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Mr. Mark E. Detterman, PG, CEG
Alameda County Environmental Health
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Alameda, California 94502

ARCADIS U.S., Inc.
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Subject:

ENVIRONMENT

**Third Quarter and Fourth Quarter 2014
Semi-Annual Groundwater Monitoring Report**
Former BP Station No. 11126
1700 Powell Street, Emeryville, California
Regulatory Site No: RO0000066

Date:
February 9, 2015

Dear Mr. Detterman:

Contact:
Hollis Phillips

ARCADIS U.S., Inc. (ARCADIS) has prepared this Third Quarter and Fourth Quarter 2014 Semi-Annual Groundwater Monitoring Report on behalf of Atlantic Richfield Company (ARCO), a BP affiliated company, for the former ARCO service station listed below.

Phone:
415.432.6903

<u>BP-ARCO Facility No.</u>	<u>ACEH Site No.</u>	<u>Location</u>
11126	RO0000066	1700 Powell Street Emeryville, California

Email:
hollis.phillips@arcadis-us.com

I declare, to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct. If you have any questions or comments regarding the content of this report, please contact Jamey Peterson by telephone at 707.889.6739 or by e-mail at jamey.peterson@arcadis-us.com or Hollis Phillips by telephone at 415.432.6903 or by e-mail at hollis.phillips@arcadis-us.com.

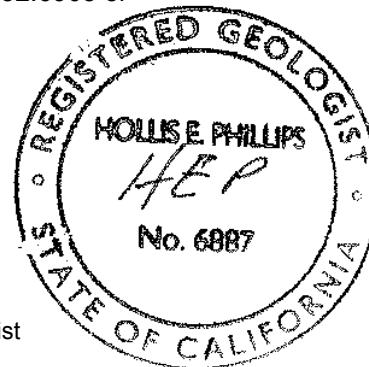
Our ref:
GP09BPNA.C044.N0000

Sincerely,

ARCADIS U.S., Inc.

Jamey Peterson
Staff Geologist

Hollis E. Phillips, P.G. (No. 6887)
Project Manager/ Principal Geologist



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GeoTracker upload

Imagine the result

Mr. Mark E. Detterman, PG, CEG
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Subject:

**Third Quarter and Fourth Quarter 2014 –
Semi-Annual Groundwater Monitoring Report**
Former BP Station No. 11126
1700 Powell Street, Emeryville, California
Regulatory Site No: RO0000066

ENVIRONMENT

Dear Mr. Detterman:

Date:
February 9, 2015

ARCADIS U.S., Inc. (ARCADIS) has prepared this *Third Quarter and Fourth Quarter Semi-Annual Groundwater Monitoring Report* to document the results of groundwater monitoring and sampling performed at the Former BP Station No. 11126 located in Emeryville, Alameda County, California (the Site; Figure 1).

Contact:
Hollis Phillips

Phone:
415.432.6903

Email:
hollis.phillips@arcadis-us.com

Our ref:
GP09BPNA.C044.N0000

1. Summary

A summary of the work performed at the Site during this reporting period and the proposed work for the next reporting period is provided below.

Work Performed – Reporting Period (July to December 2014)

- Prepared and submitted the *First Quarter and Second Quarter 2014 Semi-Annual Groundwater Monitoring Report*, dated August 6, 2014, to Alameda County Environmental Health (ACEH).
- Prepared and submitted the *Data Gaps Investigation Work Plan*, dated August 12, 2014.
- Conducted site investigation activities in November 2014 in accordance with the activities specified in the *Data Gaps Investigation Work Plan* and in ACEH's letters dated June 30, 2014 and October 1, 2014.
- Conducted groundwater monitoring/sampling for the Fourth Quarter 2014 on December 16, 2014.

Work Proposed – Reporting Period (January to June 2015)

- Submit the *Site Investigation Summary Report* dated January 23, 2015 to the ACEH.
- Submit this *Third Quarter and Fourth Quarter 2014 Semi-Annual Groundwater Monitoring Report*, contained herein.
- Perform groundwater monitoring and sampling activities during Second Quarter 2015.

2. Background

The Site is an active 76-branded gasoline station. A site historical summary is included as Appendix A. Available records indicate that the three underground storage tanks (USTs) currently present at the Site were installed in the late 1980s. Site features include a station building and two dispenser islands with three dispensers each, for a total of six dispensers. The majority of the Site surface is paved with concrete and asphalt.

Land use in the area of the Site is largely commercial. The Site is bound by Powell Street to the south and Christie Avenue to the east. The Site is approximately 350 feet east of Interstate 80/580. A Denny's restaurant is located adjacent to the west of the Site.

3. Groundwater Monitoring/Sampling Activities and Results

Groundwater monitoring well-construction details are summarized in Table 1. Current and historical groundwater monitoring and analytical data are summarized in Table 2, and Fourth Quarter 2014 data is graphically presented on Figures 3 and 4. A rose diagram illustrating groundwater flow direction is provided as Figure 5. The groundwater sampling data package and laboratory analytical reports for the Fourth Quarter 2014 sampling event are included in Appendices B and C, respectively.

Groundwater monitoring associated with the Site is conducted on a semi-annual frequency during the second and fourth quarters of each year. Fourth Quarter 2014 groundwater monitoring was conducted on December 16, 2014 by Broadbent and Associates, Inc. (BAI) personnel. BAI personnel measured depth to groundwater in MW-1 through MW-11. Depth to groundwater measurements ranged from 0.00 feet (MW-1) to 8.80 feet (MW-11). MW-1 was completely filled with water even after the well box had been drained.

Groundwater samples were collected on December 16, 2014 from monitoring wells MW-1 through MW-11, consistent with the current monitoring schedule. MW-5 was sampled out of order due to traffic control constraints. MW-6 was sampled out of order due to a car temporarily parked over the monitoring well. Samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica), of Pleasanton, California, a California Department of Public Health certified analytical laboratory. Groundwater samples collected from MW-1 through MW-11 were tested for the following constituents:

- Total petroleum hydrocarbons as diesel range organics (DRO) (C10 – C28) using United States Environmental Protection Agency (USEPA) Test Method 8015B with Silica Gel Cleanup;
- Naphthalene by USEPA Method 8260B;
- Polycyclic aromatic hydrocarbons (PAH) by USEPA Method 8270.

Groundwater samples collected from MW-1 through MW-9 were additionally tested for the following constituents:

- Total petroleum hydrocarbons as gasoline range organics (GRO) (C6-C12) using USEPA Method 8260B Modified;
- Fuel additives Methyl tert-butyl ether (MTBE), tertiary butyl alcohol (TBA) and tertiary amyl methyl ether (TAME) using USEPA Method 8260B.

Groundwater samples collected from MW-1, MW-2, MW-5, MW-7, and MW-9 were additionally tested for the following constituents:

- Benzene, toluene, ethylbenzene and xylenes (BTEX compounds) using USEPA Method 8260B.

Groundwater samples collected from MW-2 were additionally tested for constituents:

- Di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), 1,2-Dichloroethane (1,2-DCA), and 1,2-Dibromoethane (EDB) using USEPA Method 8260B.

4. Results

- Groundwater flow direction during the recent semi-annual monitoring event was to the southwest at an approximate gradient of 0.019 ft/ft. Historical data indicate the

groundwater flow direction is predominately toward the southwest as shown on Figure 5.

- GRO was detected above the laboratory reporting limits in four of the nine groundwater monitoring wells sampled with concentrations ranging from 110 micrograms per liter ($\mu\text{g/L}$) (MW-8) to 8,100 $\mu\text{g/L}$ (MW-2). GRO concentrations were below analytical reporting limits at five groundwater monitoring wells sampled during this reporting period (MW-1, MW-3, MW-4, MW-6, and MW-7).
- DRO was detected in seven of the eleven groundwater monitoring wells sampled with concentrations ranging from 73 $\mu\text{g/L}$ (MW-8) to 1,000 $\mu\text{g/L}$ (MW-2). DRO concentrations were below analytical reporting limits at four groundwater monitoring wells sampled during this reporting period (MW-3, MW-4, MW-10, and MW-11).
- Benzene was detected in three of the five groundwater monitoring wells sampled with concentrations ranging from 2.5 $\mu\text{g/L}$ (MW-5) to 1,400 $\mu\text{g/L}$ (MW-2). Benzene concentrations were below analytical reporting limits at two groundwater monitoring wells sampled during this reporting period (MW-1 and MW-7).
- Toluene concentrations were below analytical reporting limits in all five groundwater monitoring wells sampled during this reporting period (MW-1, MW-2, MW-5, MW-7, and MW-9).
- Ethylbenzene was detected in one of five groundwater monitoring wells sampled at a concentration of 100 $\mu\text{g/L}$ (MW-2). Ethylbenzene concentrations were below analytical reporting limits in four groundwater monitoring wells sampled during this reporting period (MW-1, MW-5, MW-7, and MW-9).
- Xylenes were detected in one of five groundwater monitoring wells sampled at a concentration of 3.2 $\mu\text{g/L}$ (MW-5). Xylene concentrations were below analytical reporting limits in four groundwater monitoring wells sampled during this reporting period (MW-1, MW-2, MW-7, and MW-9).
- MTBE was detected in four of the nine groundwater monitoring wells sampled with concentrations ranging from 3.5 $\mu\text{g/L}$ (MW-7) to 640 $\mu\text{g/L}$ (MW-2). MTBE concentrations were below analytical reporting limits in five groundwater monitoring wells sampled during this reporting period (MW-1, MW-3, MW-4, MW-6, and MW-8).

- TBA was detected in seven of the nine groundwater monitoring wells sampled with concentrations ranging from 24 µg/L (MW-8) to 18,000 µg/L (MW-4). TBA concentrations were below analytical reporting limits in two groundwater monitoring wells sampled during this period (MW-1 and MW-8).
- TAME was detected in one of nine groundwater monitoring wells sampled at a concentration of 3.7 µg/L (MW-9). TAME concentrations were below analytical reporting limits in eight groundwater monitoring wells sampled during this reporting period (MW-1 through MW-8).
- DIPE, ETBE, 1,2-DCA, and EDB were not detected above analytical reporting limits in the groundwater samples collected from MW-2.
- Concentrations of PAHs, including naphthalene, were generally not detected above respective laboratory reporting limits or were detected at trace concentrations in groundwater samples collected from MW-1 through MW-11. Naphthalene was detected in groundwater samples collected from MW-2, MW-5, and MW-9 at concentrations ranging from 0.10 µg/L at MW-9 to 22 µg/L at MW-2. Naphthalene was not detected in the groundwater samples collected from the remaining 8 groundwater monitoring wells. Table 3 presents the groundwater sample analytical data for individual PAH results.

5. Recommendations

Based on the observed groundwater concentrations, ARCADIS recommends continued groundwater monitoring and sampling on a semi-annual basis. DRO, naphthalene, and PAHs will remain on the list of analytes for all groundwater monitoring wells as directed by ACEH in their letter dated June 30, 2014.

If you have any questions or comments regarding the contents of this report, please contact Jamey Peterson by telephone (707.889.6739), or by e-mail (Jamey.Peterson@arcadis-us.com), or contact Hollis Phillips by telephone (415.432.6903), or by e-mail (Hollis.Phillips@arcadis-us.com).

Sincerely,

ARCADIS

Prepared by:

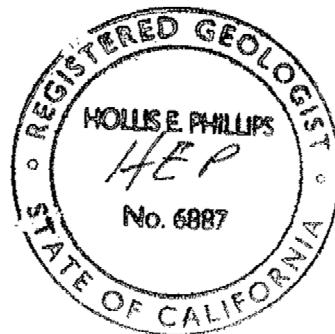


Jamey Peterson
Project Geologist

Approved by:



Hollis E. Phillips, P.G. (No. 6887)
Project Manager/Principal Geologist

**Enclosures:**

- Table 1 Well Construction Details
- Table 2 Historical Groundwater Monitoring and Analytical Results
- Table 3 Groundwater Analytical Data for Polycyclic Aromatic Hydrocarbons

- Figure 1 Site Vicinity Map
 - Figure 2 Site Plan
 - Figure 3 Groundwater Elevation Contour Map – December 16, 2014
 - Figure 4 Groundwater Hydrocarbon Concentration Map – December 16, 2014
 - Figure 5 Groundwater Flow Direction Rose Diagram
-
- Appendix A Previous Investigations and Site History Summary
 - Appendix B Groundwater Sampling Data Package
 - Appendix C Certified Laboratory Analytical Report

Copies: GeoTracker and ACEH FTP site uploads

ARCADIS

TABLES

Table 1
Well Construction Details
Former BP Station No. 11126
1700 Powell St., Emeryville, California 94608

Well I.D.	Drill Date	Well		Screen		Screen Length (feet)	Comments
		Depth (feet bgs)	Diameter (inches)	Top (feet bgs)	Bottom (feet bgs)		
Groundwater Monitoring Wells							
MW-1	10/20/1992	12	2	4	12	8	
MW-2	10/20/1992	12	2	5	12	7	
MW-3	10/20/1992	12	2	5	12	7	
MW-4	10/20/1992	12	2	5	12	7	
MW-5	9/2/1993	13.5	2	3.5	13.5	10	
MW-6	9/3/1993	14	2	4	14	10	
MW-7	9/3/1993	14	2	4	14	10	
MW-8	9/3/1993	14	2	4	14	10	
MW-9	9/3/1993	14	4	4	14	10	
MW-10	4/15/2005	20	2	7	17	10	
MW-11	4/15/2005	24	2	7	17	10	

Notes:

Wells are of polyvinyl chloride (PVC) construction

bgs = Below ground surface

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-1	11/4/1992		7.76	4.96	--	2.80	5,300	--	1,100	480	<0.5	1,500	--	--	--	--	--	--	--	--	--	
MW-1	10/12/1993		7.76	5.26	--	2.50	3,600	--	970	71	100	550	6,111	--	--	--	--	--	--	--	--	
MW-1	2/15/1994		7.76	4.98	--	2.78	17,000	--	4,200	510	360	1,600	5,495	--	--	--	--	--	--	--	3.90	
MW-1	5/11/1994		7.76	4.55	--	3.21	5,500	--	2,900	37	56	64	705	--	--	--	--	--	--	--	8.00	
MW-1	8/1/1994	Dup	7.76	5.51	--	2.25	16,000	--	3,600	750	510	2,800	9,800	--	--	--	--	--	--	--	(Dup)	
MW-1	8/1/1994		7.76	5.51	--	2.25	15,000	--	3,600	740	510	2,800	9,718	--	--	--	--	--	--	--	2.90	
MW-1	10/18/1994	Dup	7.76	5.11	--	2.65	16,000	--	1,900	64	170	950	--	--	--	--	--	--	--	--	(Dup)	
MW-1	10/18/1994		7.76	5.11	--	2.65	16,000	--	1,800	61	160	890	15,668	--	--	--	--	--	--	--	2.90	
MW-1	1/13/1995	Dup	7.76	--	--	--	590	--	88	0.7	<0.5	55	--	--	--	--	--	--	--	--	(Dup)(DUP)	
MW-1	4/13/1995		7.76	3.84	--	3.92	9,300	--	4,000	300	200	950	--	--	--	--	--	--	--	--	7.70	
MW-1	7/11/1995		7.76	3.60	--	4.16	15,000	--	2,200	84	<25	2,500	--	--	--	--	--	--	--	--	8.80	
MW-1	11/2/1995		7.76	4.58	--	3.18	19,000	--	920	<100	<100	430	52,000	--	--	--	--	--	--	--	7.30	
MW-1	2/5/1996		7.76	4.43	--	3.33	4,600	--	1,400	330	54	247	8,700	--	--	--	--	--	--	--	3.20	
MW-1	4/24/1996		7.76	4.00	--	3.76	2,000	--	510	33	61	228	4,500	--	--	--	--	--	--	--	7.50	
MW-1	7/15/1996		7.76	4.30	--	3.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	7/16/1996	Dup	7.76	--	--	--	12,000	--	2,800	160	390	1,610	63,000	--	--	--	--	--	--	--	(Dup)	
MW-1	7/16/1996		7.76	--	--	--	12,000	--	2,800	170	390	1,630	64,000	--	--	--	--	--	--	--	7.90	
MW-1	7/30/1996		7.76	4.64	--	3.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	8/12/1996		7.76	--	--	--	11,000	--	2,500	160	<10	1,740	440,000	--	--	--	--	--	--	--	7.00	
MW-1	11/4/1996		7.76	5.98	--	1.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/5/1996		7.76	--	--	--	53,000	--	1,300	43	100	349	42,000	--	--	--	--	--	--	--	6.60	
MW-1	5/17/1997		7.76	4.65	--	3.11	52,000	--	1,958	55	305	1,216	140,198	--	--	--	--	--	--	--	5.70	
MW-1	8/11/1997		7.76	4.90	--	2.86	25,000	--	540	6.7	<5.0	57	360,000	--	--	--	--	--	--	--	7.90	
MW-1	11/17/1997		7.76	6.12	--	1.64	93,000	--	1,200	31	180	40	400,000	--	--	--	--	--	--	--	7.60	
MW-1	1/29/1998		7.76	4.90	--	2.86	4,800	--	320	24	52	20	<50	--	--	--	--	--	--	--	6.60	
MW-1	6/22/1998		7.76	4.62	--	3.14	63,000	--	180	<5.0	15	69	57,000	--	--	--	--	--	--	--	6.00	
MW-1	12/30/1998		7.76	5.41	--	2.35	22,000	--	2,500	24	120	400	15,000	--	--	--	--	--	--	--	--	
MW-1	3/9/1999		7.76	3.40	--	4.36	16,000	--	2,000	84	290	510	13,000	--	--	--	--	--	--	--	--	
MW-1	6/23/1999		7.76	4.60	--	3.16	9,600	--	4,500	21	160	260	24,000	--	--	--	--	--	--	--	--	
MW-1	9/23/1999		7.76	4.21	--	3.55	3,800	--	1,600	32	150	240	7,100	--	--	--	--	--	--	--	--	
MW-1	12/28/1999		7.76	4.10	--	3.66	3,400	--	<2,200	17	53	130	5,500	--	--	--	--	--	--	--	--	
MW-1	3/22/2000		7.76	5.51	--	2.25	6,400	--	1,100	45	190	330	4,900	--	--	--	--	--	--	--	--	
MW-1	5/26/2000		7.76	4.79	--	2.97	110,000	--	700	44	140	250	320,000	--	--	--	--	--	--	--	--	
MW-1	9/6/2000		7.76	5.19	--	2.57	5,600	--	1,000	13	57	90	19,000	--	--	--	--	--	--	--	--	
MW-1	9/15/2000		7.76	5.73	--	2.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/11/2000		7.76	5.82	--	1.94	5,500	--	1,160	47	155	292	3,900	--	--	--	--	--	--	--	--	
MW-1	3/29/2001		7.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-1	6/27/2001		7.76	5.49	--	2.27	6,100	--	1,200	13	17	78	1,780	--	--	--	--	--	--	--	--	
MW-1	9/19/2001		7.76	6.19	--	1.57	1,800	--	102	<12.5	<12.5	<37.5	1,090	--	--	--	--	--	--	--	--	
MW-1	12/28/2001		7.76	5.27	--	2.49	4,000	--	540	12	20	65	1,120	--	--	--	--	--	--	--	--	
MW-1	3/12/2002		7.76	5.68	--	2.08	3,700	--	491	8.4	12	27	1,020	--	--	--	--	--	--	--	--	
MW-1	6/13/2002		7.76	5.54	--	2.22	1,900	--	255	<12.5	<12.5	<25	6,490	--	--	--	--	--	--	--	--	
MW-1	9/6/2002		7.76	5.56	--	2.20	1,100	--	170	5.1	2.2	20	550	--	--	--	--	--	--	--	--	
MW-1	12/13/2002		7.76	5.45	--	2.31	2,700	--	610	10	18	67	470	--</								

