62	458
S-21B	06/17/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	35.76	23.40	---	12.36	---	---

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-21B	07/23/2009	920	5.0	17	28	120	---	---	---	---	---	---	---	---	35.76	23.52	---	12.24	0.26	37
S-21B	10/01/2009	820	2.6	10	17	89	---	---	---	---	---	---	---	---	35.76	23.95	---	11.81	0.96	353
S-21B	01/28/2010	810	11	6.2	10	51	---	---	---	---	---	---	---	---	35.76	23.30	---	12.46	---	---
S-21B	05/20/2010	120	1.4	2.6	2.0	2.7	---	---	---	---	---	---	---	---	35.76	23.46	---	12.30	1.63	206
S-21B	08/31/2010	500	0.81	3.4	6.9	32	---	---	---	---	---	---	---	---	35.76	24.04	---	11.72	0.72	45
S-21B	12/29/2010	310	<0.50	1.9	4.5	21	---	---	---	---	---	---	---	---	35.76	23.59	---	12.17	0.40	191
S-21B	02/01/2011	270	<0.50	2.0	4.0	16	---	---	---	---	---	---	---	---	35.76	23.08	---	12.68	0.51	10
S-21B	04/25/2011	250	<0.50	1.9	4.6	16	---	---	---	---	---	---	---	---	35.76	21.86	---	13.90	1.43	72
S-21B	07/28/2011	270	<0.50	0.84	3.0	11	---	---	---	---	---	---	---	---	35.76	21.32	---	14.44	2.86	127
S-21B	10/28/2011	220	<0.50	0.53	2.3	9.2	---	---	---	---	---	---	---	---	35.76	21.52	---	14.24	0.96	153
S-21B	05/07/2012	170	<0.50	0.62	1.5	7.6	---	---	---	---	---	---	---	---	35.76	22.04	---	13.72	0.75	100
S-21B	05/02/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.76	25.59	---	10.17	---	---
S-21B	**04/21/2014**	**52**	**1.7**	**2.4**	**0.80**	**4.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.76**	**26.14**	**---**	**9.62**	**---**	**---**
S-22A	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.08	22.91	---	12.17	---	---
S-22A	11/11/2008	84,000 i	8,500 i	11,000 i	2,200 i	13,900 i	---	---	---	---	---	---	---	---	35.08	23.15	---	11.93	1.0	117
S-22A	11/11/2008	85,000 j	7,600 j	10,000 j	2,500 j	12,400 j	---	---	---	---	---	---	---	---	35.08	23.15	---	11.93	1.6	100
S-22A	12/18/2008	42,000	6,300	6,600	1,200	4,400	---	---	---	---	---	---	---	---	35.06	23.03	---	12.03	---	---
S-22A	01/05/2009	56,000	4,500	5,300	1,200	6,400	---	---	---	---	---	---	---	---	35.06	23.03	---	12.03	---	---
S-22A	01/15/2009	25,000	5,900	4,400	740	1,570	---	---	---	---	---	---	---	---	35.06	22.84	---	12.22	---	---
S-22A	02/12/2009	43,000	6,700	6,600	1,200	5,000	---	---	---	---	---	---	---	---	35.06	23.15	---	11.91	---	---
S-22A	03/12/2009	35,000	4,600	4,600	980	4,600	---	---	---	---	---	---	---	---	35.06	22.65	---	12.41	---	---
S-22A	04/09/2009	22,000	120	1,900	680	3,400	---	---	---	---	---	---	---	---	35.06	22.88	---	12.18	8.41	556
S-22A	05/18/2009	25,000	4,700	1,300	590	3,700	---	---	---	---	---	---	---	---	35.06	22.83	---	12.23	2.46	539
S-22A	07/23/2009	40,000	5,100	4,800	700	4,900	---	---	---	---	---	---	---	---	35.06	23.01	---	12.05	0.18	167
S-22A	10/01/2009	12,000	1,400	600	88	500	---	---	---	---	---	---	---	---	35.06	23.06	---	12.00	4.08	523
S-22A	11/09/2009	18,000	2,700	2,000	190	1,300	---	---	---	---	---	---	---	---	35.06	23.14	---	11.92	1.74	---
S-22A	12/01/2009	24,000	2,300	2,300	270	2,000	---	---	---	---	---	---	---	---	35.06	23.10	---	11.96	1.06	393
S-22A	01/28/2010	44,000	3,600	5,000	620	4,300	---	---	---	---	---	---	---	---	35.06	22.92	---	12.14	1.40	---
S-22A	05/20/2010	3,100	38	<10	<10	<10	---	---	---	---	---	---	---	---	35.06	23.22	---	11.84	0.48	423
S-22A	06/22/2010	2,400	110	15	4.3	6.6	---	---	---	---	---	---	---	---	35.06	23.51	---	11.55	6.10	542
S-22A	08/31/2010	5,000	690	600	78	350	---	---	---	---	---	---	---	---	35.06	23.52	---	11.54	1.03	553
S-22A	12/29/2010	13,000	1,300	1,800	490	2,100	---	---	---	---	---	---	---	---	35.06	23.17	---	11.89	0.70	476
S-22A	02/01/2011	13,000	1,800	3,100	640	2,800	---	---	---	---	---	---	---	---	35.06	22.45	---	12.61	0.89	453
S-22A	04/25/2011	23,000	2,600	5,500	1,200	6,200	---	---	---	---	---	---	---	---	35.06	21.37	---	13.69	0.40	506
S-22A	07/28/2011	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.06	---	---	---	---	---
S-22A	10/28/2011	31,000	1,800	4,700	1,600	8,100	---	---	---	---	---	---	---	---	35.06	20.98	---	14.08	1.33	342
S-22A	05/07/2012	40,000	2,000	7,200	2,000	12,000	---	---	---	---	---	---	---	---	35.06	20.96	---	14.10	2.50	230
S-22A	12/11/2012	54,000	1,800	8,900	2,400	14,000	---	---	---	---	---	---	---	---	35.06	23.42	---	11.64	0.99/1.96	-14/-21
S-22A	05/02/2013	53,000	1,800	6,800	2,200	11,000	---	---	---	---	---	---	---	---	35.06	24.71	---	10.35	---	---
S-22A	11/07/2013	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.06	---	---	---	---	---
S-22A	**04/21/2014**	**Well inaccessible**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.06**	**---**	**---**	**---**	**---**	**---**