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MW-2	10/18/1994		8.56	5.71	--	2.85	9,000	--	2,000	140	150	420	2,417	--	--	--	--	--	--	--	7.20		
MW-2	1/13/1995		8.56	4.67	--	3.89	7,900	--	2,200	42	<5.0	770	--	--	--	--	--	--	--	--	6.80		
MW-2	4/13/1995	Dup	8.56	4.37	--	4.19	25,000	--	6,500	1,500	110	5,300	--	--	--	--	--	--	--	--	--	(Dup)	
MW-2	4/13/1995		8.56	4.37	--	4.19	33,000	--	8,000	2,500	1,100	6,600	--	--	--	--	--	--	--	--	7.50		
MW-2	7/11/1995	Dup	8.56	4.51	--	4.05	28,000	--	6,800	1,000	900	4,900	--	--	--	--	--	--	--	--	--	(Dup)	
MW-2	7/11/1995		8.56	4.51	--	4.05	19,000	--	3,300	99	7.5	4,600	--	--	--	--	--	--	--	--	7.80		
MW-2	11/2/1995	Dup	8.56	5.55	--	3.01	22,000	--	4,000	1,200	600	2,700	19,000	--	--	--	--	--	--	--	--	(Dup)	
MW-2	11/2/1995		8.56	5.55	--	3.01	20,000	--	3,800	1,200	570	2,700	15,000	--	--	--	--	--	--	--	7.30		
MW-2	2/5/1996	Dup	8.56	5.10	--	3.46	910	--	290	180	19	137	93	--	--	--	--	--	--	--	--	(Dup)	
MW-2	2/5/1996		8.56	5.10	--	3.46	1,200	--	320	220	26	187	99	--	--	--	--	--	--	--	2.20		
MW-2	4/24/1996	Dup	8.56	--	--	--	<500	--	70	22	<10	61	<50	--	--	--	--	--	--	--	7.00	(Dup)	
MW-2	4/24/1996		8.56	--	--	--	<500	--	100	30	<10	71	<100	--	--	--	--	--	--	--	--		
MW-2	7/15/1996		8.56	5.40	--	3.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	7/16/1996		8.56	--	--	--	12,000	--	3,300	1,400	250	2,610	1,400	--	--	--	--	--	--	--	7.80		
MW-2	7/30/1996		8.56	5.44	--	3.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	11/4/1996		8.56	7.06	--	1.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	11/5/1996	Dup	8.56	--	--	--	9,200	--	1,300	170	<25	2,240	1,100	--	--	--	--	--	--	--	--	(Dup)	
MW-2	11/5/1996		8.56	--	--	--	7,200	--	1,400	230	38	2,110	1,100	--	--	--	--	--	--	--	--	7.40	
MW-2	5/17/1997		8.56	5.77	--	2.79	570	--	42	<5.0	5	60	210	--	--	--	--	--	--	--	--	6.90	
MW-2	8/11/1997		8.56	5.71	--	2.85	6,300	--	1,800	130	86	397	2,400	--	--	--	--	--	--	--	8.50		
MW-2	11/17/1997		8.56	6.91	--	1.65	2,400	--	220	30	33	259	130	--	--	--	--	--	--	--	7.90		
MW-2	1/29/1998		8.56	4.61	--	3.95	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	6.20		
MW-2	6/22/1998		8.56	4.80	--	3.76	4,200	--	640	150	120	650	560	--	--	--	--	--	--	--	5.40		
MW-2	12/30/1998		8.56	5.21	--	3.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	6/23/1999		8.56	5.30	--	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	9/23/1999		8.56	4.75	--	3.81	3,800	--	760	19	210	960	910	--	--	--	--	--	--	--	--		
MW-2	12/28/1999		8.56	4.51	--	4.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	3/22/2000		8.56	4.21	--	4.35	2,500	--	780	17	44	270	2,800	--	--	--	--	--	--	--	--		
MW-2	5/26/2000		8.56	4.66	--	3.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	9/6/2000		8.56	4.71	--	3.85	3,700	--	1,200	5.5	12	170	12,000	--	--	--	--	--	--	--	--		
MW-2	9/15/2000		8.56	4.74	--	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	12/11/2000		8.56	4.79	--	3.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2	3/29/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-2	6/27/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-2	9/19/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-2	12/28/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-2	3/12/2002		8.56	4.25	--	4.31	26,000	--	1,160	4.4	61	171	37,300	--	--	--	--	--	--	--	--		
MW-2	6/13/2002		8.56	4.94	--	3.62	18,000	--	578	<50	<50	<100	84,600	--	--	--	--	--	--	--	--		
MW-2	9/6/2002		8.56	5.23	--	3.33	26,000	--	440	<50	<50	<50	45,000	--	--	--	--	--	--	--	--		
MW-2	12/13/2002		8.56	4.94	--	3.62	69,000	--	1,200	<500	<500	<500	98,000	--	--	--	--	--	--	--	--		
MW-2	2/19/2003		8.56	4.14	--	4.42	78,000	--	1,100	<500	<500	<500	81,000	--	--	--	--	--	--	--	--		
MW-2	6/6/2003		8.56	4.66	--	3.90	120,000	--	1,100	<1,000	<1,000	<1,000	72,000	<40,000	--	<1,000	<1,000	--	1,300	<200,000	--		
MW-2	8/7/2003		8.56	4.90	(SHEEN)	3.66	71,000	--	590	<500	<500	<500	83,000	45,000	<500	<500	<500	<500	1,300	<100,000	--	(Sheen)	
MW-2	11/20/2003		8.56	4.																			

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-2	8/26/2004		8.56	4.59	--	3.97	140,000	--	8,200	18,000	4,200	19,000	11,000	<10,000	<250	<250	<250	320	<50,000	--		
MW-2	12/1/2004		8.56	4.79	--	3.77	98,000	--	8,400	13,000	4,600	21,000	10,000	<4,000	<100	<100	<100	230	<20,000	--		
MW-2	2/2/2005		8.56	4.27	(SHEEN)	4.29	92,000	--	6,600	9,900	4,400	18,000	10,000	4,000	<100	<100	<100	<100	260	<20,000	--	(Sheen)
MW-2	4/25/2005		11.39	4.00	--	7.39	80,000	--	6,700	4,900	4,400	17,000	8,200	3,700	<50	<50	<50	<50	220	<10,000	--	
MW-2	9/30/2005		11.39	4.86	--	6.53	98,000	--	7,700	7,400	4,700	20,000	16,000	4,700	<50	<50	<50	<50	270	<5,000	--	
MW-2	12/28/2005		11.39	4.28	--	7.11	210,000	--	15,000	21,000	7,300	31,000	22,000	6,300	<100	<200	<100	--	410	<20,000	--	
MW-2	3/23/2006		11.39	3.60	--	7.79	79,000	--	9,100	12,000	4,300	17,000	13,000	5,800	<100	<200	<100	<100	290	<20,000	--	
MW-2	6/5/2006		11.39	4.28	(SHEEN)	7.11	79,000	--	9,700	8,700	4,900	20,000	8,000	3,300	<50	<100	<50	<50	280	<10,000	--	(Sheen)
MW-2	9/19/2006		11.39	4.61	--	6.78	68,000	--	12,000	9,300	4,100	14,000	16,000	4,800	<50	<100	<50	<50	370	<25,000	--	
MW-2	12/1/2006		11.39	4.55	--	6.84	61,000	--	15,000	6,900	4,400	17,000	10,000	3,900	<50	<100	<50	<50	270	<25,000	--	
MW-2	3/1/2007		11.39	4.14	--	7.25	80,000	--	9,300	5,500	4,100	15,000	8,300	2,700	<50	<100	<50	<50	210	<25,000	--	
MW-2	6/1/2007		11.39	4.34	--	7.05	120,000	--	12,000	6,400	4,200	11,000	17,000	4,900	<100	260	<100	<100	310	<50,000	--	
MW-2	9/13/2007		11.39	5.35	--	6.04	<5,000	--	770	<50	140	<100	2,300	42,000	<50	<100	<50	<50	50	<25,000	--	
MW-2	11/21/2007		11.39	5.19	--	6.20	27,000	--	4,500	220	1,600	2,800	5,200	5,000	<50	<100	<50	<50	160	<25,000	--	
MW-2	2/29/2008		11.39	4.41	--	6.98	44,000	--	6,100	320	3,800	6,600	4,900	2,500	<50	<100	<50	<50	120	<25,000	--	
MW-2	5/23/2008		11.39	5.25	--	6.14	13,000	--	1,700	<50	300	210	2,500	29,000	<50	140	<50	<50	60	<25,000	--	
MW-2	9/26/2008		11.39	5.81	--	5.58	4,800	--	220	12	20	42	960	77,000	<1.0	<1.0	2.8	<1.0	42	<250	--	
MW-2	12/23/2008		11.39	5.50	--	5.89	5,700	--	950	19	170	70	1,800	57,000	<2.0	<2.0	2.4	<2.0	51	<500	--	
MW-2	3/9/2009		11.39	4.35	--	7.04	25,000	--	3,200	73	2,800	2,200	2,200	21,000	<20	<20	<20	<20	82	<5,000	--	
MW-2	5/28/2009		11.39	4.90	--	6.49	55,000	--	4,700	740	3,800	8,100	2,800	2,000	<10	<10	<10	<10	110	<2,500	0.27	
MW-2	12/10/2009		11.39	5.29	--	6.10	2,200	--	250	7.3	13	14	360	44,000	<0.50	0.52	1.4	<0.50	8.7	<100	0.65	
MW-2	6/29/2010		11.39	5.03	--	6.36	5,300	--	800	<25	250	300	770	31,000	<25	<25	<25	<25	<25	<5,000	0.60	(P, odor)
MW-2	12/30/2010		11.39	4.22	--	7.17	19,000	--	3,500	58	2,000	1,000	1,700	4,700	<25	<25	<25	<25	56	<12,000	--	(P)
MW-2	6/29/2011		11.39	4.51	--	6.88	12,000	--	3,200	41	920	150	2,100	2,400	<25	<25	<25	<25	77	--	0.41	(P)
MW-2	1/30/2012		11.39	4.93	--	6.46	13,000	--	3,000	45	640	370	1,700	1,900	<20	<20	<20	<20	60	--	0.63	(P)
MW-2	6/27/2012		11.39	4.72	--	6.67	23,000	--	3,900	110	2,300	2,000	2,600	2,900	<20	<20	<20	<20	95	--	1.24	(P)
MW-2	12/7/2012		11.39	4.11	--	7.28	10,000	--	2,600	31	350	72	1,300	3,400	<10	<10	<10	<10	51	--	1.03	
MW-2	6/6/2013		11.39	4.95	--	6.44	20,000	--	6,100	86	670	1,200	2,000	2,600	<10	<10	<10	<10	96	--	1.04	
MW-2	12/13/2013		11.39	5.29	--	6.10	<10,000	--	200	<100	<100	<200	140	32,000	<100	<100	<100	<100	--	3.12		
MW-2	6/30/2014		11.39	4.95	--	6.44	<10,000	--	1,800	<100	140	<200	700	25,000	<100	<100	<100	<100	--	0.57		
MW-2	12/16/2014		11.39	4.27	--	7.12	8,100	1,000	1,400	<25	100	<50	640	12,000	<25	<25	<25	<25	--	0.65		
MW-3	11/4/1992		8.25	6.38	--	1.87	200	690	1.6	<0.5	<0.5	1.1	--	--	--	--	--	--	--	--		
MW-3	10/12/1993	Dup	8.25	--	--	--	270	2,100	5	0.7	<0.5	2.6	96	--	--	--	--	--	--	--	(Dup)	
MW-3	10/12/1993		8.25	--	--	--	150	--	5.6	0.6	<0.5	1.6	--	--	--	--	--	--	--	--		
MW-3	2/15/1994		8.25	6.60	--	1.65	140	2.3	5.7	<0.5	<0.5	<0.5	30	--	--	--	--	--	--	--	3.90	
MW-3	5/11/1994		8.25</td																			

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Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-3	7/15/1996		8.25	6.18	--	2.07	<250	3,700	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	7.70	
MW-3	7/30/1996		8.25	6.04	--	2.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/4/1996		8.25	7.84	--	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/5/1996		8.25	--	--	--	90	890	<0.5	<1.0	<1.0	<1.0	30	--	--	--	--	--	--	--	6.80	
MW-3	5/17/1997		8.25	6.49	--	1.76	<50	2,100	<0.5	<1.0	<1.0	<1.0	52	--	--	--	--	--	--	--	6.30	
MW-3	8/11/1997		8.25	6.15	--	2.10	490	1,900	<2.5	<5.0	<5.0	<5.0	170	--	--	--	--	--	--	--	7.40	
MW-3	11/17/1997		8.25	7.15	--	1.10	120	2,500	<0.5	<1.0	<1.0	<1.0	46	--	--	--	--	--	--	--	7.00	
MW-3	1/29/1998		8.25	5.10	--	3.15	270	1,700	0.53	<1.0	<1.0	<1.0	330	--	--	--	--	--	--	--	6.40	
MW-3	6/22/1998		8.25	5.50	--	2.75	200	2,200	<0.5	<1.0	<1.0	<1.0	130	--	--	--	--	--	--	--	5.50	
MW-3	12/30/1998		8.25	6.68	--	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	3/9/1999		8.25	5.53	--	2.72	60	840	<1.0	<1.0	<1.0	<1.0	19	--	--	--	--	--	--	--	--	
MW-3	6/23/1999		8.25	6.60	--	1.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	9/23/1999		8.25	6.17	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	12/28/1999		8.25	6.00	--	2.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	3/22/2000		8.25	4.77	--	3.48	690	<58	4.2	3.1	0.81	2.7	2,900	--	--	--	--	--	--	--	--	
MW-3	5/26/2000		8.25	5.28	--	2.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	9/15/2000		8.25	5.58	--	2.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	12/11/2000		8.25	11.74	--	-3.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	3/29/2001		8.25	5.04	--	3.21	650	<50	<2.5	<2.5	<2.5	<7.5	680	--	--	--	--	--	--	--	--	
MW-3	6/27/2001		8.25	5.62	--	2.63	460	690	<2.5	<2.5	<2.5	<7.5	560	--	--	--	--	--	--	--	--	
MW-3	9/19/2001		8.25	5.80	--	2.45	<500	520	<5.0	<5.0	<5.0	<15	464	--	--	--	--	--	--	--	--	
MW-3	12/28/2001		8.25	4.85	--	3.40	180	550	<0.5	<0.5	<0.5	<1.0	180	--	--	--	--	--	--	--	--	
MW-3	3/12/2002		8.25	4.39	--	3.86	410	1,300	<2.5	<2.5	<2.5	<5.0	443	--	--	--	--	--	--	--	--	
MW-3	6/13/2002		8.25	5.38	--	2.87	<250	2,600	<2.5	<2.5	<2.5	<5.0	395	--	--	--	--	--	--	--	--	
MW-3	9/6/2002		8.25	5.68	--	2.57	<200	--	<2.0	<2.0	<2.0	<2.0	650	--	--	--	--	--	--	--	--	
MW-3	12/13/2002		8.25	5.37	--	2.88	<50	980	<0.5	<0.5	<0.5	<0.5	60	--	--	--	--	--	--	--	--	
MW-3	2/19/2003		8.25	4.80	--	3.45	<1,000	380	<10	<10	<10	<10	120	--	--	--	--	--	--	--	--	
MW-3	6/6/2003		8.25	5.13	--	3.12	<500	620	<5.0	<5.0	<5.0	<5.0	180	<200	--	<5.0	<5.0	--	16	<1,000	--	
MW-3	8/7/2003		8.25	5.43	--	2.82	<500	820(N)	5.7	<5.0	<5.0	<5.0	290	<200	<5.0	<5.0	<5.0	<5.0	20	<1,000	--	
MW-3	11/20/2003		8.25	4.72	--	3.53	<50	1,200(N)	<0.5	<0.5	<0.5	<0.5	17	<20	--	<0.5	<0.5	--	1.4	<100	--	
MW-3	4/28/2004		8.25	4.87	--	3.38	<100	240(N)	<1.0	<1.0	<1.0	<1.0	87	<40	<1.0	<1.0	<1.0	<1.0	3.9	<200	--	
MW-3	8/26/2004		8.25	5.42	--	2.83	56	250(N)	<0.5	<0.5	<0.5	<0.5	34	260	<0.5	<0.5	<0.5	<0.5	2	<100	--	
MW-3	12/1/2004		8.25	5.69	--	2.56	<100	690	<1.0	<1.0	<1.0	<1.0	7.4	610	<1.0	<1.0	<1.0	<1.0	<200	--	--	
MW-3	2/2/2005		8.25	4.72	--	3.53	<100	730	<1.0	<1.0	<1.0	<1.0	20	<40	<1.0	<1.0	<1.0	<1.0	1.1	<200	--	
MW-3	4/25/2005		10.73	4.75	--	5.98	<250	520	<2.5	<2.5	<2.5	<2.5	220	160	<2.5	<2.5	<2.5	<2.5	10	<500	--	
MW-3	9/30/2005		10.73	5.30	--	5.43	<50	300(N)	<0.5	<0.5	<0.5	<1.0	8.2	270	<0.5	<0.5	<0.5	<0.5	0.68	<50	--	
MW-3	12/28/2005		10.73	4.41	--	6.32	<50	100	<0.5	<0.5	<0.5	<1.0	0.66	<5.0	<0.5	<1.0	<0.5	--	<0.5	<100	--	
MW-3	3/23/2006		10.73	4.43	--	6.30	<50	260	<0.5	<0.5	<0.5	<1.0	13	130	<0.5	<1.0	<0.5	<0.5	0.63	<100	--	
MW-3	6/5/2006		10.73	4.95	--	5.78	61	340	0.69	1.4	0.85	3.6	29	510	<0.5	<1.0	<0.5	<0.5	1.6	<100	--	
MW-3	9/19/2006		10.73	5.19	--	5.54	<50	330	<0.5	<0.5	<0.5	<1.0	4.1	420	<0.5	<1.0	<0.5	<0.5	<250	--	--	
MW-3	12/1/2006		10.73	5.37	--	5.36	<50	130	<0.5	<0.5	<0.5	<1.0	2	250								

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Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-4	3/22/2000		8.12	6.74	--	1.38	910	--	<0.5	<0.5	0.54	1.7	3,800	--	--	--	--	--	--	--	--	
MW-4	5/26/2000		8.12	5.13	--	2.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/15/2000		8.12	8.20	--	-0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	12/11/2000		8.12	8.31	--	-0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	3/29/2001		8.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	6/27/2001		8.12	7.57	--	0.55	2,800	--	19	<2.5	<2.5	<7.5	4,220	--	--	--	--	--	--	--	--	
MW-4	9/19/2001		8.12	7.87	--	0.25	2,500	--	<5.0	<5.0	<5.0	<15	3,340	--	--	--	--	--	--	--	--	
MW-4	12/28/2001		8.12	7.80	--	0.32	4,400	--	<5.0	<5.0	<5.0	<10	5,330	--	--	--	--	--	--	--	--	
MW-4	3/12/2002		8.12	4.53	--	3.59	6,400	--	72	<5.0	<5.0	<10	8,440	--	--	--	--	--	--	--	--	
MW-4	6/13/2002		8.12	6.21	--	1.91	1,800	--	7.5	<5.0	5	13	6,870	--	--	--	--	--	--	--	--	
MW-4	9/6/2002		8.12	7.78	--	0.34	<2,000	--	<20	<20	<20	<20	9,600	--	--	--	--	--	--	--	--	
MW-4	12/13/2002		8.12	7.87	--	0.25	5,600	--	<50	<50	<50	<50	8,600	--	--	--	--	--	--	--	--	
MW-4	2/19/2003		8.12	4.84	--	3.28	<10,000	--	<100	<100	<100	<100	8,000	--	--	--	--	--	--	--	--	
MW-4	6/6/2003		8.12	7.98	--	0.14	13,000	--	<50	<50	<50	<50	6,800	2,500	--	<50	<50	--	190	<10,000	--	
MW-4	8/7/2003		8.12	7.24	--	0.88	6,200	--	<50	<50	<50	<50	6,600	2,400	<50	<50	<50	<50	160	<10,000	--	
MW-4	11/20/2003		8.12	7.02	--	1.10	10,000	--	<100	<100	<100	<100	11,000	<4,000	--	<100	<100	--	310	<20,000	--	
MW-4	4/28/2004		8.12	4.81	--	3.31	<25,000	--	<250	<250	<250	<250	3,600	15,000	<250	<250	<250	<250	<250	<50,000	--	
MW-4	8/26/2004		8.12	5.65	--	2.47	<2,500	--	<25	<25	<25	<25	1,800	16,000	<25	<25	<25	<25	60	--	--	
MW-4	12/1/2004		8.12	7.34	--	0.78	1,100	--	<10	<10	<10	<10	450	19,000	<10	<10	<10	<10	10	<2,000	--	
MW-4	2/2/2005		8.12	7.61	--	0.51	1,000	--	<5.0	<5.0	<5.0	<5.0	410	19,000	<5.0	<5.0	<5.0	<5.0	10	<1,000	--	
MW-4	4/25/2005		10.58	7.25	--	3.33	720	--	8	5.3	<5.0	16	170	18,000	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	
MW-4	9/30/2005		10.58	7.72	--	2.86	<2,500	--	63	58	46	140	110	30,000	<25	<25	<25	<25	<25	<2,500	--	
MW-4	12/28/2005		10.58	7.48	--	3.10	<2,500	--	<25	<25	<25	<50	34	27,000	<25	<50	<25	--	<25	<5,000	--	
MW-4	3/23/2006		10.58	4.42	--	6.16	<2,500	--	<25	<25	<25	<50	120	34,000	<25	<50	<25	<25	<25	<5,000	--	
MW-4	6/5/2006		10.58	4.97	--	5.61	<5,000	--	<50	<50	<50	<100	<50	34,000	<50	<100	<50	<50	<50	<10,000	--	
MW-4	9/19/2006		10.58	5.45	--	5.13	<5,000	--	<50	<50	<50	<100	110	27,000	<50	<100	<50	<50	<50	<25,000	--	
MW-4	12/1/2006		10.58	5.14	--	5.44	<5,000	--	<50	<50	<50	<100	68	31,000	<50	<100	<50	<50	<50	<25,000	--	
MW-4	3/1/2007		10.58	7.60	--	2.98	<5,000	--	<50	<50	<50	<100	<50	31,000	<50	<100	<50	<50	<50	<25,000	--	
MW-4	6/1/2007		10.58	5.21	--	5.37	2,700	--	<25	<25	<25	<50	31	32,000	<25	<50	<25	<25	<25	<13,000	--	
MW-4	9/13/2007		10.58	6.45	--	4.13	<2,500	--	<25	<25	<25	<50	<25	10,000	<25	<50	<25	<25	<25	<13,000	--	
MW-4	11/21/2007		10.58	5.68	--	4.90	<2,500	--	<25	<25	<25	<50	<25	38,000	<25	<50	<25	<25	<25	<13,000	--	
MW-4	2/29/2008		10.58	6.44	--	4.14	<5,000	--	<50	<50	<50	<100	<50	32,000	<50	<100	<50	<50	<50	<25,000	--	
MW-4	5/23/2008		10.58	6.01	--	4.57	<5,000	--	<50	<50	<50	<100	<50	42,000	<50	<100	<50	<50	<50	<25,000	--	
MW-4	9/26/2008		10.58	7.37	--	3.21	370	--	<1.0	<1.0	<1.0	<1.0	14	39,000	<1.0	<1.0	2.8	<1.0	<1.0	<250	--	
MW-4	12/23/2008		10.58	6.04	--	4.54	270	--	<1.0	<1.0	<1.0	<1.0	15	37,000	<1.0	<1.0	3.2	<1.0	<1.0	<250	--	
MW-4	3/9/2009		10.58	5.30	--	5.28	140	--	<1.0	<1.0	<1.0	<1.0	18	27,000	<1.0	<1.0	3.5	<1.0	<1.0	<250	--	
MW-4	5/28/2009		10.58	7.06	--	3.52	330	--	<1.0	<1.0	<1.0	<1.0	21	36,000	<1.0	<1.0	2.9	<1.0	1.1	<250	0.41	
MW-4	12/10/2009		10.58	6.24	--	4.34	660	--	<0.50	<0.50	<0.50	<1.0	10	39,000	<0.50	<0.50	2.7	<0.50	<0.50	<100	0	

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Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-5	2/19/2003		7.69	5.29	--	2.40	2,800	--	11	5.4	9.7	12	6.4	--	--	--	--	--	--	--	--	
MW-5	6/6/2003		7.69	5.30	--	2.39	3,200	--	9.1	<5.0	7.6	9.3	<5.0	<200	--	<5.0	<5.0	--	<5.0	<1,000	--	
MW-5	8/7/2003		7.69	5.33	--	2.36	2,200	--	7.3	<5.0	<5.0	9.1	18	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	
MW-5	11/20/2003		7.69	5.39	--	2.30	3,500	--	12	5.4	6.4	12	12	<100	--	<2.5	<2.5	--	<2.5	<500	--	
MW-5	4/28/2004		7.69	5.53	--	2.16	5,700	--	7.8	4.2	5.2	11	11	<100	<2.5	<2.5	<2.5	<2.5	<500	--		
MW-5	8/26/2004		7.69	5.42	--	2.27	2,400	--	23	4	3.6	11	74	<100	<2.5	<2.5	<2.5	<2.5	<2.5	--	--	
MW-5	12/1/2004		7.69	5.38	--	2.31	4,300	--	11	<5.0	5.5	15	<5.0	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	
MW-5	2/2/2005		7.69	5.48	--	2.21	4,000	--	8.4	4.8	4	10	11	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-5	4/25/2005		10.18	5.52	--	4.66	5,200	--	7.6	4	4.3	9.9	12	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-5	9/30/2005		10.18	5.04	--	5.14	4,100	--	5.3	2.7	2.1	8	16	27	<1.0	<1.0	<1.0	<1.0	<1.0	<100	--	
MW-5	12/28/2005		10.18	4.85	--	5.33	7,700	--	7.7	3.3	2.9	7.1	3.8	<20	<2.0	14	<2.0	--	<2.0	<400	--	
MW-5	3/23/2006		10.18	5.07	--	5.11	5,700	--	11	3.3	2.4	8.1	8.6	37	<2.0	<4.0	<2.0	<2.0	<2.0	<400	--	
MW-5	6/5/2006		10.18	5.39	(SHEEN)	4.79	5,900	--	36	5	3.7	15	11	90	<2.5	<5.0	<2.5	<2.5	<2.5	<500	--	
MW-5	9/19/2006		10.18	4.75	--	5.43	4,600	--	6.7	<2.5	<2.5	<5.0	12	53	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-5	12/1/2006		10.18	5.29	--	4.89	4,400	--	5	<2.5	<2.5	5.8	14	<25	<2.5	<5.0	<2.5	<2.5	2.7	<1,300	--	
MW-5	3/1/2007		10.18	5.01	--	5.17	6,400	--	6.2	3	<2.5	8.7	<2.5	<25	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-5	6/1/2007		10.18	5.34	--	4.84	7,000	--	3.4	<2.5	<2.5	6.6	11	40	<2.5	32	<2.5	5.8	<2.5	<1,300	--	
MW-5	9/13/2007		10.18	5.11	--	5.07	7,000	--	3.8	<2.5	<2.5	<5.0	8.5	<25	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-5	11/21/2007		10.18	5.34	--	4.84	4,700	--	<2.5	<2.5	<2.5	<5.0	11	310	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-5	2/29/2008		10.18	5.33	--	4.85	5,100	--	1.9	1.8	0.93	4.2	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-5	5/23/2008		10.18	5.38	--	4.80	4,600	--	<2.5	<2.5	<2.5	<5.0	3.9	<25	<2.5	<5.0	<2.5	<2.5	<2.5	<1,200	--	
MW-5	9/26/2008		10.18	5.26	--	4.92	3,400	--	1.5	<1.0	<1.0	2.2	2.8	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-5	12/23/2008		10.18	5.04	--	5.14	3,300	--	2.7	1.1	<1.0	3.4	1	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-5	3/9/2009		10.18	4.79	--	5.39	4,300	--	1.9	1.8	<1.0	4	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-5	5/28/2009		10.18	5.21	--	4.97	4,400	--	<1.0	<1.0	<1.0	1.8	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	2.15	
MW-5	12/10/2009		10.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA, need traffic control)		
MW-5	6/29/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA, need traffic control)		
MW-5	12/30/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA, need traffic control)		
MW-5	6/29/2011		10.18	5.38	--	4.80	3,300	--	1.7	0.60	<0.50	2.4	1.9	<4.0	--	--	--	<0.50	--	0.46	(P)	
MW-5	1/30/2012		10.18	5.24	--	4.94	3,200	--	2.4	1.1	<0.50	3.6	2.1	17	--	--	--	<0.50	--	1.09	(P)	
mw-5	6/27/2012		10.18	5.39	--	4.79	--	--	--	--	--	--	--	--	--	--	--	--	--	1.52	(P, smpld 6/29/12)	
MW-5	6/29/2012		--	--	--	3,000	--	1.5	<0.50	<0.50	<0.50	3.5	2.0	<4.0	--	--	--	<0.50	--	--		
MW-5	12/7/2012		10.18	5.11	--	5.07	3,200	--	2.9	0.79	0.89	2.9	6.2	89	--	--	--	<0.50	--	1.26		
MW-5	6/6/2013		10.18	5.47	--	4.71	3,800	--	2.1	0.67	<0.50	3.2	3.7	41	--	--	--	<0.50	--	1.06		
MW-5	12/13/2013		10.18	5.47	--	4.71	3,300	600	3.3	1.0	0.79	4.1	9.5	410	--	--	--	<0.50	--	2.87		
MW-5	6/30/2014		10.18	5.49	--	4.69	2,800	340	2.5	0.67	<0.50	3.9	5.2	160	--	--	--	<0.50	--	0.23		
MW-5	12/16/2014		10.18	4.05	--	6.13	2,500	410	2.5	<0.50	<0.50	3.2	3.6	200	--	--	--	<0.50	--	0.31		
MW-6	10/12/1993		8.52	6.59	--	1.93	63	--	<0.5	<0.5	<0.5	<0.5	44	--	--	--	--	--	--	--		
MW-6	2/15/1994		8.52	6.31	--	2.21	68	--	<0.5	<0.5												

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Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-6	10/18/1994		8.52	6.72	--	1.80	<50	--	<0.5	<0.5	<0.5	<0.5	85	--	--	--	--	--	--	--	6.00	
MW-6	1/13/1995		8.52	5.95	--	2.57	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.00	
MW-6	4/13/1995		8.52	5.44	--	3.08	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.50	
MW-6	7/11/1995		8.52	5.68	--	2.84	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.40	
MW-6	11/2/1995		8.52	6.57	--	1.95	<50	--	<0.5	<0.5	<0.5	<1.0	35	--	--	--	--	--	--	--	8.30	
MW-6	2/5/1996		8.52	6.27	--	2.25	<50	--	<5.0	<10	<10	<10	<100	--	--	--	--	--	--	--	2.20	
MW-6	4/24/1996		8.52	5.95	--	2.57	<250	--	<2.5	<5.0	<5.0	<5.0	62	--	--	--	--	--	--	--	8.00	
MW-6	7/15/1996		8.52	6.39	--	2.13	<250	--	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8.00	
MW-6	7/30/1996		8.52	6.44	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/4/1996		8.52	8.05	--	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/5/1996		8.52	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.30	
MW-6	5/17/1997		8.52	6.75	--	1.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	8/11/1997		8.52	6.48	--	2.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/17/1997		8.52	9.27	--	-0.75	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.70	
MW-6	1/29/1998		8.52	7.98	--	0.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	6/22/1998		8.52	7.68	--	0.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/30/1998		8.52	6.98	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	3/9/1999		8.52	5.90	--	2.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	6/23/1999		8.52	6.93	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	9/23/1999		8.52	6.45	--	2.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/28/1999		8.52	6.33	--	2.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	3/22/2000		8.52	5.15	--	3.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	5/26/2000		8.52	5.72	--	2.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	9/15/2000		8.52	6.02	--	2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/11/2000		8.52	6.20	--	2.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	3/29/2001		8.52	5.34	--	3.18	750	--	<2.5	2.9	<2.5	12	820	--	--	--	--	--	--	--	--	
MW-6	6/27/2001		8.52	6.00	--	2.52	760	--	33	<2.5	<2.5	<7.5	968	--	--	--	--	--	--	--	--	
MW-6	9/19/2001		8.52	6.22	--	2.30	<500	--	<5.0	<5.0	<5.0	<15	879	--	--	--	--	--	--	--	--	
MW-6	12/28/2001		8.52	4.71	--	3.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NS)
MW-6	3/12/2002		8.52	4.96	--	3.56	<500	--	<5.0	<5.0	<5.0	<10	244	--	--	--	--	--	--	--	--	
MW-6	6/13/2002		8.52	5.78	--	2.74	<250	--	<2.5	<2.5	<2.5	<5.0	413	--	--	--	--	--	--	--	--	
MW-6	9/6/2002		8.52	6.14	--	2.38	130	--	<0.5	<0.5	<0.5	<0.5	240	--	--	--	--	--	--	--	--	
MW-6	12/13/2002		8.52	6.05	--	2.47	140	--	<1.0	<1.0	<1.0	<1.0	200	--	--	--	--	--	--	--	--	
MW-6	2/19/2003		8.52	5.40	--	3.12	<500	--	<5.0	<5.0	<5.0	<5.0	150	--	--	--	--	--	--	--	--	
MW-6	6/6/2003		8.52	5.54	--	2.98	1,100	--	<5.0	<5.0	<5.0	<5.0	140	<200	--	<5.0	<5.0	<5.0	21	<1,000	--	
MW-6	8/7/2003		8.52	5.94	--	2.58	<500	--	<5.0	<5.0	<5.0	<5.0	160	<200	<5.0	<5.0	<5.0	<5.0	20	<1,000	--	
MW-6	11/20/2003		8.52	5.85	--	2.67	95	--	<0.5	<0.5	<0.5	<0.5	74	<20	--	<0.5	<0.5	<0.5	12	<100	--	
MW-6	4/28/2004		8.52	5.45	--	3.07	<250	--	<2.5	<2.5	<2.5	<2.5	120	<100	<2.5	<2.5	<2.5	<2.5	12	<500	--	
MW-6	8/26/2004		8.52	6.06	--	2.46	<250	--	<2.5	<2.5	<2.5	<2.5	110	<100	<2.5	<2.5	<2.5	<2.5	12	<500	--	
MW-6	12/1/2004		8.52	6.19	--	2.33	<250	--	<2.5	<2.5	<2.5	<2.5	86	<100	<2.5	<2.5	<2.5	<2.5	11	<500	--	
MW-6	2/2/2005		8.52	5.20	--	3.32	55	--	<0.5	<0.5	<0.5	<0.5	41	32	<0.5	<0.5	<0.5	<0.5	6.2	<100	--	
MW-6	4/25/2005		11.01	5.22	--	5.79	64	--	<0.5	<0.5	<0.5	<0.5	50	45	<0.5	<0.5	<0.5	<0.5	6	<100	--	
MW-6	9/30/2005		11.01	5.93	--	5.08	200(N)	--	<2.0	<2.0												