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-22B	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.15	23.06	---	12.09	---	---
S-22B	11/11/2008	<50 i	<0.50 i	<1.0 i	<1.0 i	1.2 i	---	---	---	---	---	---	---	---	35.15	23.20	---	11.95	0.9	92
S-22B	11/11/2008	360 j	3.3 j	12 j	5.8 j	38 j	---	---	---	---	---	---	---	---	35.15	23.20	---	11.95	1.6	90
S-22B	12/18/2008	150	2.9	6.1	2.9	17.5	---	---	---	---	---	---	---	---	35.24	23.26	---	11.98	---	---
S-22B	01/05/2009	110	1.9	5.0	2.6	11	---	---	---	---	---	---	---	---	35.24	28.12	---	7.12	---	---
S-22B	01/15/2009	59	1.3	1.9	1.6	<1.0	---	---	---	---	---	---	---	---	35.24	22.90	---	12.34	---	---
S-22B	02/12/2009	290	11	6.8	7.9	19	---	---	---	---	---	---	---	---	35.24	23.02	---	12.22	---	---
S-22B	03/12/2009	390	4.4	4.6	3.8	12	---	---	---	---	---	---	---	---	35.24	22.86	---	12.38	---	---
S-22B	04/09/2009	280	5.3	2.5	4.0	6.8	---	---	---	---	---	---	---	---	35.24	22.62	---	12.62	2.24	164
S-22B	05/18/2009	170	3.7	2.9	2.4	8.6	---	---	---	---	---	---	---	---	35.24	22.62	---	12.62	1.42	-171
S-22B	07/23/2009	160	8.9	5.7	3.8	12	---	---	---	---	---	---	---	---	35.24	22.65	---	12.59	0.15	28
S-22B	10/01/2009	300	2.4	1.0	1.2	<1.0	---	---	---	---	---	---	---	---	35.24	23.18	---	12.06	2.62	173
S-22B	01/28/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	22.73	---	12.51	---	---
S-22B	05/20/2010	230	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	22.88	---	12.36	6.14	584
S-22B	08/31/2010	<50	0.57	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	23.51	---	11.73	0.92	377
S-22B	12/29/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	23.04	---	12.20	1.07	391
S-22B	02/01/2011	<50	0.55	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.24	22.70	---	12.54	1.07	-3
S-22B	04/25/2011	<50	<0.50	0.62	<0.50	1.1	---	---	---	---	---	---	---	---	35.24	21.38	---	13.86	1.37	416
S-22B	07/28/2011	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.24	---	---	---	---	---
S-22B	10/28/2011	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	20.62	---	14.62	4.83	-12
S-22B	05/07/2012	<50	1.4	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.24	21.08	---	14.16	2.84	127
S-22B	05/02/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.24	24.68	---	10.56	---	---
S-22B	**04/21/2014**	**Well inaccessible**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.24**	**---**	**---**	**---**	**---**	**---**
S-23	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.77	23.28	---	12.49	---	---
S-23	11/11/2008	8,800 i	640 i	610 i	82 i	1,260 i	---	---	---	---	---	---	---	---	35.77	23.58	---	12.19	---	---
S-23	11/11/2008	6,400 j	520 j	640 j	34 j	760 j	---	---	---	---	---	---	---	---	35.77	23.58	---	12.19	---	---
S-23	01/05/2009	830	63	98	14	58	---	---	---	---	---	---	---	---	35.75	23.51	---	12.24	---	---
S-23	02/12/2009	3,400	160	320	55	430	---	---	---	---	---	---	---	---	35.75	23.62	---	12.13	---	---
S-23	03/12/2009	4,600	210	460	71	610	---	---	---	---	---	---	---	---	35.75	23.03	---	12.72	---	---
S-23	04/09/2009	2,700	180	95	33	<5.0	---	---	---	---	---	---	---	---	35.75	22.98	---	12.77	1.24	567
S-23	05/18/2009	3,000	350	440	79	300	---	---	---	---	---	---	---	---	35.75	23.18	---	12.57	19.77	503
S-23	07/23/2009	2,900	180	400	67	340	---	---	---	---	---	---	---	---	35.75	23.48	---	12.27	0.21	133
S-23	10/01/2009	790	40	24	5.4	<1.0	---	---	---	---	---	---	---	---	35.75	23.82	---	11.93	8.64	428
S-23	11/09/2009	3,200	84	330	90	400	---	---	---	---	---	---	---	---	35.75	23.51	---	12.24	0.28	---
S-23	12/01/2009	1,800	47	180	50	190	---	---	---	---	---	---	---	---	35.75	23.31	---	12.44	2.49	472
S-23	01/28/2010	3,000	100	450	110	650	---	---	---	---	---	---	---	---	35.75	23.25	---	12.50	1.74	---
S-23	05/20/2010	900	8.2	<5.0	<5.0	<5.0	---	---	---	---	---	---	---	---	35.75	23.80	---	11.95	3.76	607
S-23	06/22/2010	640	11	22	9.0	11	---	---	---	---	---	---	---	---	35.75	24.40	---	11.35	12.96	572
S-23	08/31/2010	710	14	45	34	110	---	---	---	---	---	---	---	---	35.75	23.95	---	11.80	1.25	322
S-23	12/29/2010	1,300	45	82	56	240	---	---	---	---	---	---	---	---	35.75	23.61	---	12.14	1.39	313
S-23	02/01/2011	1,300	51	110	72	270	---	---	---	---	---	---	---	---	35.75	22.92	---	12.83	1.30	107
S-23	04/25/2011	1,300	53	110	81	400	---	---	---	---	---	---	---	---	35.75	21.62	---	14.13	0.96	321