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-6	6/5/2006		11.01	5.38	--	5.63	<50	--	<0.5	0.54	<0.5	<1.0	14	110	<0.5	<1.0	<0.5	<0.5	1.5	<100	--	
MW-6	9/19/2006		11.01	5.93	--	5.08	<50	--	<0.5	<0.5	<0.5	<1.0	8.8	190	<0.5	<1.0	<0.5	<0.5	1.4	<250	--	
MW-6	12/1/2006		11.01	6.28	--	4.73	<50	--	<0.5	<0.5	<0.5	<1.0	5.9	98	<0.5	<1.0	<0.5	<0.5	0.94	<250	--	
MW-6	3/1/2007		11.01	5.72	--	5.29	<50	--	<0.5	<0.5	<0.5	<1.0	6	96	<0.5	<1.0	<0.5	<0.5	0.68	<250	--	
MW-6	6/1/2007		11.01	6.22	--	4.79	<50	--	<0.5	<0.5	<0.5	<1.0	7.4	160	<0.5	<1.0	<0.5	<0.5	0.77	<250	--	
MW-6	9/13/2007		11.01	6.57	--	4.44	63	--	<0.5	<0.5	<0.5	<1.0	6.7	120	<0.5	<1.0	<0.5	<0.5	0.87	<250	--	
MW-6	11/21/2007		11.01	6.67	--	4.34	<50	--	<0.5	<0.5	<0.5	<1.0	8.4	210	<0.5	<1.0	<0.5	<0.5	1	<250	--	
MW-6	2/29/2008		11.01	5.80	--	5.21	<50	--	<0.5	<0.5	<0.5	<1.0	7.1	46	<0.5	<1.0	<0.5	<0.5	0.92	<250	--	
MW-6	5/23/2008		11.01	6.53	--	4.48	<50	--	<0.5	<0.5	<0.5	<1.0	8.4	53	<0.5	<1.0	<0.5	<0.5	0.95	<250	--	
MW-6	9/26/2008		11.01	6.86	--	4.15	<50	--	<1.0	<1.0	<1.0	<1.0	5.1	56	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-6	12/23/2008		11.01	6.90	--	4.11	<50	--	<1.0	<1.0	<1.0	<1.0	5.3	54	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-6	3/9/2009		11.01	6.00	--	5.01	<50	--	<1.0	<1.0	<1.0	<1.0	3.5	62	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-6	5/28/2009		11.01	6.19	--	4.82	<50	--	<1.0	<1.0	<1.0	<1.0	6.6	55	<1.0	<1.0	<1.0	<1.0	<1.0	<250	2.77	
MW-6	12/10/2009		11.01	6.15	--	4.86	<50	--	<0.50	<0.50	<0.50	<1.0	2.0	40	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.60	
MW-6	6/29/2010		11.01	6.18	--	4.83	<50	--	<0.50	<0.50	<0.50	<1.0	2.7	49	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.57	
MW-6	12/30/2010		11.01	5.34	--	5.67	<50	--	<0.50	<0.50	<0.50	<1.0	2.2	44	<0.50	<0.50	<0.50	<0.50	<0.50	<250	0.41	
MW-6	6/29/2011		11.01	5.53	--	5.48	<50	2,100	--	--	--	--	3.6	37	--	--	--	--	<0.50	--	0.03	
MW-6	1/30/2012		11.01	5.89	--	5.12	<50	710	--	--	--	--	4.0	110	--	--	--	--	<0.50	--	0.61	
MW-6	6/27/2012		11.01	5.68	--	5.33	<50	1,200	--	--	--	--	2.2	49	--	--	--	--	0.52	--	0.94	
MW-6	12/7/2012		11.01	5.35	--	5.66	<50	610	--	--	--	--	2.4	300	--	--	--	--	<0.50	--	1.20	
MW-6	6/6/2013		11.01	5.99	--	5.02	160	3,900	--	--	--	--	3.8	150	--	--	--	--	<0.50	--	1.26	
MW-6	12/13/2013		11.01	6.36	--	4.65	<50	140	--	--	--	--	4.4	160	--	--	--	--	<0.50	--	2.76	
MW-6	6/30/2014		11.01	5.94	--	5.07	<50	300	--	--	--	--	2.4	57	--	--	--	--	<0.50	--	0.18	
MW-6	12/16/2014		11.01	5.22	--	5.79	<50	510	--	--	--	--	<0.50	<20	--	--	--	--	<0.50	--	1.76	
																					(Drained well box)	
MW-7	10/12/1993		7.61	6.14	--	1.47	<50	--	<0.5	<0.5	<0.5	0.7	<5.0	--	--	--	--	--	--	--	--	
MW-7	2/15/1994		7.61	5.88	--	1.73	78	--	<0.5	<0.5	<0.5	0.6	<5.0	--	--	--	--	--	--	--	4.00	
MW-7	5/11/1994		7.61	5.76	--	1.85	70	--	<0.5	<0.5	<0.5	0.9	12	--	--	--	--	--	--	--	9.10	
MW-7	8/1/1994		7.61	5.97	--	1.64	77	--	<0.5	<0.5	<0.5	0.5	182	--	--	--	--	--	--	--	2.50	
MW-7	10/18/1994		7.61	6.24	--	1.37	<50	--	<0.5	<0.5	<0.5	<0.5	52	--	--	--	--	--	--	--	6.30	
MW-7	1/13/1995		7.61	5.39	--	2.22	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.20	
MW-7	4/13/1995		7.61	5.17	--	2.44	63	--	<0.5	<0.5	<0.5	1.4	--	--	--	--	--	--	--	--	8.40	
MW-7	7/11/1995		7.61	5.25	--	2.36	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.90	
MW-7	11/2/1995		7.61	6.19	--	1.42	<50	--	<0.5	<0.5	<0.5	<1.0	55	--	--	--	--	--	--	--	8.00	
MW-7	2/5/1996		7.61	5.69	--	1.92	<50	--	<0.5	<1.0	<1.0	<1.0	40	--	--	--	--	--	--	--	1.90	
MW-7	4/24/1996		7.61	5.59	--	2.02	<250	--	<2.5	<5.0	<5.0	<5.0	53	--	--	--	--	--	--	--	8.20	
MW-7	7/15/1996		7.61	6.07	--	1.54	<250	--	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	7.80	
MW-7	7/30/1996		7.61	6.04	--	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/4/1996		7.61	7.76	--	-0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/5/1996		7.61	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<1.0	<10									

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Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-7	12/30/1998		7.61	5.51	--	2.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	3/9/1999		7.61	5.57	--	2.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	6/23/1999		7.61	6.69	--	0.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/23/1999		7.61	6.23	--	1.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	12/28/1999		7.61	6.08	--	1.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	3/22/2000		7.61	4.88	--	2.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	5/26/2000		7.61	5.42	--	2.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/15/2000		7.61	5.79	--	1.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	12/11/2000		7.61	5.93	--	1.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	3/29/2001		7.61	5.24	--	2.37	600	--	<2.5	<2.5	<2.5	<7.5	636	--	--	--	--	--	--	--	--	
MW-7	6/27/2001		7.61	5.69	--	1.92	590	--	<2.5	<2.5	<2.5	<7.5	739	--	--	--	--	--	--	--	--	
MW-7	9/19/2001		7.61	5.89	--	1.72	560	--	<5.0	<5.0	<5.0	<15	1,190	--	--	--	--	--	--	--	--	
MW-7	12/28/2001		7.61	4.53	--	3.08	910	--	23	<2.5	<2.5	<5.0	856	--	--	--	--	--	--	--	--	
MW-7	3/12/2002		7.61	4.71	--	2.90	620	--	<2.5	<2.5	<2.5	<5.0	675	--	--	--	--	--	--	--	--	
MW-7	6/13/2002		7.61	5.21	--	2.40	860	--	<2.5	<2.5	<2.5	<5.0	1,470	--	--	--	--	--	--	--	--	
MW-7	9/6/2002		7.61	5.77	--	1.84	350	--	<2.5	<2.5	<2.5	<2.5	690	--	--	--	--	--	--	--	--	
MW-7	12/13/2002		7.61	5.65	--	1.96	1,300	--	<10	<10	<10	<10	1,800	--	--	--	--	--	--	--	--	
MW-7	2/19/2003		7.61	5.07	--	2.54	1,700	--	<10	<10	<10	<10	1,600	--	--	--	--	--	--	--	--	
MW-7	6/6/2003		7.61	5.27	--	2.34	1,000	--	<5.0	<5.0	<5.0	<5.0	510	<200	--	<5.0	<5.0	--	41	<1,000	--	
MW-7	8/7/2003		7.61	5.52	--	2.09	510	--	<5.0	<5.0	<5.0	<5.0	520	<200	<5.0	<5.0	<5.0	<5.0	43	<1,000	--	
MW-7	11/20/2003		7.61	5.79	--	1.82	330	--	<2.5	<2.5	<2.5	<2.5	270	1,300	--	<2.5	<2.5	--	8.9	<500	--	
MW-7	4/28/2004		7.61	5.20	--	2.41	<250	--	<2.5	<2.5	<2.5	<2.5	71	880	<2.5	<2.5	<2.5	<2.5	3.5	<500	--	
MW-7	8/26/2004		7.61	5.65	--	1.96	450	--	<2.5	<2.5	<2.5	<2.5	150	4,800	<0.5	<2.5	<2.5	<0.5	7.8	<500	--	
MW-7	12/1/2004		7.61	5.79	--	1.82	100	--	<1.0	<1.0	<1.0	<1.0	25	1,400	<1.0	<1.0	<1.0	<1.0	1.1	<200	--	
MW-7	2/2/2005		7.61	4.92	--	2.69	81	--	<0.5	<0.5	<0.5	<0.5	31	830	<0.5	<0.5	<0.5	<0.5	1.8	<100	--	
MW-7	4/25/2005		10.11	4.88	--	5.23	67	--	<0.5	<0.5	<0.5	0.64	41	520	<0.5	<0.5	<0.5	<0.5	2.1	<100	--	
MW-7	9/30/2005		10.11	5.62	--	4.49	58(N)	--	<0.5	<0.5	<0.5	<1.0	18	450	<0.5	<0.5	<0.5	<0.5	1.5	<50	--	
MW-7	12/28/2005		10.11	4.93	--	5.18	<500	--	<5.0	<5.0	<5.0	<10	7.4	1,600	<5.0	<10	<5.0	--	<5.0	<1,000	--	
MW-7	3/23/2006		10.11	4.63	--	5.48	71	--	<0.5	<0.5	<0.5	<1.0	25	340	<0.5	<1.0	<0.5	<0.5	1.7	<100	--	
MW-7	6/5/2006		10.11	5.08	--	5.03	57	--	<0.5	<0.5	<0.5	<1.0	14	200	<0.5	<1.0	<0.5	<0.5	1.2	<100	--	
MW-7	9/19/2006		10.11	5.60	--	4.51	<50	--	<0.5	<0.5	<0.5	<1.0	14	280	<0.5	<1.0	<0.5	<0.5	1.6	<250	--	
MW-7	12/1/2006		10.11	6.00	--	4.11	<250	--	<2.5	<2.5	<2.5	<5.0	6.7	1,400	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-7	3/1/2007		10.11	5.69	--	4.42	<250	--	<2.5	<2.5	<2.5	<5.0	4	1,000	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-7	6/1/2007		10.11	5.97	--	4.14	120	--	<0.5	<0.5	<0.5	<1.0	7.5	600	<0.5	<1.0	<0.5	<0.5	0.59	<250	--	
MW-7	9/13/2007		10.11	6.31	--	3.80	<50	--	<0.5	<0.5	<0.5	<1.0	10	260	<0.5	<1.0	<0.5	<0.5	0.8	<250	--	
MW-7	11/21/2007		10.11	6.39	--	3.72	55	--	<0.5	<0.5	<0.5	<1.0	8.4	1,500	<0.5	<1.0	<0.5	<0.5	0.87	<250	--	
MW-7	2/29/2008		10.11	5.78	--	4.33	<50	--	<0.5	<0.5	<0.5	<1.0	6.2	960	<0.5	<1.0	<0.5	<0.5	0.73	<250	--	
MW-7	5/23/2008		10.11	6.27	--	3.84	53	--	<0.5	<0.5	<0.5	<1.0	9.6	300	<0.5	<1.0	<0.5	<0.5	0.96	<250	--	
MW-7	9/26/2008		10.11	6.52	--	3.59	<50	--	<1.0	<1.0	<1.0	<1.0	7.5	800	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-7	12/23/2008		10.11	6.40	--	3.71	59	--	<1.0	<1.0	<1.0	<1.0	5.7	3,500	<1.0	<1.0</td						

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1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-7	6/29/2011		10.11	5.18	--	4.93	<500	--	<5.0	<5.0	<5.0	<10	<5.0	2,200	--	--	--	<5.0	--	0.47	(P)	
MW-7	1/30/2012		10.11	5.29	--	4.82	<50	--	<0.50	<0.50	<0.50	<1.0	4.0	2,700	--	--	--	<0.50	--	0.69	(P)	
MW-7	6/27/2012		10.11	5.19	--	4.92	<50	--	<0.50	<0.50	<0.50	<1.0	2.7	1,400	--	--	--	--	0.56	--	1.23	(P)
MW-7	12/7/2012		10.11	4.78	--	5.33	<50	--	<0.50	<0.50	<0.50	<1.0	3.0	2,600	--	--	--	<0.50	--	1.21		
MW-7	6/6/2013		10.11	5.43	--	4.68	<50	--	<0.50	<0.50	<0.50	<1.0	2.8	1,600	--	--	--	<0.50	--	1.23		
MW-7	6/14/2013		--	--	--	--	570	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-7	12/13/2013		10.11	5.84	--	4.27	<50	<51	<0.50	<0.50	<0.50	<1.0	4.4	3,100	--	--	--	<0.50	--	2.75		
MW-7	6/30/2014		10.11	5.42	--	4.69	<250	130	<2.5	<2.5	<2.5	<5.0	2.7	2,300	--	--	--	<2.5	--	0.23		
MW-7	12/16/2014		10.11	5.71	--	4.40	<100	140	<1.0	<1.0	<1.0	<2.0	3.5	2,800	--	--	--	<1.0	--	0.47		
MW-8	10/12/1993		8.60	5.86	--	2.74	<50	--	<0.5	<0.5	<0.5	<0.5	11	--	--	--	--	--	--	--	--	
MW-8	2/15/1994		8.60	5.50	--	3.10	380	--	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	3.30	
MW-8	5/11/1994		8.60	5.09	--	3.51	330	--	<0.5	1.2	<0.5	1.9	<5.0	--	--	--	--	--	--	--	8.50	
MW-8	8/1/1994		8.60	5.20	--	3.40	260	--	<0.5	1.2	2.9	5.8	<5.0	--	--	--	--	--	--	--	2.30	
MW-8	10/18/1994		8.60	5.70	--	2.90	82	--	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	6.40	
MW-8	1/13/1995		8.60	4.96	--	3.64	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	6.90	
MW-8	4/13/1995		8.60	5.40	--	3.20	270	--	<0.5	<0.5	<0.5	4.4	--	--	--	--	--	--	--	--	8.40	
MW-8	7/11/1995		8.60	6.01	--	2.59	320	--	<0.5	<0.5	<0.5	3.5	--	--	--	--	--	--	--	--	8.00	
MW-8	11/2/1995		8.60	6.81	--	1.79	100	--	<0.5	<0.5	<0.5	<1.0	<5.0	--	--	--	--	--	--	--	8.70	
MW-8	2/5/1996		8.60	6.12	--	2.48	<50	--	<5.0	<10	<10	<10	<100	--	--	--	--	--	--	--	1.50	
MW-8	4/24/1996		8.60	6.23	--	2.37	<50	--	<5.0	<10	<10	<10	<100	--	--	--	--	--	--	--	8.70	
MW-8	7/15/1996		8.60	6.70	--	1.90	<250	--	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8.40	
MW-8	7/30/1996		8.60	6.64	--	1.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/4/1996		8.60	8.36	--	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/5/1996		8.60	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.20	
MW-8	5/17/1997		8.60	7.03	--	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	8/11/1997		8.60	6.05	--	2.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/17/1997		8.60	9.14	--	-0.54	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.70	
MW-8	1/29/1998		8.60	7.90	--	0.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	6/22/1998		8.60	7.72	--	0.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/30/1998		8.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-8	3/9/1999		8.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-8	6/23/1999		8.60	4.70	--	3.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	9/23/1999		8.60	4.22	--	4.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/28/1999		8.60	4.12	--	4.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	3/22/2000		8.60	4.71	--	3.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	5/26/2000		8.60	4.98	--	3.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	9/15/2000		8.60	4.62	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/11/2000		8.60	4.77	--	3.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	3/29/2001		8.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-8	6/27/2001		8.60	5.11	--	3.49	570	--	<2.5	<2.5	2.6	<7.5	3.4	--	--	--	--	--	--	--	--	
MW-8	9/19/2001		8.60	5.00	--	3.60	<500	--	<5.0	<5.0	<5.0	<15	<5.0	--	--	--	--	--	--	--	--	
MW-8	12/28/2001		8.60	4.15	--	4.45	440	--	<0.5	<0.5	0.98	<1.0	6.3	--	--	--	--	--	--	--	--	
MW-8	3/12/2002		8.60	4.35	--	4.25	330	--	<2.5	<2.5	<2.5	<5.0	8.7	--	--	--	--	--	--	--	--	
MW-8	6/13/2002		8.60	5.09	--	3.51	<500	--	<5.0	<5.0	<5.0	<10	16	--	--	--	--	--	--	--	--	

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-8	9/6/2002		8.60	5.18	--	3.42	98	--	<0.5	<0.5	<0.5	<0.5	76	--	--	--	--	--	--	--	--	
MW-8	12/13/2002		8.60	4.84	--	3.76	120	--	<0.5	<0.5	0.94	0.52	140	--	--	--	--	--	--	--	--	
MW-8	2/19/2003		8.60	4.45	--	4.15	<2,500	--	<25	<25	<25	<25	800	--	--	--	--	--	--	--	--	
MW-8	6/6/2003		8.60	5.00	--	3.60	<50,000	--	<500	<500	<500	<500	17,000	<20,000	--	<500	<500	--	<500	<100,000	--	
MW-8	8/7/2003		8.60	4.84	--	3.76	<2,500	--	<25	<25	<25	<25	2,400	<1,000	<25	<25	<25	44	<5,000	--		
MW-8	11/20/2003		8.60	4.48	--	4.12	<2,500	--	<25	<25	<25	<25	1,400	4,100	--	<25	<25	--	<25	<5,000	--	
MW-8	4/28/2004		8.60	9.66	--	-1.06	730	--	<2.5	<2.5	<2.5	<2.5	170	42,000	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-8	8/26/2004		8.60	4.73	--	3.87	<2,500	--	<25	<25	<25	<25	170	47,000	<25	<25	<25	<25	<25	--	--	
MW-8	12/1/2004		8.60	4.80	--	3.80	<250	--	<2.5	<2.5	<2.5	<2.5	36	9,700	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-8	2/2/2005		8.60	4.50	--	4.10	810	--	<0.5	<0.5	<0.5	<0.5	41	<20	<0.5	<0.5	0.72	<0.5	0.64	<100	--	
MW-8	4/25/2005		11.08	4.99	--	6.09	1,400	--	<12	<12	<12	<12	32	45,000	<12	<12	<12	<12	<12	<2,500	--	
MW-8	9/30/2005		11.08	4.89	--	6.19	840	--	<5.0	<5.0	<5.0	<10	17	8,500	<5.0	<5.0	<5.0	<5.0	<5.0	<500	--	
MW-8	12/28/2005		11.08	4.81	--	6.27	<250	--	<2.5	<2.5	<2.5	<5.0	17	7,400	<2.5	<5.0	<2.5	--	<2.5	<500	--	
MW-8	3/23/2006		11.08	4.22	--	6.86	660	--	<2.5	<2.5	<2.5	<5.0	21	11,000	<2.5	<5.0	<2.5	<2.5	<2.5	<500	--	
MW-8	6/5/2006		11.08	4.63	--	6.45	<2,500	--	<25	<25	<25	<50	30	34,000	<25	<50	<25	<25	<25	<5,000	--	
MW-8	9/19/2006		11.08	4.82	--	6.26	<500	--	<5.0	<5.0	<5.0	<10	17	7,500	<5.0	<10	<5.0	<5.0	<5.0	<2,500	--	
MW-8	12/1/2006		11.08	4.83	--	6.25	350	--	<2.5	<2.5	<2.5	<5.0	16	1,900	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-8	3/1/2007		11.08	4.43	--	6.65	<500	--	<5.0	<5.0	<5.0	<10	20	6,200	<5.0	<10	<5.0	<5.0	<5.0	<2,500	--	
MW-8	6/1/2007		11.08	4.74	--	6.34	<500	--	<5.0	<5.0	<5.0	<10	8.7	3,700	<5.0	<10	<5.0	<5.0	<5.0	<2,500	--	
MW-8	9/13/2007		11.08	5.25	--	5.83	230	--	<0.5	<0.5	<0.5	<1.0	9.4	630	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-8	11/21/2007		11.08	5.13	--	5.95	350	--	<0.5	<0.5	<0.5	<1.0	8.7	360	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-8	2/29/2008		11.08	4.75	--	6.33	<1,000	--	<10	<10	<10	<20	16	7,500	<10	<20	<10	<10	<10	<5,000	--	
MW-8	5/23/2008		11.08	5.01	--	6.07	<1,000	--	<10	<10	<10	<20	15	4,800	<10	<20	<10	<10	<10	<5,000	--	
MW-8	9/26/2008		11.08	5.43	--	5.65	190	--	<1.0	<1.0	<1.0	<1.0	14	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-8	12/23/2008		11.08	5.25	--	5.83	270	--	<1.0	<1.0	<1.0	<1.0	10	770	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-8	3/9/2009		11.08	4.36	--	6.72	210	--	<1.0	<1.0	<1.0	<1.0	15	3,300	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-8	5/28/2009		11.08	4.98	--	6.10	270	--	<1.0	<1.0	<1.0	<1.0	6.5	710	<1.0	<1.0	<1.0	<1.0	<1.0	<250	2.14	
MW-8	12/10/2009		11.08	5.06	--	6.02	90	--	<0.50	<0.50	<0.50	<1.0	9.0	960	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.47	
MW-8	6/29/2010		11.08	4.71	--	6.37	170	--	<0.50	<0.50	<0.50	<1.0	10	1,700	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.38	(P)
MW-8	12/30/2010		11.08	4.37	--	6.71	190	--	<0.50	<0.50	<0.50	<1.0	6.6	1,500	<0.50	<0.50	<0.50	<0.50	<0.50	<250	0.52	(P)
MW-8	6/29/2011		11.08	4.57	--	6.51	140	1,000	--	--	--	--	4.7	2,000	--	--	--	--	<0.50	--	0.62	(P)
MW-8	1/30/2012		11.08	4.63	--	6.45	240	1,500	--	--	--	--	3.8	250	--	--	--	--	<0.50	--	1.52	(P)
MW-8	6/27/2012		11.08	4.49	--	6.59	300	1,100	--	--	--	--	2.2	270	--	--	--	--	<0.50	--	1.09	(P)
MW-8	12/7/2012		11.08	3.99	--	7.09	210	800	--	--	--	--	1.2	31	--	--	--	--	<0.50	--	1.37	
MW-8	6/6/2013		11.08	4.43	--	6.65	200	830	--	--	--	--	0.50	5.7	--	--	--	--	<0.50	--	1.09	
MW-8	12/13/2013		11.08	4.42	--	6.66	270	100	--	--	--	--	<0.50	<10	--	--	--	--	<0.50	--	2.86	
MW-																						