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*
S-23	07/28/2011	1,400	43	79	74	320	---	---	---	---	---	---	---	---	35.75	21.28	---	14.47	0.92	209
S-23	10/28/2011	1,600	43	83	92	370	---	---	---	---	---	---	---	---	35.75	21.50	---	14.25	1.82	161
S-23	05/07/2012	870	50	40	66	220	---	---	---	---	---	---	---	---	35.75	21.59	---	14.16	2.20	254
S-23	05/02/2013	540	24	15	5.6	25	---	---	---	---	---	---	---	---	35.75	25.04	---	10.71	---	---
S-23	**04/21/2014**	**1,700**	**110**	**47**	**8.4**	**95**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.75**	**25.67**	**---**	**10.08**	**---**	**---**
AS-1	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.33	22.91	---	12.42	---	---
AS-1	02/08/2008	130 f	1.1	3.4	<1.0	5.4	---	<1.0	---	---	---	---	<0.50	<1.0	35.33	22.62	---	12.71	---	---
AS-1	05/08/2008	<50 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	35.33	27.78	---	7.55	---	---
OW-1	04/09/2009	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OW-1	05/18/2009	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to July 25, 2001, analyzed by EPA Method 8015 unless otherwise noted.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to July 25, 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
EDC = 1,2-Dichloroethane analyzed by EPA Method 8260B.
EDB = 1,2-Dibromoethane 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 (pre-purge/post purge reading)
ORP = Oxygen redox potential (pre-purge/post purge reading)
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
mg/L = Milligrams per liter
mV = Millivolts
<x = Not detected at reporting limit x
--- = Not analyzed or available
(D) = Duplicate sample