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-9	4/13/1995		8.08	4.06	0.11	4.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	7/11/1995		8.08	4.21	0.08	3.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/2/1995		8.08	5.22	0.05	2.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	2/5/1996		8.08	4.76	0.01	3.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	4/24/1996		8.08	4.62	0.09	3.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	7/15/1996		8.08	5.11	0.04	3.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	7/30/1996		8.08	5.15	--	2.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/4/1996		8.08	6.75	0.01	1.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	5/17/1997	Dup	8.08	5.42	--	2.66	97,000	--	16,000	8,200	2,300	17,300	39,000	--	--	--	--	--	--	--	--	(Dup)
MW-9	5/17/1997		8.08	5.42	--	2.66	97,000	--	16,000	7,700	2,300	18,400	40,000	--	--	--	--	--	--	--	7.00	
MW-9	8/11/1997	Dup	8.08	5.37	--	2.71	100,000	--	14,000	360	3,200	5,790	27,000	--	--	--	--	--	--	--	--	(Dup)
MW-9	8/11/1997		8.08	5.37	--	2.71	71,000	--	12,000	340	2,100	4,300	26,000	--	--	--	--	--	--	--	9.10	
MW-9	11/17/1997		8.08	5.62	(SHEEN)	2.46	100,000	--	22,000	4,800	3,100	17,900	32,000	--	--	--	--	--	--	--	8.30	(Sheen)
MW-9	11/17/1997	Dup	8.08	5.62	(SHEEN)	2.46	100,000	--	24,000	5,300	3,500	19,300	35,000	--	--	--	--	--	--	--	--	(Dup)(Sheen)
MW-9	1/29/1998		8.08	4.07	(SHEEN)	4.01	250,000	--	20,000	21,000	3,100	18,500	110,000	--	--	--	--	--	--	--	6.60	(Sheen)
MW-9	1/29/1998	Dup	8.08	4.07	(SHEEN)	4.01	250,000	--	20,000	20,000	3,100	18,400	110,000	--	--	--	--	--	--	--	--	(Dup)(Sheen)
MW-9	6/22/1998	Dup	8.08	4.28	--	3.80	290,000	--	20,000	17,000	3,800	21,200	110,000	--	--	--	--	--	--	--	--	(Dup)
MW-9	6/22/1998		8.08	4.28	--	3.80	280,000	--	21,000	18,000	3,800	21,200	110,000	--	--	--	--	--	--	--	5.80	
MW-9	12/30/1998		8.08	4.95	--	3.13	150,000	--	10,000	3,800	2,000	9,600	86,000	--	--	--	--	--	--	--	--	
MW-9	3/9/1999		8.08	3.95	--	4.13	82,000	--	6,800	570	1,400	4,700	100,000	--	--	--	--	--	--	--	--	
MW-9	6/23/1999		8.08	5.12	--	2.96	41,000	--	11,000	820	2,300	5,200	92,000	--	--	--	--	--	--	--	--	
MW-9	9/23/1999		8.08	4.74	--	3.34	57,000	--	12,000	5,400	1,900	9,500	89,000	--	--	--	--	--	--	--	--	
MW-9	12/28/1999		8.08	4.58	--	3.50	46,000	--	15,000	490	2,500	3,500	100,000	--	--	--	--	--	--	--	--	
MW-9	3/22/2000		8.08	3.90	--	4.18	86,000	--	18,000	1,800	2,300	6,800	120,000	--	--	--	--	--	--	--	--	
MW-9	5/26/2000		8.08	4.15	--	3.93	82,000	--	17,000	680	1,800	3,800	100,000	--	--	--	--	--	--	--	--	
MW-9	9/6/2000		8.08	4.47	--	3.61	100,000	--	19,000	280	2,400	6,400	84,000	--	--	--	--	--	--	--	--	
MW-9	9/15/2000		8.08	4.34	--	3.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	12/11/2000		8.08	4.41	--	3.67	110,000	--	14,400	768	2,610	6,670	123,000	--	--	--	--	--	--	--	--	
MW-9	3/29/2001		8.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)	
MW-9	6/26/2001		8.08	5.03	0.13	3.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	9/19/2001		8.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	12/28/2001		8.08	3.73	--	4.35	110,000	--	15,000	1,500	2,280	5,530	60,900	--	--	--	--	--	--	--	--	
MW-9	3/12/2002		8.08	4.93	--	3.15	88,000	--	12,500	2,600	2,800	8,950	44,000	--	--	--	--	--	--	--	--	
MW-9	6/13/2002		8.08	4.13	--	3.95	59,000	--	9,870	161	2,560	5,560	35,600	--	--	--	--	--	--	--	--	
MW-9	9/6/2002		8.08	4.39	--	3.69	47,000	--	10,000	<100	2,100	4,600	31,000	--	--	--	--	--	--	--	--	
MW-9	12/13/2002		8.08	3.97	--	4.11	57,000	--	11,000	1,000	2,300	5,800	28,000	--	--	--	--	--	--	--	--	
MW-9	2/19/2003		8.08	3.25	--	4.83	76,000	--	10,000	2,100	3,000	8,900	11,000	--	--	--	--	--	--	--	--	
MW-9	6/6/2003		8.08	3.94	--	4.14	66,000	--	9,000	<500	2,500	4,400	17,000	<20,000	--	<500	<500	<500	<500	<100,000	--	
MW-9	8/7/2003		8.08	3.92	(SHEEN)	4.16	53,000	--	7,600	<250	2,600	4,700	17,000	<10,000	<250	<250	<250	<250	350	<50,000	--	(Sheen)
MW-9	11/20/2003		8.08	4.89	--	3.19	40,000	--	6,800	<250	860	1,100	16,000	12,000	--	<250	<250	<250	<250	<50,000	--	
MW-9	4/28/2004		8.08	3.19	(SHEEN)	4.89	47,000	--	5,600	690	2,300	6,800	8,500	<5,000	<120	<120	<120	<120	<120	<25,000	--	(Sheen)
MW-9	8/26/2004		8.08	3.61	--	4.47	35,000	--	3,700													

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-9	9/30/2005		10.55	4.02	--	6.53	26,000	--	2,400	360	1,600	4,200	2,400	520	<20	<20	<20	<20	61	<2,000	--	
MW-9	12/28/2005		10.55	2.99	--	7.56	14,000	--	1,400	22	350	450	2,200	1,800	<10	<20	<10	--	49	<2,000	--	
MW-9	3/23/2006		10.55	2.50	--	8.05	4,100	--	250	<10	130	110	330	2,400	<10	<20	<10	<10	<10	<2,000	--	
MW-9	6/5/2006		10.55	3.34	--	7.21	8,200	--	2,200	79	500	1,200	1,800	1,100	<13	<25	<13	<13	75	<2,500	--	
MW-9	9/19/2006		10.55	4.06	--	6.49	9,000	--	2,600	15	440	370	3,100	3,900	<13	<25	<13	<13	100	<6,300	--	
MW-9	12/1/2006		10.55	3.88	--	6.67	5,400	--	1,600	15	310	140	1,400	2,400	<13	<25	<13	<13	46	<6,300	--	
MW-9	3/1/2007		10.55	2.79	--	7.76	6,300	--	250	<13	270	75	240	580	<13	<25	<13	<13	<13	<6,300	--	
MW-9	6/1/2007		10.55	3.53	--	7.02	6,500	--	980	16	250	95	1,800	2,300	<13	<25	<13	<13	50	<6,300	--	
MW-9	9/13/2007		10.55	4.78	--	5.77	4,500	--	170	14	79	27	640	7,300	<13	<25	<13	<13	28	<6,300	--	
MW-9	11/21/2007		10.55	4.41	--	6.14	4,600	--	790	<13	97	34	2,000	3,500	<13	<25	<13	<13	42	<6,300	--	
MW-9	2/29/2008		10.55	3.41	--	7.14	6,800	--	700	19	250	98	1,100	2,400	<13	<25	<13	<13	35	<6,300	--	
MW-9	5/23/2008		10.55	4.53	--	6.02	5,300	--	390	22	130	68	1,200	6,800	<12	<25	<12	<12	33	<6,200	--	
MW-9	9/26/2008		10.55	5.07	--	5.48	10,000	--	94	11	26	35	280	12,000	<1.0	<1.0	<1.0	<1.0	6.2	<250	--	
MW-9	12/23/2008		10.55	4.04	--	6.51	2,600	--	420	7.9	110	84	870	1,000	<1.0	<1.0	<1.0	<1.0	23	<250	--	
MW-9	3/9/2009		10.55	3.45	--	7.10	3,400	--	45	2.2	51	18	180	610	<1.0	<1.0	<1.0	<1.0	4	<250	--	
MW-9	5/28/2009		10.55	4.17	--	6.38	4,400	--	420	14	270	170	720	840	<1.0	<1.0	<1.0	<1.0	21	<250	0.94	
MW-9	12/10/2009		10.55	4.11	(SHEEN)	6.44	4,400	--	240	7.9	17	19	780	4,200	<2.5	<2.5	<2.5	<2.5	15	<500	--	
MW-9	6/29/2010		10.55	4.30	--	6.25	4,200	--	680	15	110	130	1,200	4,200	<10	<10	<10	<10	30	<2,000	0.37	
MW-9	12/30/2010		10.55	2.79	--	7.76	420	--	6.7	<0.50	2.1	2.0	13	22	<0.50	<0.50	<0.50	<0.50	<0.50	<250	0.79	
MW-9	6/29/2011		10.55	3.72	--	6.83	4,700	--	600	13	370	120	900	960	--	--	--	--	29	--	0.48	
MW-9	1/30/2012		10.55	4.09	--	6.46	2,300	--	210	5.1	10	20	630	1,600	--	--	--	--	20	--	0.75	
MW-9	6/27/2012		10.55	3.51	--	7.04	810	--	78	<2.5	4.6	7.9	130	160	--	--	--	--	4.9	--	1.43	
MW-9	12/7/2012		10.55	3.38	--	7.17	2,000	--	130	5.1	6.1	11	250	340	--	--	--	--	9.6	--	1.04	
MW-9	6/6/2013		10.55	4.30	--	6.25	3,400	--	480	14	8.9	15	680	2,200	--	--	--	--	33	--	1.12	
MW-9	12/13/2013		10.55	4.60	--	5.95	1,600	--	110	6.4	4.2	<5.0	220	2,500	--	--	--	--	7.7	--	2.91	
MW-9	6/30/2014		10.55	4.25	--	6.30	2,500	--	170	12	4.0	10	370	3,800	--	--	--	--	13	--	0.47	
MW-9	12/16/2014		10.55	3.05	--	7.50	850	150	11	<2.5	<2.5	<5.0	110	640	--	--	--	--	3.7	--	1.30	
MW-10	4/25/2005		12.53	8.37	--	4.16	<50	--	<0.5	<0.5	<0.5	<0.5	1.5	<20	<0.5	<0.5	<0.5	<0.5	<100	--		
MW-10	9/30/2005		12.53	8.41	--	4.12	<50	--	<0.5	<0.5	<0.5	<1.0	1.5	<5.0	<0.5	<0.5	<0.5	<0.5	<50	--		
MW-10	12/28/2005		12.53	7.78	--	4.75	<50	--	<0.5	<0.5	<0.5	<1.0	0.78	<5.0	<0.5	<1.0	<0.5	--	<0.5	<100	--	
MW-10	3/23/2006		12.53	7.77	--	4.76	<50	--	<0.5	<0.5	<0.5	<1.0	0.67	<5.0	<0.5	<1.0	<0.5	<0.5	<100	--		
MW-10	6/5/2006		12.53	8.38	--	4.15	<50	--	<0.5	<0.5	<0.5	<1.0	1.8	<5.0	<0.5	<1.0	<0.5	<0.5	<100	--		
MW-10	9/19/2006		12.53	7.99	--	4.54	<50	--	<0.5	<0.5	<0.5	<1.0	0.59	<5.0	<0.5	<1.0	<0.5	<0.5	<250	--		
MW-10	12/1/2006		12.53	5.47	--	7.06	<50	--	<0.5	<0.5	<0.5	<1.0	0.89	<5.0	<0.5	<1.0	<0.5	<0.5	<250	--		
MW-10	3/1/2007		12.53	7.92	--	4.61	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<250	--		
MW-10	6/1/2007		12.53	8.55	--	3.98	<50	--	<0.5	<0.5	<0.5	<1.0	1.2	<5.0	<0.5	<1.0	<0.5	<0.5	<250	--		
MW-10	9/13/2007		12.53	8.71	--	3.82	<50	--	<0.5	<0.5	<0.5	<1.0	0.94	<5.0	<0.5	<1.0	<0.5	<0.5	<250	--		
MW-10	11/21/2007		12.53	8.84	--	3.69	<															

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-10	12/10/2009		12.53	8.35	--	4.18	<50	--	<0.50	<0.50	<0.50	<1.0	1.5	<4.0	<0.50	<0.50	<0.50	<0.50	<100	1.81		
MW-10	6/29/2010		12.53	8.43	--	4.10	<50	--	<0.50	<0.50	<0.50	<1.0	1.6	<4.0	<0.50	<0.50	<0.50	<0.50	<100	1.00	(P)	
MW-10	12/30/2010		12.53	6.62	--	5.91	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<250	1.26	(P)	
MW-10	6/29/2011		12.53	7.16	--	5.37	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	0.49	(P)	
MW-10	1/30/2012		12.53	7.33	--	5.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-10	6/27/2012		12.53	7.70	--	4.83	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	1.14	(P)	
MW-10	12/7/2012		12.53	6.29	--	6.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NSP)	
MW-10	6/6/2013		12.53	7.65	--	4.88	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	1.34		
MW-10	12/13/2013		12.53	8.10	--	4.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NSP)	
MW-10	6/30/2014		12.53	7.87	--	4.66	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	1.17		
MW-10	12/16/2014		12.53	5.79	--	6.74	--	<50	--	--	--	--	--	--	--	--	--	--	--	0.99		
MW-11	4/25/2005		14.55	9.29	--	5.26	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	<100	--	
MW-11	9/30/2005		14.55	10.23	--	4.32	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<50	--	
MW-11	12/28/2005		14.55	9.09	--	5.46	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	--	
MW-11	3/23/2006		14.55	8.75	--	5.80	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	--	
MW-11	6/5/2006		14.55	9.47	--	5.08	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	--	
MW-11	9/19/2006		14.55	10.16	--	4.39	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	12/1/2006		14.55	10.46	--	4.09	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	3/1/2007		14.55	9.62	--	4.93	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	6/1/2007		14.55	9.97	--	4.58	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	9/13/2007		14.55	10.42	--	4.13	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	11/21/2007		14.55	10.64	--	3.91	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	2/29/2008		14.55	9.76	--	4.79	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	5/23/2008		14.55	10.51	--	4.04	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-11	9/26/2008		14.55	10.51	--	4.04	<50	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-11	12/23/2008		14.55	10.74	--	3.81	<50	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-11	3/9/2009		14.55	9.50	--	5.05	<50	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-11	5/28/2009		14.55	10.40	--	4.15	<50	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	3.06	
MW-11	12/10/2009		14.55	10.41	--	4.14	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	1.03	
MW-11	6/29/2010		14.55	10.19	--	4.36	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.47	
MW-11	12/30/2010		14.55	9.22	--	5.33	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	0.63	
MW-11	6/29/2011		14.55	9.40	--	5.15	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	0.75		
MW-11	1/30/2012		14.55	9.49	--	5.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-11	6/27/2012		14.55	9.70	--	4.85	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	1.13		
MW-11	12/7/2012		14.55	8.85	--	5.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-11	6/6/2013		14.55	10.03	--	4.52	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	1.62		
MW-11	12/13/2013		14.55	10.25	--	4.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-11	6/30/2014		14.55	10.12	--	4.43	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	1.45		
MW-11	12/16/2014		14.55	8.80	--	5.75</																

Table 2
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
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Notes:

ft = Feet
 ft bTOC = Feet below top of casing
 TOC = Top of casing (surveyed)
 DTW = Depth to water
 LNAPL = Light non-aqueous phase liquid
 GW Elev = Calculated groundwater elevation = TOC - Depth to Water + 0.75*(Measured SPH Thickness); assuming a specific gravity of 0.75 for SPH when present.
 SPH = Separate-phase hydrocarbons
 GRO = Gasoline range organics
 DRO = Diesel range organics
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes, total
 MTBE = Methyl tert-butyl ether
 TBA = Tert-butyl alcohol
 1,2-DCA = 1,2-Dichloroethane
 DIPE = Diisopropyl ether
 ETBE = Ethyl tert-butyl ether
 EDB = Ethylene dibromide
 TAME = Tert-amyl methyl ether
 DO = Dissolved Oxygen
 VOC = Volatile organic compound
 mg/L = Milligrams per liter
 µg/L = Micrograms per liter
 < = Analyte was not detected above the specified method detection limit
 -- = Not measured or analyzed
 DUP = Duplicate sample
 INA = Well inaccessible; not sampled
 NS = Well not sampled
 NSP = Well not sampled in accordance with groundwater sampling schedule.
 P/NP = Well purged/not purged prior to sampling

- Post-May 2005 TOC and groundwater elevations surveyed relative to an established benchmark with an elevation of 8.11 feet above mean sea level. Wells were resurveyed to the North American Vertical Datum of 1988 (NAVD '88) in May 2005.
- Beginning in the first quarter 2003, GRO and VOCs analyzed by EPA Method 8260B.
- The data within this table collected prior to December 2009 was provided to ARCADIS U.S., Inc. by Atlantic Richfield Company and their previous consultants. ARCADIS U.S., Inc. has not verified the accuracy of this information.

Table 3
Groundwater Analytical Data for Polycyclic Aromatic Hydrocarbons
Former BP Service Station No. 11126
1700 Powell St., Emeryville, California 94608

Sample Location	Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene
Groundwater Samples (results in µg/L)									
MW-1	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-2	12/16/2014	0.31	0.15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-3	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-4	12/16/2014	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-5	12/16/2014	0.56	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-6	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-7	12/16/2014	0.16	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-8	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-9	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-10	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-11	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

PAHs were analyzed in soil by USEPA Method 8270C SIM.

PAHs = polycyclic aromatic hydrocarbons

< = Analyte was not detected above the specified method reporting limit.

µg/L = micrograms per liter

Table 3
Groundwater Analytical Data for Polycyclic Aromatic Hydrocarbons
Former BP Service Station No. 11126
1700 Powell St., Emeryville, California 94608

Sample Location	Date	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
Groundwater Samples (results in µg/L)									
MW-1	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10
MW-2	12/16/2014	<0.10	<0.10	<0.10	0.15	<0.10	22	0.11	<0.10
MW-3	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-4	12/16/2014	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-5	12/16/2014	<0.10	<0.10	<0.10	0.28	<0.10	0.43	0.30	<0.10
MW-6	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11
MW-7	12/16/2014	<0.10	<0.10	0.13	<0.10	<0.10	<0.10	0.18	0.16
MW-8	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-9	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	<0.10
MW-10	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-11	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

PAHs were analyzed in soil by USEPA Method 8270C SIM.

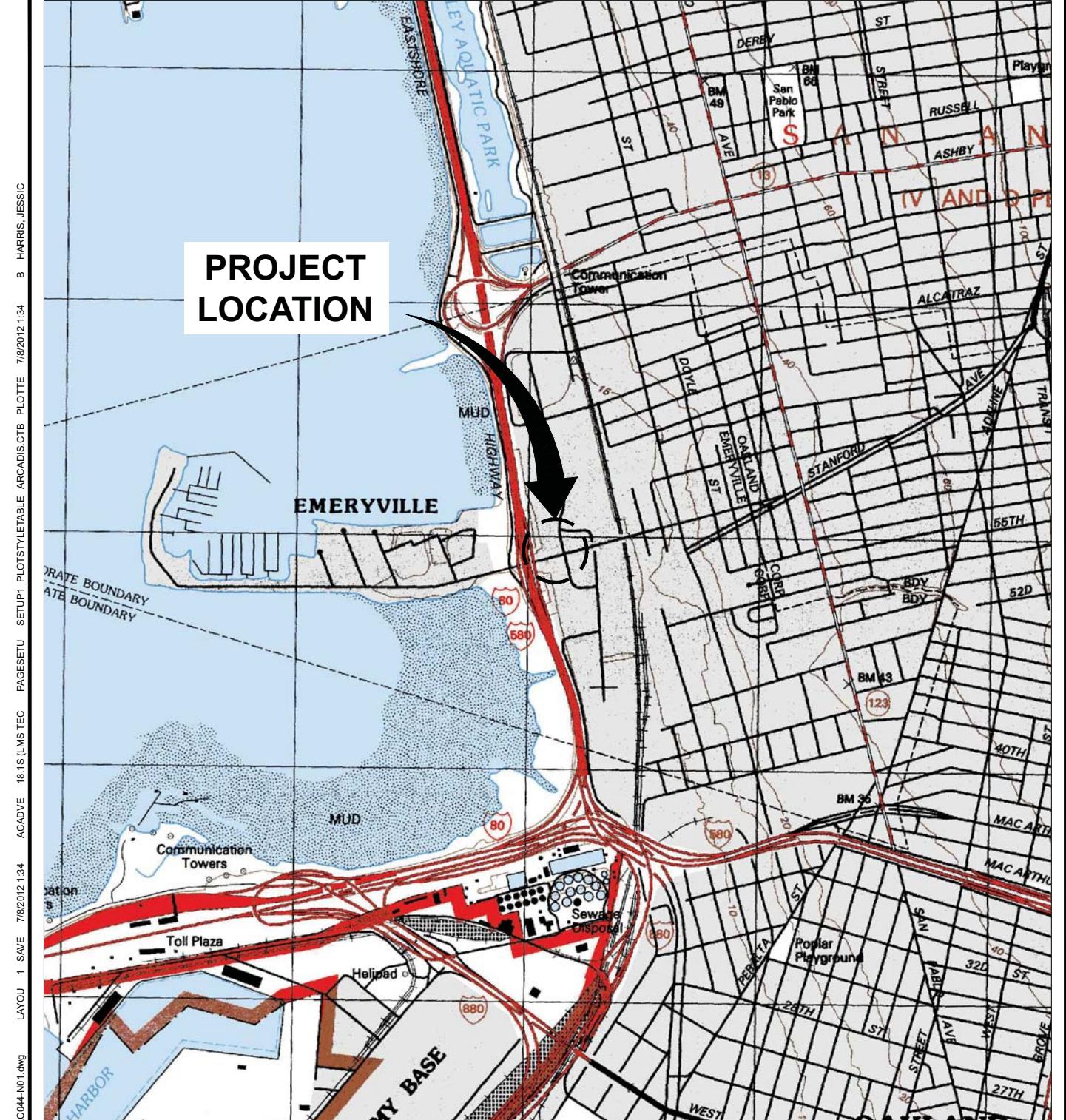
PAH = polycyclic aromatic hydrocarbon

< = Analyte was not detected above the specified method reporting limit.

µg/L = micrograms per liter

ARCADIS

FIGURES



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CALIFORNIA



CITY: PETAULUMA, CA DIV/GROUP: ENV TEAM 2 & IMAGES: PROJECTNAME: ---
C:\Users\jharris\Desktop\ENV\AC4\DWG\BP\BPNA044\DWG\BP\BPNA044-N01.dwg
XREFS: Oakland West]

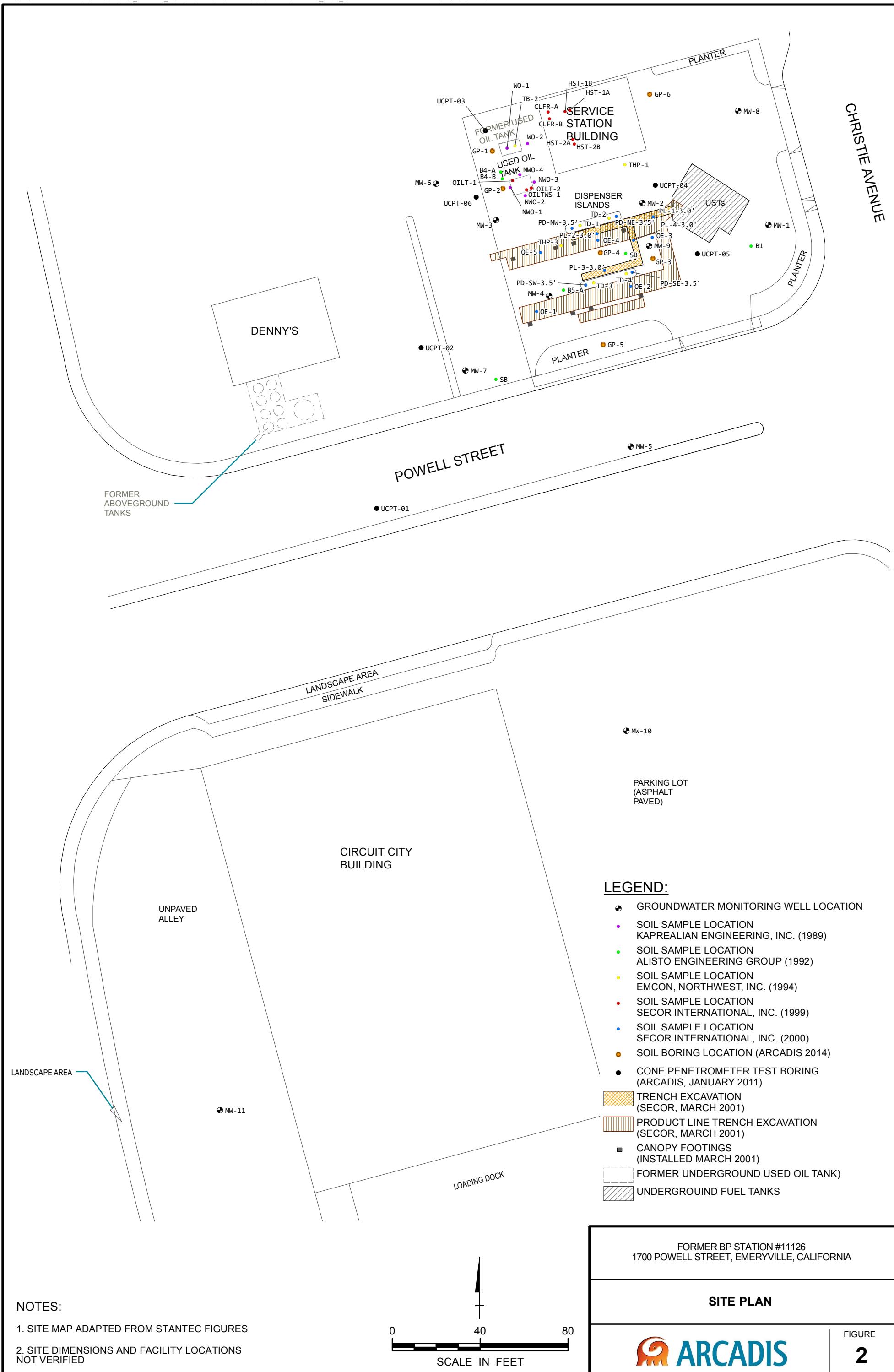


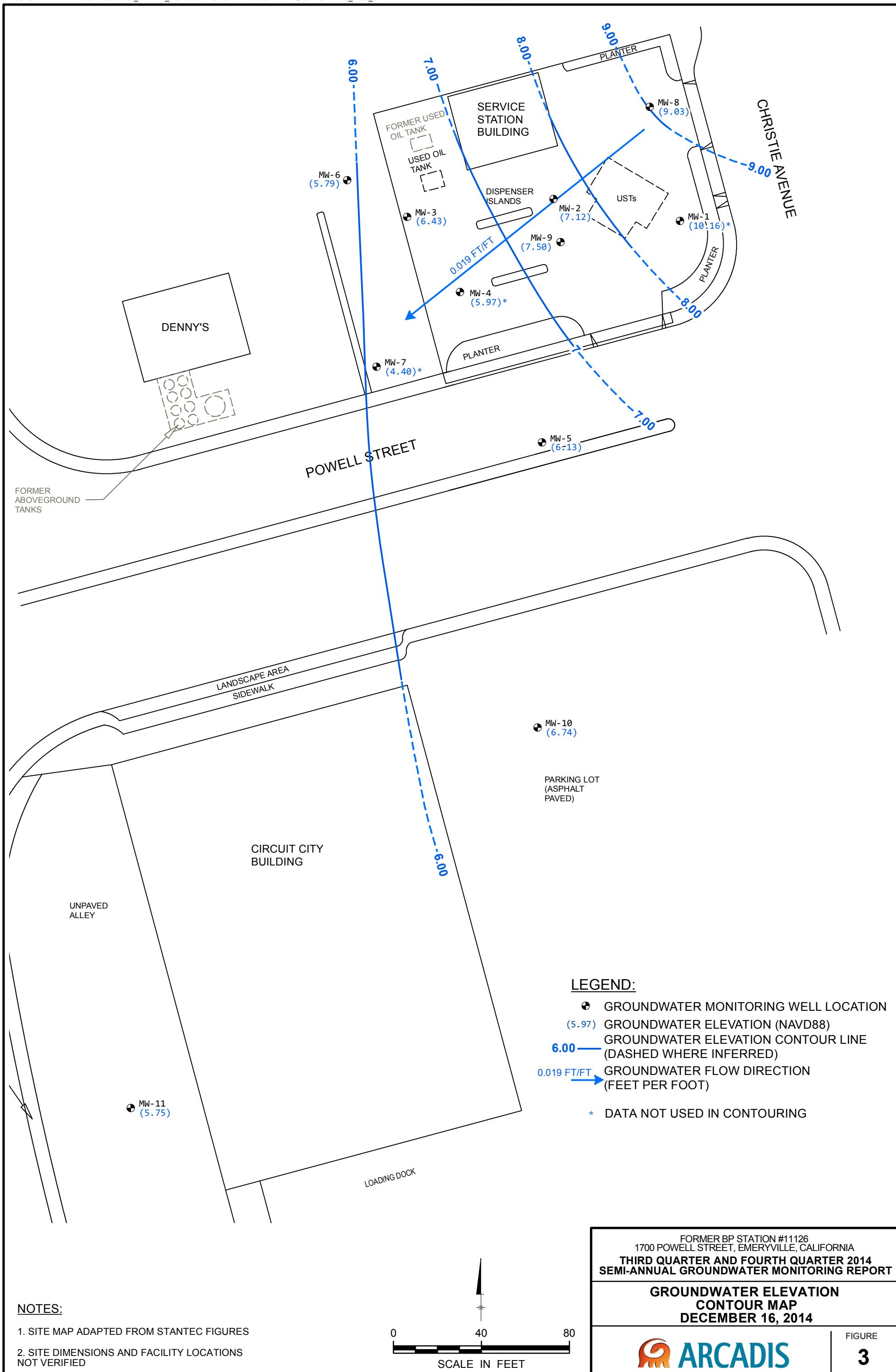
FORMER BP STATION #11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

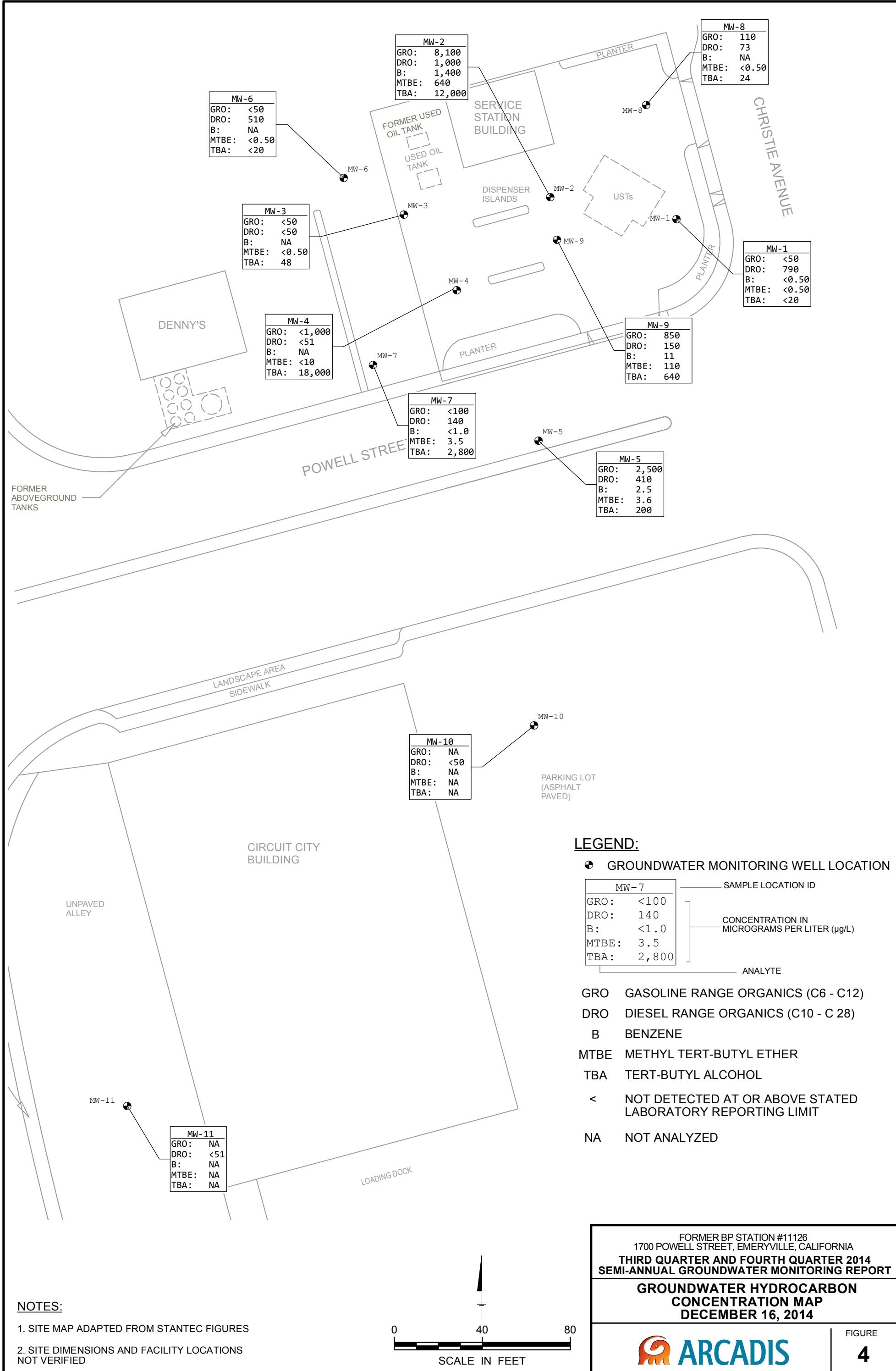
SITE VICINITY MAP

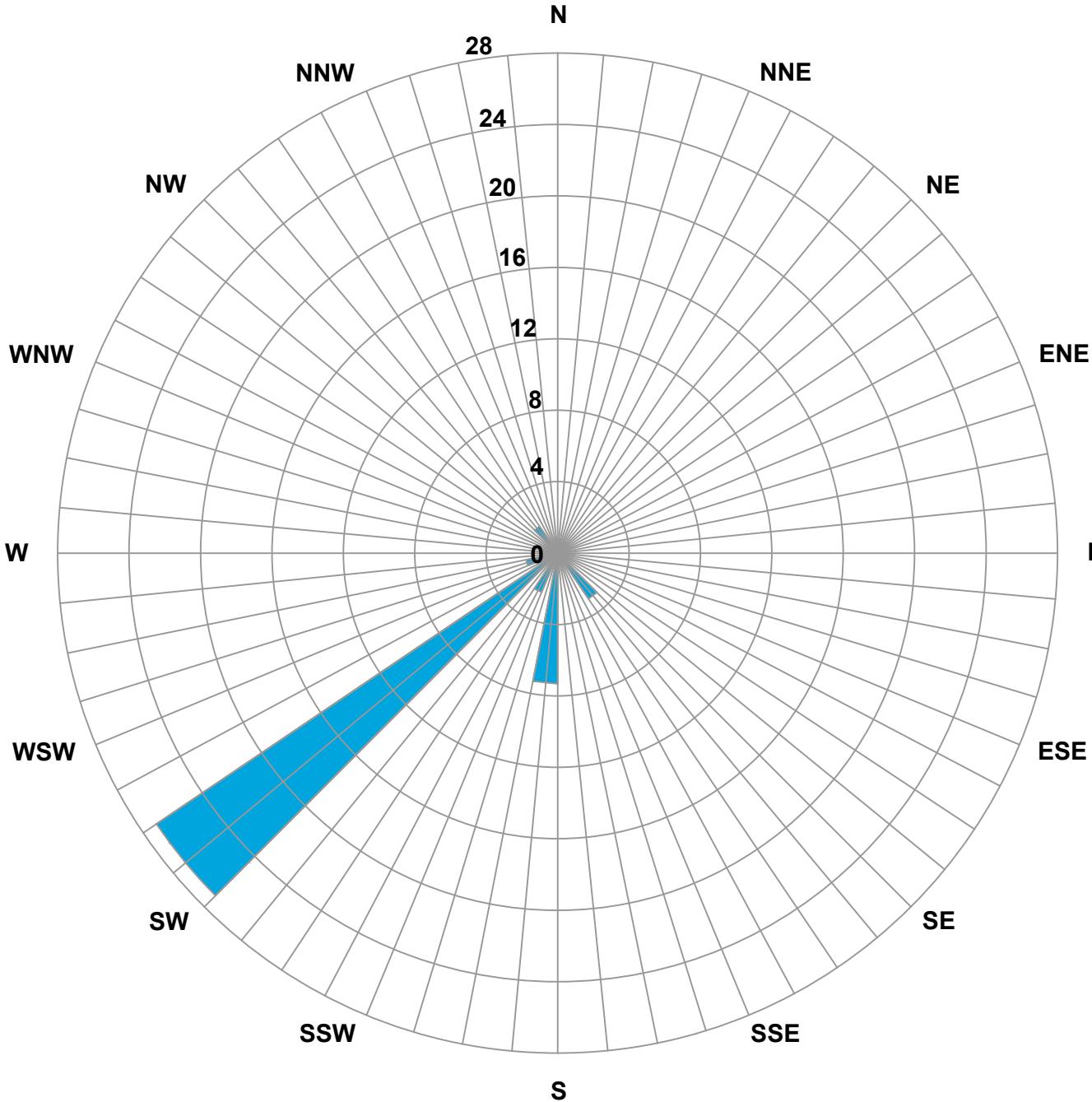


FIGURE
1









LEGEND

CONCENTRIC CIRCLES REPRESENT 46 MONITORING EVENTS CONDUCTED BETWEEN THE FIRST QUARTER 2001 AND THE FOURTH QUARTER 2014.