a = Included in xylenes analysis
b = Analyzed outside of EPA recommended holding time
c = Depth to water measured from TOC; elevation unknown.
d = Grab sampled
e = Casing broken; TOC unknown.
f = Analyzed by EPA Method 8015B (M)

TABLE 1

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*EDC (µg/L)*	*EDB (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*SPH Thickness (ft)*	*GW Elevation (ft MSL)*	*DO (mg/L)*	*ORP (mV)*

g = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
h = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
i = Pre-purge sample
j = Post-purge sample
k = SPH present; well purged prior to gauging with interface probe

When SPHs are present, groundwater elevation is adjusted using the relation: Corrected groundwater elevation = TOC - Depth to Water + (0.8 x Hydrocarbon Thickness).
Beginning July 18, 2002, well elevations measured from TOC
Site wells surveyed March 5, 2002 by Virgil Chavez Land Surveying
Site wells surveyed December 18, 2007 by Virgil Chavez Land Surveying
Wells S-14R and S-19 through S-23 surveyed on November 11, 2008 by Virgil Chavez Land Surveying
Well S-5 surveyed on November 11, 2008 by Virgil Chavez Land Surveying
Well S-5 surveyed on October 8, 2009 by Virgil Chavez Land Surveying

APPENDIX A

SITE HISTORY

SITE HISTORY

The property was leased by American Oil Company from at least 1965 until 1972, when the lease was assigned to Shell Oil Products US (Shell). A Shell-branded service station operated on the property from 1972 to 1980. The underground storage tanks (USTs) associated with the former Shell service station were removed after Shell terminated operations at the site in May 1980.

1978 - 1980 Separate Phase Hydrocarbons (SPHs) Discovered in Bay Area Rapid Transit's (BART's) KE Line Tunnel: In January 1979, BART notified Shell that they had found SPHs in a tunnel under the intersection of 7th Street and Broadway. Shell tested the product lines at the subject site and found a pressure leak. Shell replaced the product lines in January 1979. Shell also tested the USTs' tightness, and they passed. According to BART's January 10, 1979 to December 3, 1981 *Bart Recovery Project Log* and Groundwater Technology, Inc.'s (GTI's) 1981 *Considerations on Infiltration of Gasoline into BART KE Line* report, one observation well was installed to a depth of 25 feet below grade (fbg) concurrent with piping replacement, and no contamination was reported. SPH analyses conducted in January 1979 and in May 1981 identified the SPHs in the BART tunnel as Shell Regular gasoline. Between October 1979 and April 1980, approximately 4,400 gallons of water and gasoline were removed from the BART tunnel. The Shell-branded station discontinued operations in May 1980, and all existing improvements, tanks, and associated piping were removed. No UST removal or piping removal reports are available.

1981 – 1988 Subsurface Investigations: In August and September 1981, GTI installed seven monitoring wells (L-1 through L-7) to delineate the extent of hydrocarbons in groundwater. Based on groundwater sampling results, in December 1981, Gettler-Ryan, Inc. (G-R) installed a recovery well adjacent to well L-6. Wells L-1 through L-3 were destroyed during construction of the BART tunnels in the mid-1980s. Well destruction records are not available. Wells L-4, L-5, and L-6 were renamed S-4, S-5, and S-6. G-R began gauging wells S-4 through S-6 in 1986 and collecting groundwater samples for analysis in 1988. GeoStrategies Inc.'s (GSI's) September 14, 1993 *Work Plan* summarizes groundwater extraction (GWE) activities associated with the recovery well. Enviros, Inc.'s (Enviros') November 2, 1993 *Work Plan for Soil and Groundwater Sampling* summarizes other investigation activities.

1982 – 2004 GWE: From February 1982 to August 1982, G-R conducted GWE from the recovery well located adjacent to well L-6. Enviros' November 2, 1993 *Work Plan for Soil and Groundwater Sampling* summarizes the GWE system operation.

In October 1987, G-R conducted mobile GWE from well S-5 and reportedly pumped approximately 50 gallons of SPHs from the well. G-R's January 9, 1989 monitoring report summarizes this GWE event.

In the third quarter of 1992, GSI conducted mobile GWE from well S-5, which removed approximately 200 gallons of groundwater containing less than one percent SPHs. This event is mentioned in GSI's January 12, 1993 status report.

In May 1993, Crosby and Overton, Inc. conducted mobile GWE from well S-5, which removed approximately 150 gallons of groundwater and SPHs. This event is summarized in GSI's July 6, 1993 *Quarterly Report*.

From July 1993 to July 2004, periodic mobile GWE was conducted from wells S-5 and S-6, which removed approximately 6,754 gallons of groundwater containing approximately 2.8 pounds of total petroleum hydrocarbons as gasoline (TPHg) and 0.64 pounds of benzene. Cambria Environmental Technology, Inc.'s (Cambria's) *Groundwater Monitoring Report – Second Quarter 2004* provides tabulated GWE data for this period.

1987 BART Tunnel Inspection: In November 1987, G-R conducted an inspection of the KE line tunnel with BART personnel. No gasoline seepage was observed. G-R's January 9, 1989 monitoring report summarizes the inspection results.

1993 Phase I Assessment: GSI's June 30, 1993 *Phase I Preliminary Site Assessment* identified seven sites with known UST leaks within a one-quarter mile radius of the site including an Oakland Police Department (OPD) site located down gradient (southwest). The *Bart Recovery Project Log* noted that leaking USTs were replaced at the OPD site in October 1979 and that OPD had received product deliveries from a local Shell gasoline distributor. In addition, a permit to repair the product lines and dispensers at the OPD site was taken out in 1984 by Egan and Paradiso Company, but no additional information was available. The OPD site is not listed in Geotracker or on Alameda County Environmental Health's website.

1994 Subsurface Investigation: During July 1994, Enviros drilled nine soil borings (B-1 through B-9) in the vicinity of the former pump islands and the former USTs. Soil samples collected from the borings near the dispenser islands contained up to 15 milligrams per kilogram (mg/kg) TPHg and 0.24 mg/kg benzene. No TPHg or benzene was detected in soil samples from borings drilled in the area of the former piping or the former USTs. This investigation is described in Enviros' August 16, 1994 *Site Investigation Report*.

1994 - 1995 Subsurface Investigation: During December 1994, Enviros installed three monitoring wells (S-8, S-9, and S-10). Soil samples collected from the well borings contained up to 760 mg/kg TPHg (S-10 at 11.5 fbg) and 0.014 mg/kg benzene (S-8 at 21.5 fbg). Enviros' February 14, 1995 *Site Investigation Report and Quarterly Monitoring Report – First Quarter 1995* provides investigation results.

1995 SPH Removal: From January 1995 to October 1995, Blaine Tech Services, Inc. removed approximately 3.1 liters of SPHs by bailing. SPH removal details are provided in Enviros' quarterly monitoring reports for this period.