■ GROUNDWATER FLOW DIRECTION

FORMER BP STATION #11126
1700 POWELL STREET, EMERYVILLE, CALIFORNIA
**THIRD AND FOURTH QUARTER 2014
SEMI-ANNUAL GROUNDWATER MONITORING REPORT**

**GROUNDWATER FLOW DIRECTION
ROSE DIAGRAM**





Appendix A

Previous Investigations and Site
History Summary

Former BP Station No. 11126

Site Description

Former BP service station No. 11126 (the Site) is located at 1700 Powell Street in Emeryville. The property is identified as APN 49-1494-4-10. Land use in this area is largely commercial. The Site is approximately 350 feet east of Interstate 80/580.

The site is currently in use as a 76-branded service station. BP acquired the gasoline retail outlet from Mobil Oil Corporation in 1989. In 1994, BP transferred the gasoline retail outlet to Tosco Corporation (Tosco, now ConocoPhillips). The Site surface structures consist of a station building located in the northwestern portion of the Site, two dispenser islands in the southwestern portion of the Site, a concrete slab and canopy. Three underground gasoline storage tanks (USTs; one 6,000-gallon UST, one 10,000 gallon UST, and one 12,000-gallon UST) are located east of the dispenser islands. Historical documents indicate that these USTs were installed in the late 1980s (SECOR 2007). The majority of the Site surface is paved with concrete and asphalt.

The area surrounding the Site was historically used for industrial purposes before being developed into commercial and retail shopping centers. Surrounding land use is largely commercial: a Denny's restaurant is located west of the Site; a shopping plaza is located south of the Site, a bank and offices are located to the north, and a furniture store is located to the east.

The topography of the surrounding area slopes gently to the west, toward San Francisco Bay. The Site is situated at an approximate elevation of 8 feet above mean sea level.

Previous Site Investigations and Cleanup Activities

A soil gas survey was conducted on April 10, 1989, by Target Environmental Services, Inc. on behalf of Mobil Oil Corporation prior to the transfer of ownership of the property to BP. Soil gas samples were collected from 19 sampling points at an approximate depth of 4 feet below ground surface (ft bgs) across the site (locations were not provided in historic documents). Results indicated that gasoline may have entered the site subsurface at the pump islands, UST complex, or along the product supply lines. Total volatile hydrocarbons were detected in soil vapor using a flame-ionization detector (FID) at concentrations up to 932,000 micrograms per liter ($\mu\text{g}/\text{L}$), with the highest detections in the vicinity of the pump islands and east of the USTs (TES 1989; SECOR 2007).

Former BP Station No. 11126

On April 24, 1989, one 550-gallon waste oil UST was removed from the site, and was replaced with a suspected 1,000-gallon waste oil UST (the actual size is not documented) in a separate excavation. Soil samples collected from beneath the removed waste oil UST and sidewalls excavation contained detectable concentrations of total oil and grease (TOG), total petroleum hydrocarbons as diesel (TPHd), and total petroleum hydrocarbons as gasoline (TPHg). Additional soil samples were collected from the sidewalls of the new waste oil UST excavation (NWO-1 through NWO-4), located approximately 20 feet (ft) south of the former waste oil tank. All analytes were below laboratory reporting limits with the exception of TPHd and TOG which were both detected at NWO-4. TPHd was detected at 370 parts per million and TOG was detected at 10,000 ppm.

The UST pit also contained detectable concentrations of TOG and TPHd (Alisto 1994). An *Underground Storage Tank Unauthorized Release (Leak) / Contamination Site Report* dated May 2, 1989 documenting the past occurrence of a release of unknown quantity was subsequently submitted to Alameda County Environmental Health Department, Hazardous Materials Division (EMCON 1994; SECOR 2007).

In October 1992, Alisto performed a preliminary site assessment to investigate the extent of petroleum hydrocarbon impacts beneath the site. Eight soil borings (B-1 through B-3, B-4A, B-4B, B-4, B-5A, and B-5) were advanced to depths ranging from 4 ft to 20 ft bgs. Auger refusal was encountered during the drilling of borings B-1, B-4A, B-4B, and B-5A, and borings B-2 through B-5 were converted to monitoring wells MW-1 through MW-4, respectively. Soil samples collected up to a depth of 5.5 ft bgs from the borings advanced in the immediate vicinity of the USTs and dispenser islands contained detectable concentrations of TPHg and benzene.

Groundwater samples collected from the wells in November 1992 also contained detectable concentrations of TPHd, TPHg and benzene (SECOR 2007).

In September 1993, Alisto installed five additional groundwater monitoring wells: MW- 5 through MW-7 off-site and MW-8 and MW-9) on-site. Soil samples collected from approximately 4.5 ft bgs from borings MW-5 and MW-9 contained detectable concentrations of TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX). Well MW-9, which is located in the area of the product dispensers contained separate phase hydrocarbons (SPH) at an initial thickness of 0.08 ft. A product recovery canister was subsequently installed to assist in the removal of SPH from beneath the site (SECOR 2007).

Former BP Station No. 11126

In October 1994, EMCON conducted a supplementary site assessment to establish baseline subsurface conditions prior to the purchase of the site by Tosco Corporation (Tosco, now ConocoPhillips [CP]) from BP. Three soil borings (THP-1, TB-2 and THP-3, and also respectively referred to as TB-1, TB-2 and TB-3) were advanced onsite using cone penetrometer testing (CPT) equipment. Refusal was encountered in TB-2 and TPH-3 at 10 ft and 4.5 ft bgs, respectively. Soil samples collected during this investigation contained detectable concentrations of TPHd, TPHg, TOG and benzene. Hydropunch™ groundwater samples collected during this investigation contained detectable concentrations of TPHg, TOG, 1,2-dichloroethane (1,2-DCA,), and 1,2-dichlorethane (1,2-DCE) (EMCON 1994). EMCON personnel returned to the site on December 5, 1994 to inspect the fuel dispensers for the presence of spill containment boxes, and for indications of leakage (EMCON 1994). Grab soil samples collected from beneath the fuel dispensers (TD-1, TD-2, TD-3 and TD-4) also contained detectable concentrations of TPHg and TPHd (SECOR 2007).

In 1999, SECOR observed the removal of one 550-gallon, fiberglass, waste oil UST, along with a clarifier and two hoists (Hoist No. 1 and Hoist No. 2) from the former service bays as part of site remodeling activities on April 28, 1999 (SECOR 1999). The waste oil UST and Hoist No. 2, were removed from two separate excavations, and the clarifier and Hoist No. 1 were removed from one excavation. One soil sample collected from the waste oil UST excavation contained detectable concentrations of TPHd, TPHg, benzene, and total petroleum hydrocarbons as motor oil (TPHo). A grab groundwater sample collected from 7.5 ft bgs from the waste oil UST excavation contained detectable concentrations of TPHd, TPHo, benzene, and methyl tertiary butyl ether (MTBE). Soil samples collected from beneath the former clarifier (4 ft bgs), former Hoist No. 1 (8 ft bgs), and the former Hoist No. 2 (8 ft bgs) also contained detectable concentrations of TPHg, TPHd, TPHo, benzene, and lead. MTBE was not detected in soil samples collected from the excavations (SECOR 2007).

Based on the previous detections of petroleum hydrocarbons in soil in the clarifier and hoist areas, over-excavation was conducted on May 7, 1999 (SECOR 1999). Soil samples collected from the clarifier excavation at 5 ft bgs, and the hoist excavations at 5 ft bgs contained detectable concentrations of TPHg, TPHd, TPHo, and lead. Over-excavation confirmation soil samples were not analyzed for the presence of BTEX and other metals. A composite sample collected from the pea gravel was also analyzed for the presence of petroleum hydrocarbons; based on the relatively minor levels of TPHd and TPHo and relatively low to non-detectable levels of BTEX, and non-detectable concentrations of MTBE, the excavated pea gravel was

Former BP Station No. 11126

used as backfill for the waste oil UST excavation. Approximately 17.41 tons of soil were removed from the site as a result of the initial excavation and over-excavation activities (SECOR 2007).

On March 28 and 30, 2001, Gettler-Ryan Incorporated (GRI) oversaw the removal and replacement of product lines, dispensers, and the station canopy (SECOR, 2001). During the removal of the product lines, petroleum hydrocarbon-stained soil and odors were observed within the excavated trench. The entire length of the former product line trench was subsequently over-excavated an additional 1.5 ft to 3.5 ft bgs prior to sampling, resulting in the removal of approximately 150 cubic yards (yd^3) of soil from beneath the site. The former trenches were backfilled with clean, imported backfill as it was discovered that the former trenches were not suitable for re-use due to insufficient grading. An additional 100 yd^3 of soil were excavated to accommodate the new product lines. A total of 13 confirmation soil samples were collected from product line, dispenser and trench excavations by SECOR from the initial excavation and following over-excavation of soil. TPHg and TPHd were detected in the 13 samples at concentrations up to 5,300 milligrams per kilogram (mg/Kg) and 630 mg/Kg in the initial excavation soil samples, respectively. The highest concentrations of petroleum hydrocarbons were detected in a 3.5-foot soil sample from a former product line location near well MW-9. MTBE was detected in 12 of the 13 samples up to 8.4 mg/Kg. A total of 400 yd^3 of soil were removed from the site, and approximately 15,000 gallons of groundwater were removed from beneath the site during the dewatering of the UST excavation (SECOR 2007).

In June 2005, URS supervised the installation of two off-site, down-gradient groundwater monitoring wells (MW-10 and MW-11) at the Powell Street Plaza property, located south of the site (URS 2005). Soil samples from both of the borings at depths of 7 ft bgs (MW-10), and 18 and 23.5 ft bgs (MW-11) did not contain petroleum hydrocarbons or fuel oxygenates at or above laboratory method reporting limits (MRLs). With the exception of a concentration of MTBE collected at 7 ft bgs in well MW-10 (1.5 $\mu\text{g/L}$), petroleum hydrocarbons and fuel oxygenates were not detected in groundwater from the wells. The direction of groundwater flow was toward the southwest at a calculated hydraulic gradient of 0.02 foot per foot (ft/ft). URS concluded that the off-site, lateral extent of dissolved impacts had been delineated during this investigation.

SECOR prepared a Remedial Action Plan (RAP), dated March 30, 2007, to perform source area remediation at the Site. Based on their feasibility analysis and review of previous site assessment and remedial activities, SECOR recommended that oxygen

Former BP Station No. 11126

injections be implemented at the Site (SECOR 2007). However, no testing was conducted.

On June 1, 2009, Stantec Consulting Corporation (Stantec) submitted the Work Plan (WP) for Additional Assessment and Extension Request to ACEH, proposing the installation of one off-site monitoring well and three on-site soil borings to 6 ft bgs. The ACEH directive, issued on July 10, 2009 in response to this WP, indicated that:

- One monitoring well was likely not sufficient to provide off-site plume characterization as there were potentially two hydraulic gradient directions;
- Soil borings should be advanced beyond 6 ft bgs to evaluate residual source contamination because historical groundwater levels had ranged between 4 and 10 ft bgs; and
- A preferential pathway study should be conducted.

On August 2, 2010, ARCADIS submitted the Work Plan Addendum for Additional Assessment (the WP Addendum) based on the original Stantec WP and the ACEH directive. In the WP Addendum, ARCADIS proposed to: (1) conduct CPT with laser induced fluorescence [LIF] to evaluate both off-site groundwater and on-site soil; and (2) perform a preferential pathway study to assess the probability of on-site contaminants migrating off-site via potential conduits. ARCADIS completed the proposed soil and groundwater investigation field activities in January 2011, as documented in the Soil and Water Investigation Report (ARCADIS 2011) and briefly summarized below:

- Five CPTs (CPT-01 through CPT-06 both on- and off-site) were advanced to approximately 25 ft bgs to collect lithologic data (Figure 3). The CPT logs were consistent with historical boring logs for nearby monitoring wells;
- Four LIF profiles were collected with the CPT rods to identify poly-aromatic hydrocarbons (PAHs), and free phase and residual non-aqueous phase liquid (NAPL) in the subsurface. Based on the LIF results NAPL is not present at the Site;
- A total of three HydropunchTM grab groundwater samples were collected from off-site borings UCPT-1 and UCPT-2. Samples were collected at 7 ft bgs from both borings, and at 21 ft bgs from UCPT-2 only. MTBE and TBA were detected at UCPT-1 at concentrations of 14 µg/L and 63 µg/L, respectively. No analytes

Former BP Station No. 11126

were detected at UCPT-2 at concentrations above the laboratory reporting limits.; and

- A total of five soil samples were collected from three borings (UCPT-3 at 7 ft bgs, UCPT-4 at 7.5 and 12.5 ft bgs, and UCPT-5 at 11.5 and 14.5 ft bgs) based on the CPT lithology and UVOST results. Concentrations of MTBE and TBA were detected in four samples; TPHg and ethylbenzene were detected in three samples; and benzene and total xylenes were detected in two samples.

The investigation results indicated no to low impacts of off-site groundwater contamination, and very low levels of soil contamination on-site.

On August 23, 2011, ARCADIS conducted slug-out tests at on-site monitoring wells MW-2, MW-4, and MW-9. A total of 4.5 gallons of groundwater were removed from MW-2, 4 gallons were removed from MW-4, and 18 gallons were removed from MW-9 over the course of two tests in each well; and depth-to-water was monitored and recorded at each well until water levels returned to near static conditions. Results of the slug-out tests indicate projected injection rates of generally less than one gallon per minute (gpm) in all tested monitoring wells and less than approximately 0.1 gpm at MW-9 (ARCADIS 2011b).

ARCADIS submitted a Low Threat Closure Policy Checklist and Site Conceptual Model to Alameda County Environmental Health on July 3, 2013 to assess potential data gaps to be addressed prior to closure.

A Site Investigation Summary Report was submitted on January 23, 2015 (ARCADIS 2015). Soil borings were completed at six locations (GP-1 through GP-6) on November 24 and 25, 2014. A preferential pathway study of utility lines was conducted on November 20, 2014. The Site Investigation Summary Report recommended a new groundwater monitoring well be installed in the northeast corner of the site to define the upgradient extent of the dissolved-phase petroleum hydrocarbon plume in groundwater.

References

Alisto Engineering Group, 1994, Supplemental Site Investigation Report. April 8.

ARCADIS U.S., Inc., 2011a. Soil and Water Investigation Report, 76 (Former BP) Service Station No. 11126. February 11.

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ARCADIS U.S., Inc., 2011b. Feasibility Study and Corrective Action Plan, Former BP Station No. 11126. October 14.

ARCADIS U.S., Inc., 2013. ACEH Low Threat Closure Policy Checklist and Site Conceptual Model, Former BP Station No. 11126. July 3.

ARCADIS U.S. Inc. 2015. Site Investigation Summary Report. Former BP Station No. 11126. January 23.

EMCON Environmental, Inc. (EMCON), 1994, Baseline Assessment Report. December 27.

SECOR International, Inc. (SECOR), 1999, Removal of Waste Oil UST, Hoists No. 1 & No. 2 and Clarifier. June 29.

SECOR International, Inc., 2001. Removal and Replacement of Product Lines, Dispensers and Canopy. May 4.

SECOR International Inc., 2007. Remedial Action Plan; 76 (Former BP) Service Station No. 11126, 1700 Powell Street, Emeryville, California. March 30.

Target Environmental Services, Inc. (TES), 1989. Soil Gas Survey. April.