2002 Sensitive Receptor Survey (SRS): In February 2002, Cambria submitted an SRS which identified a school approximately 1,300 feet west of the site and the Oakland Inner Harbor approximately 2,400 feet south-southwest of the site. Cambria's review of California Department of Water Resources well records did not identify any water-producing wells within one-half mile of the site. Cambria's review of utility records from the City of Oakland and the East Bay Municipal Utilities District did not identify any utilities which would provide preferential pathways for groundwater migration; however, five BART tunnels were identified which intercept groundwater in the vicinity. SRS details are provided in Cambria's February 11, 2002 *SRS, Well Survey, Conduit Study, and Cross-Sectional Diagram Report.*

2003 Subsurface Investigation: In October 2003, Cambria drilled one soil boring (HA-1) within 7th Street, south of the site. No TPHg, benzene, or methyl tertiary-butyl ether (MTBE) was detected in soil samples. A grab groundwater sample from the boring contained 6.3 micrograms per liter (µg/L) MTBE. Investigation activities are described in Cambria's December 16, 2003 *Subsurface Investigation Report*.

2004 Subsurface Investigation: During May 2004, Treadwell & Rollo, Inc. (T&R) drilled four soil borings (TR-1 through TR-4) and four soil vapor borings (TR-V1 through TR-V4) on site to collect soil and soil vapor samples. TPHg and volatile organic compounds were not detected in soil samples, and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in soil vapor samples collected. Investigation results are summarized in T&R's March 27, 2006 *Subsurface Investigation* report.

2006 Subsurface Investigation: During December 2006, Cambria drilled 14 soil borings (B-10 through B-23) to determine the extent of hydrocarbon impacts in soil. Fuel oxygenates were not detected in any of the soil samples with the exception of up to 0.083 mg/kg of tertiary-butyl alcohol in three soil samples from borings B-13 and B-14. Lead scavengers (1,2-dichloroethane [1,2-DCA] and ethylene dibromide [EDB]) were

not detected in soil samples. Grab groundwater samples contained up to 960,000 µg/L TPHg (B-22) and 24,000 µg/L benzene (B-10). No fuel oxygenates were detected in the grab groundwater samples. Up to 410 µg/L 1,2-DCA was detected in grab groundwater samples, and 52 µg/L EDB was reported in one grab groundwater sample (B-12). Investigation results are summarized in Cambria's March 2, 2007 *Subsurface Investigation Report*

2007 – 2008 Subsurface Investigation and Pilot Testing: In November and December 2007, Conestoga-Rovers & Associates (CRA) drilled four soil borings (B-24 through B-27) and installed soil vapor probes (VP-1 through VP-4) in the borings, installed five monitoring wells (S-12 through S-16), and installed an air sparge well (AS-1). In January 2008, CRA conducted a dual-phase extraction (DPE) pilot test and an air sparging (AS) pilot test. CRA conducted the DPE pilot test using wells S-8, S-9, S-13, S-14, and S-16. The theoretical vacuum radius of influence was up to 60 feet, but more consistently around 45 feet with an average groundwater flow rate of 3.42 gallons per minute. All wells, except for well S-14, were dewatered to near the bottom of the well (30 to 35 fbg). CRA conducted the AS pilot test injecting into well AS-1. A flow rate of 20 cubic feet per minute was achieved at the maximum injection pressure of 25 pounds per square inch. Based on higher vapor concentrations detected during the AS pilot test, CRA concluded that vapor-phase mass removal would be greater with a soil vapor extraction and AS system than with a DPE system. These activities are documented in CRA's February 25, 2008 *Site Investigation and Pilot Test Report, and Corrective Action Plan*.

2008 Subsurface Investigation: In May 2008, CRA properly destroyed four wells (S-14, S-15, S-16, and AS-1) and installed three wells (S-17, S-18, and OW-1) to accommodate source area excavation. Soil samples from well borings S-17 and S-18 contained up to 5,200 mg/kg TPHg, 5.3 mg/kg benzene, 96 mg/kg toluene, 120 mg/kg ethylbenzene, and 630 mg/kg xylenes. No TPHg or BTEX was detected in soil samples collected from well OW-1. These activities are documented in CRA's August 20, 2008 *Well Destruction and Installation Report*.

2008 Soil Excavation and In Situ Chemical Oxidation (ISCO) Piping Installation: In June 2008, G-R excavated soil to approximately 20 fbg in the southeastern portion of the site. CRA collected 10 soil samples (EB-1 through EB-10) by potholing the excavation bottom to approximately 23 fbg. The soil samples contained up to 3,900 mg/kg TPHg, 22 mg/kg benzene, 230 mg/kg toluene, 85 mg/kg ethylbenzene, and 540 mg/kg xylenes. Following soil sampling, three ISCO injection galleries were placed in the excavation. G-R excavated approximately 1,340 tons of soil for proper off-site disposal. CRA's September 17, 2008 *Soil Sampling and ISCO Piping Installation Report* provides details of the excavation and ISCO gallery installation.

2009 Subsurface Investigation: In September 2009, CRA installed four deep wells (S-19, S-20, S-21B, and S-22B) and four shallow wells (S-14R, S-19, S-20, and S-23) to facilitate planned ISCO pilot testing and drilled two soil borings (B-28 and B-29) to delineate vertical soil impact in the southern portion of the site. Soil samples from the well and soil borings contained up to 7,100 mg/kg TPHg, 37 mg/kg benzene, 260 mg/kg toluene, 130 mg/kg ethylbenzene, and 760 mg/kg xylenes. This investigation is detailed in CRA's December 8, 2008 *Subsurface Investigation Report*.

2008 - 2010 ISCO Pilot Testing: In December 2008 and January 2009, CRA performed two rounds of ISCO pilot testing using the injection gallery to treat hydrocarbon impacts to soil within the source area. In March 2009, August 2009, and April 2010, CRA continued the ISCO pilot testing using injection into monitoring wells. CRA's July 17, 2009 *ISCO Pilot Test Report* details the three initial events ISCO injection events, and details of the August 2009 event are presented in CRA's November 30, 2009 *ISCO Pilot Test Report*. CRA's September 21, 2010 *ISCO Pilot Test Report* details the April 2010 ISCO event.

2010 Down-Gradient Receptor Survey: In March 2010, CRA conducted inquiries concerning potential receptors at BART and at buildings along Broadway between 6th and 8th Streets, which identified five buildings with basements. Three of the basements also contained sumps. No dewatering systems were identified. Survey results are summarized in CRA's March 30, 2010 *Down-Gradient Receptor Survey.*

2010 – 2011 Sump Sampling: In November 2010, CRA sampled two sumps in the OPD building located on the southwest corner of 7th Street and Broadway, and in February 2011, CRA sampled a sump in the BART tunnel below the southeast corner of 7th Street and Broadway. No chemicals of concern were detected in water samples from the BART sump and one of the sumps in the OPD building. The water sample collected from the second sump in the OPD building contained 93 µg/L TPHg, 38 µg/L benzene, and 4.2 µg/L ethylbenzene. The BART sump water sample contained 62,000 mg/L sulfate, and one OPD sump water sample contained 100 mg/L sulfate. CRA's April 13, 2011 *Sump Sampling Report* provides details of this investigation.

2011-2012 Subsurface Investigation: In November 2011, CRA installed eight nested soil vapor probes (VP-5 through VP-12). Soil vapor samples were collected from the probes in December 2011 and January 2012. TPHg, benzene, and toluene were not detected in soil vapor samples from the soil vapor probes. Detections of ethylbenzene and total xylenes were below San Francisco Bay Regional Water Quality Control Board

environmental screening levels[1] for commercial land use during the December 2011 and January 2012 sampling events. CRA's January 26, 2012 *Subsurface Investigation Report* provides soil vapor investigation details.

Groundwater Monitoring: Groundwater has been monitored since August 1981. Depth to groundwater has ranged from 12.82 to 28.12 fbg. Groundwater flow direction is typically southwesterly.

[1] *Screening for Environmental Concerns at Site With Contaminated Soil and Groundwater,* California Regional Water Quality Control Board, Interim Final – November 2007 [Revised May 2008]