Appendix B

Groundwater Sampling Data
Package



Groundwater Monitoring Field Data For ARCADIS-11126

Gauging Data

Date	12/16/2014
Project_Number	09-88-662
Location	1700 Powell St, Emeryville, CA
Sampler	Nicholas Vrdoljak

Well	Date/Time	Well Depth (ft)	Depth To Water (ft)	Depth to LNAPL (ft)	Remarks
MW-1	12/16/2014 08:14	11.90	>1		Well box and well completely filled with water. Drained well box but well is completely full of water
MW-2	12/16/2014 08:44	12.05	4.27		
MW-3	12/16/2014 07:49	11.65	4.30		
MW-4	12/16/2014 08:05	11.05	4.61		
MW-5	12/16/2014 08:14	12.52	4.05		
MW-6	12/16/2014 07:50	13.85	5.22		Well box completely filled with water. Drained well box.
MW-7	12/16/2014 07:55	13.50	5.71		
MW-8	12/16/2014 14:50	13.90	2.05		Gauged and sampled out of order due to car being parked over well. Car did not belong to any station employee.
MW-9	12/16/2014 08:23	14.11	3.05		
MW-10	12/16/2014 07:36	19.89	5.79		
MW-11	12/16/2014 07:19	23.98	8.80		

Signature:



MW-1

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	11
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	0
Weather Conditions	Rainy			Well Depth (ft)	11.90
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
15:56	0		8.39	15.53	6.71	216	116	529	
15:58	0.5		7.14	15.14	6.43	165	111	250	
16:00	1.0		7.13	15.13	6.44	158	109	231	
16:02	1.5		7.17	15.19	6.44	192	116	296	
16:04	2.0		7.18	15.28	6.58	231	119	437	

Sampling Summary

Sample ID	mw-1	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	16:10	VOA Un-preserved #	
DTW at Sampling (ft)	-	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:




Groundwater Monitoring Field Data For ARCADIS-11126

MW-2

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	11.50
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	4.27
Weather Conditions	Cloudy			Well Depth (ft)	12.05
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
16:35	0		2.00	20.40	6.30	1530	-164	71.2	
16:37	0.5		1.89	20.44	6.35	1550	-170	40.2	
16:39	1.0		1.10	20.34	6.37	1500	-172	31.2	
16:41	1.5		0.70	20.31	6.36	1450	-172	36.7	
16:43	2.0		0.65	19.90	6.29	1280	-171	23.7	

Sampling Summary

Sample ID	mw-2	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	16:45	VOA Un-preserved #	
DTW at Sampling (ft)	4.40	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:



Groundwater Monitoring Field Data For ARCADIS-11126

MW-3

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	11
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	4.65
Weather Conditions	Sunny			Well Depth (ft)	11.30
Waste Container					
Waste Location					
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:59	0		1.57	20.35	6.75	900	16	4.6	
12:01	0.5		1.10	20.36	6.56	919	21	0.1	
12:03	1.0		0.90	20.30	6.47	904	28	0	
12:05	1.5		0.83	20.30	6.53	919	39	0	
12:07	2.0		0.79	20.29	6.47	915	39	0	

Sampling Summary

Sample ID	mw-3	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	12:10	VOA Un-preserved #	
DTW at Sampling (ft)	4.71	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:

aquablue
solutions



Groundwater Monitoring Field Data For ARCADIS-11126

MW-4

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	11
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	4.61
Weather Conditions	Sunny			Well Depth (ft)	11.05
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
13:31	0		7.87	20.43	6.83	2390	-181	7.1	
13:33	0.5		2.17	20.30	6.80	2380	-176	22.3	
13:37	1.0		2.12	20.17	6.83	2350	-166	24.0	
13:39	1.5		2.05	20.56	6.79	2350	-181	24.7	

Sampling Summary

Sample ID	mw-4	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	13:45	VOA Un-preserved #	
DTW at Sampling (ft)	7.95	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:



Groundwater Monitoring Field Data For ARCADIS-11126

MW-5

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	11.5
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	4.05
Weather Conditions	Sunny			Well Depth (ft)	12.52
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:22	0		1.00	20.04	6.21	2.05	-136	151	
09:24	0.5		0.45	20.23	6.27	2.04	-138	158	
09:26	1.0		0.37	20.39	6.32	2.05	-143	146	
09:28	1.5		0.31	20.51	6.37	2.06	-149	134	

Sampling Summary

Sample ID	mw-5	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	09:35	VOA Un-preserved #	
DTW at Sampling (ft)	4.17	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	samples and tagged or off order due to traffic control constraints

Signature:

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Groundwater Monitoring Field Data For ARCADIS-11126

MW-6

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	12.5
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	5.22
Weather Conditions	Sunny			Well Depth (ft)	13.85
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:22	0		5.45	21.25	7.33	190	58	453	
12:30	0.5		1.96	21.26	6.76	182	14	335	
12:33	1.0		1.77	21.32	6.66	181	1	277	
12:36	1.5		1.86	21.38	6.40	193	-42	191	
12:38	2.0		1.76	21.49	6.38	208	-45	180	

Sampling Summary

Sample ID	mw-6	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	12:40	VOA Un-preserved #	
DTW at Sampling (ft)	5.39	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:



Groundwater Monitoring Field Data For ARCADIS-11126

MW-7

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	12
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	5.71
Weather Conditions	Sunny			Well Depth (ft)	13.50
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:58	0		1.06	22.74	6.69	2200	-174	13.9	
12:59	0.5		0.45	22.73	6.71	2190	-176	14.6	
13:02	1.0		0.43	22.79	6.72	2200	-183	9.1	
13:06	1.5		0.47	22.80	6.72	2210	-183	6	

Sampling Summary

Sample ID	mw-7	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	13:10	VOA Un-preserved #	
DTW at Sampling (ft)	5.84	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:



Groundwater Monitoring Field Data For ARCADIS-11126

MW-8

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	12
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	2.05
Weather Conditions	Cloudy			Well Depth (ft)	13.90
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
14:58	0		1.03	21.55	6.71	428	-135	7.3	
14:59	0.5		0.33	21.63	6.60	421	-138	11	
15:02	1.0		0.41	21.58	6.56	414	-135	10.5	
15:04	1.5		0.42	21.63	6.54	412	-134	8.2	
15:06	2.0		0.41	21.45	6.52	400	-128	10.9	

Sampling Summary

Sample ID	mw-8	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	15:15	VOA Un-preserved #	
DTW at Sampling (ft)	2.15	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

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Groundwater Monitoring Field Data For

ARCADIS-11126

MW-9

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	12
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	3.05
Weather Conditions	Cloudy			Well Depth (ft)	14.11
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
14:24	0		4.75	19.93	7.10	845	-37	4.3	
14:26	0.5		1.40	19.99	6.57	853	-35	4.9	
14:28	1.0		1.32	19.99	6.44	826	-34	5.8	
14:32	1.5		1.30	19.86	6.41	837	-34	4.5	

Sampling Summary

Sample ID	mw-9	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	14:35	VOA Un-preserved #	
DTW at Sampling (ft)	3.35	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Signature:




Groundwater Monitoring Field Data For ARCADIS-11126

MW-10

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	16
Project Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	5.79
Weather Conditions	Cloudy			Well Depth (ft)	19.89
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
16:16	0		1.90	21.8	7.17	1830	-172	0	
16:18	0.5		1.38	21.8	7.17	1880	-172	0	
16:20	1.0		1.09	22.0	7.17	1900	.171	0	
16:22	1.5		0.99	22.1	7.17	1970	-174	0	

Sampling Summary

Sample ID	mw-10	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	16:25	VOA Un-preserved #	
DTW at Sampling (ft)	8.56	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	Sampled out of order due to car being parked over it. Owner unable to be located

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Groundwater Monitoring Field Data For ARCADIS-11126

MW-11

Date	12/16/2014	Well Head Integrity	Okay	Pump Inlet Depth (ft)	19
Project_Number	09-88-662	Well Head		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA	Comments		Initial DTW (ft)	8.80
Weather Conditions	Sunny			Well Depth (ft)	23.98
Waste Container	Drum				
Waste Location	Off site				
Sampler	Nicholas Vrdoljak				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:54	0		3.24	21.03	6.92	999	-114	174	
11:19	0.5		1.10	21.14	6.81	900	-124	138	
11:21	1.0		0.90	21.15	6.88	900	-131	117	
11:23	1.5		0.81	21.19	6.88	900	-138	107	
11:27	2.0		0.83	21.23	6.89	999	-140	101	

Sampling Summary

Sample ID	mw-11	Purge Rate (LPM)	0.25
Sample Collection Date	12/16/2014	VOA Preserved #	3
Sample Collection Time	11:30	VOA Un-preserved #	
DTW at Sampling (ft)	8.85	Liter Amber #	4
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

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Appendix C

Certified Laboratory Analytical
Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-61944-1

Client Project/Site: BP #11126, Emeryville

For:

ARCADIS U.S., Inc.

100 Montgomery Street

Suite 300

San Francisco, California 94104

Attn: Hollis Phillips

Authorized for release by:

12/31/2014 3:50:26 PM

Dimple Sharma, Senior Project Manager

(925)484-1919

dimple.sharma@testamericainc.com

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Expert

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
D	Listed under the "D" column to designate that the result is reported on a dry weight basis	2
%R	Percent Recovery	3
CFL	Contains Free Liquid	4
CNF	Contains no Free Liquid	5
DER	Duplicate error ratio (normalized absolute difference)	6
Dil Fac	Dilution Factor	7
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	8
DLC	Decision level concentration	9
MDA	Minimum detectable activity	10
EDL	Estimated Detection Limit	11
MDC	Minimum detectable concentration	12
MDL	Method Detection Limit	13
ML	Minimum Level (Dioxin)	14
NC	Not Calculated	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative error ratio	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Job ID: 720-61944-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-61944-1

Comments

No additional comments.

Receipt

The samples were received on 12/17/2014 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.4° C, 2.2° C, 2.5° C and 4.6° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-1

Lab Sample ID: 720-61944-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.10		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	790		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-2

Lab Sample ID: 720-61944-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	640		25		ug/L	50		8260B/CA_LUFT	Total/NA
Benzene	1400		25		ug/L	50		MS	
Ethylbenzene	100		25		ug/L	50		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C6-C12	8100		2500		ug/L	50		MS	
TBA	12000		1000		ug/L	50		8260B/CA_LUFT	Total/NA
Naphthalene	22		0.20		ug/L	2		8270C SIM	Total/NA
Acenaphthene	0.31		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthylene	0.15		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.15		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.11		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1000		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-3

Lab Sample ID: 720-61944-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TBA	48		20		ug/L	1		8260B/CA_LUFT	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 720-61944-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TBA	18000		400		ug/L	20		8260B/CA_LUFT	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 720-61944-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	3.6		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Benzene	2.5		0.50		ug/L	1		MS	
Xylenes, Total	3.2		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C6-C12	2500		50		ug/L	1		MS	
TBA	200		20		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	0.43		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.56		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthylene	0.11		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.28		0.10		ug/L	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-5 (Continued)

Lab Sample ID: 720-61944-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	0.30		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	410		51		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-6

Lab Sample ID: 720-61944-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	0.11		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	510		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-7

Lab Sample ID: 720-61944-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	3.5		1.0		ug/L	2		8260B/CA_LUFT MS	Total/NA
TBA	2800		40		ug/L	2		8260B/CA_LUFT MS	Total/NA
Acenaphthene	0.16		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.18		0.10		ug/L	1		8270C SIM	Total/NA
Fluoranthene	0.13		0.10		ug/L	1		8270C SIM	Total/NA
Pyrene	0.16		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	140		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-8

Lab Sample ID: 720-61944-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C12	110		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
TBA	24		20		ug/L	1		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	73		51		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-9

Lab Sample ID: 720-61944-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	110		2.5		ug/L	5		8260B/CA_LUFT MS	Total/NA
Benzene	11		2.5		ug/L	5		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C6-C12	850		250		ug/L	5		8260B/CA_LUFT MS	Total/NA
TBA	640		100		ug/L	5		8260B/CA_LUFT MS	Total/NA
TAME	3.7		2.5		ug/L	5		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.10		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	150		51		ug/L	1		8015B	Silica Gel Cleanup

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-10

Lab Sample ID: 720-61944-10

No Detections.

Client Sample ID: MW-11

Lab Sample ID: 720-61944-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-1

Lab Sample ID: 720-61944-1

Date Collected: 12/16/14 16:10

Matrix: Water

Date Received: 12/17/14 09:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			12/17/14 19:58	1
Benzene	ND		0.50		ug/L			12/17/14 19:58	1
Ethylbenzene	ND		0.50		ug/L			12/17/14 19:58	1
Toluene	ND		0.50		ug/L			12/17/14 19:58	1
Xylenes, Total	ND		1.0		ug/L			12/17/14 19:58	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			12/17/14 19:58	1
TBA	ND		20		ug/L			12/17/14 19:58	1
TAME	ND		0.50		ug/L			12/17/14 19:58	1
Naphthalene	ND		1.0		ug/L			12/17/14 19:58	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene		97		67 - 130				12/17/14 19:58	1
1,2-Dichloroethane-d4 (Surr)		110		72 - 130				12/17/14 19:58	1
Toluene-d8 (Surr)		99		70 - 130				12/17/14 19:58	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L			12/23/14 01:04	1
Acenaphthene	ND		0.10		ug/L			12/23/14 01:04	1
Acenaphthylene	ND		0.10		ug/L			12/23/14 01:04	1
Fluorene	ND		0.10		ug/L			12/23/14 01:04	1
Phenanthrene	ND		0.10		ug/L			12/23/14 01:04	1
Anthracene	ND		0.10		ug/L			12/23/14 01:04	1
Benzo[a]anthracene	ND		0.10		ug/L			12/23/14 01:04	1
Chrysene	ND		0.10		ug/L			12/23/14 01:04	1
Benzo[a]pyrene	ND		0.10		ug/L			12/23/14 01:04	1
Benzo[b]fluoranthene	ND		0.10		ug/L			12/23/14 01:04	1
Benzo[k]fluoranthene	ND		0.10		ug/L			12/23/14 01:04	1
Benzo[g,h,i]perylene	ND		0.10		ug/L			12/23/14 01:04	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L			12/23/14 01:04	1
Fluoranthene	ND		0.10		ug/L			12/23/14 01:04	1
Pyrene	0.10		0.10		ug/L			12/23/14 01:04	1
Dibenz(a,h)anthracene	ND		0.10		ug/L			12/23/14 01:04	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl		50		29 - 120				12/23/14 01:04	1
Terphenyl-d14		64		45 - 120				12/23/14 01:04	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	790		50		ug/L			12/19/14 21:12	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.008		0 - 5					12/19/14 21:12	1
p-Terphenyl	85		31 - 150					12/19/14 21:12	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-2

Lab Sample ID: 720-61944-2

Matrix: Water

Date Collected: 12/16/14 16:45

Date Received: 12/17/14 09:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	640		25		ug/L			12/17/14 21:28	50
Benzene	1400		25		ug/L			12/17/14 21:28	50
EDB	ND		25		ug/L			12/17/14 21:28	50
1,2-DCA	ND		25		ug/L			12/17/14 21:28	50
Ethylbenzene	100		25		ug/L			12/17/14 21:28	50
Toluene	ND		25		ug/L			12/17/14 21:28	50
Xylenes, Total	ND		50		ug/L			12/17/14 21:28	50
Gasoline Range Organics (GRO) -C6-C12	8100		2500		ug/L			12/17/14 21:28	50
TBA	12000		1000		ug/L			12/17/14 21:28	50
DIPE	ND		25		ug/L			12/17/14 21:28	50
TAME	ND		25		ug/L			12/17/14 21:28	50
Ethyl t-butyl ether	ND		25		ug/L			12/17/14 21:28	50
Naphthalene	ND		50		ug/L			12/17/14 21:28	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130					12/17/14 21:28	50
1,2-Dichloroethane-d4 (Surr)	107		72 - 130					12/17/14 21:28	50
Toluene-d8 (Surr)	100		70 - 130					12/17/14 21:28	50

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	22		0.20		ug/L		12/22/14 10:11	12/30/14 04:20	2
Acenaphthene	0.31		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Acenaphthylene	0.15		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Fluorene	0.15		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Phenanthrene	0.11		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		29 - 120				12/22/14 10:11	12/22/14 20:05	1
2-Fluorobiphenyl	61		29 - 120				12/22/14 10:11	12/30/14 04:20	2
Terphenyl-d14	51		45 - 120				12/22/14 10:11	12/22/14 20:05	1
Terphenyl-d14	55		45 - 120				12/22/14 10:11	12/30/14 04:20	2

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1000		50		ug/L		12/18/14 10:22	12/19/14 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	1		0 - 5				12/18/14 10:22	12/19/14 17:09	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-2
Date Collected: 12/16/14 16:45
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-2
Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	86		31 - 150	12/18/14 10:22	12/19/14 17:09	1

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TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-3

Lab Sample ID: 720-61944-3

Matrix: Water

Date Collected: 12/16/14 12:10

Date Received: 12/17/14 09:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			12/18/14 11:27	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			12/18/14 11:27	1
TBA	48		20		ug/L			12/18/14 11:27	1
Naphthalene	ND		1.0		ug/L			12/18/14 11:27	1
TAME	ND		0.50		ug/L			12/18/14 11:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130					12/18/14 11:27	1
1,2-Dichloroethane-d4 (Surr)	89		72 - 130					12/18/14 11:27	1
Toluene-d8 (Surr)	95		70 - 130					12/18/14 11:27	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Acenaphthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Acenaphthylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Fluorene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Phenanthrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 20:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	48		29 - 120				12/22/14 10:11	12/22/14 20:28	1
Terphenyl-d14	56		45 - 120				12/22/14 10:11	12/22/14 20:28	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		12/18/14 10:22	12/19/14 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 5				12/18/14 10:22	12/19/14 17:33	1
p-Terphenyl	86		31 - 150				12/18/14 10:22	12/19/14 17:33	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-4

Lab Sample ID: 720-61944-4

Matrix: Water

Date Collected: 12/16/14 13:45

Date Received: 12/17/14 09:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		10		ug/L			12/17/14 22:28	20
Gasoline Range Organics (GRO) -C6-C12	ND		1000		ug/L			12/17/14 22:28	20
TBA	18000		400		ug/L			12/17/14 22:28	20
Naphthalene	ND		20		ug/L			12/17/14 22:28	20
TAME	ND		10		ug/L			12/17/14 22:28	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130					12/17/14 22:28	20
1,2-Dichloroethane-d4 (Surr)	113		72 - 130					12/17/14 22:28	20
Toluene-d8 (Surr)	98		70 - 130					12/17/14 22:28	20

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Acenaphthene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Acenaphthylene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Fluorene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Phenanthrene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Anthracene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Benzo[a]anthracene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Chrysene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Benzo[a]pyrene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Benzo[b]fluoranthene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Benzo[k]fluoranthene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Benzo[g,h,i]perylene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Indeno[1,2,3-cd]pyrene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Fluoranthene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Pyrene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Dibenz(a,h)anthracene	ND		0.11		ug/L		12/22/14 10:11	12/22/14 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		29 - 120				12/22/14 10:11	12/22/14 20:51	1
Terphenyl-d14	60		45 - 120				12/22/14 10:11	12/22/14 20:51	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		12/18/14 10:22	12/19/14 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.01		0 - 5				12/18/14 10:22	12/19/14 17:57	1
p-Terphenyl	91		31 - 150				12/18/14 10:22	12/19/14 17:57	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-5

Date Collected: 12/16/14 09:35
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-5

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	3.6		0.50		ug/L			12/17/14 22:58	1
Benzene	2.5		0.50		ug/L			12/17/14 22:58	1
Ethylbenzene	ND		0.50		ug/L			12/17/14 22:58	1
Toluene	ND		0.50		ug/L			12/17/14 22:58	1
Xylenes, Total	3.2		1.0		ug/L			12/17/14 22:58	1
Gasoline Range Organics (GRO) -C6-C12	2500		50		ug/L			12/17/14 22:58	1
TBA	200		20		ug/L			12/17/14 22:58	1
TAME	ND		0.50		ug/L			12/17/14 22:58	1
Naphthalene	ND		1.0		ug/L			12/17/14 22:58	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104			67 - 130				12/17/14 22:58	1
1,2-Dichloroethane-d4 (Surr)	112			72 - 130				12/17/14 22:58	1
Toluene-d8 (Surr)	102			70 - 130				12/17/14 22:58	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.43		0.10		ug/L			12/22/14 21:14	1
Acenaphthene	0.56		0.10		ug/L			12/22/14 21:14	1
Acenaphthylene	0.11		0.10		ug/L			12/22/14 21:14	1
Fluorene	0.28		0.10		ug/L			12/22/14 21:14	1
Phenanthrene	0.30		0.10		ug/L			12/22/14 21:14	1
Anthracene	ND		0.10		ug/L			12/22/14 21:14	1
Benzo[a]anthracene	ND		0.10		ug/L			12/22/14 21:14	1
Chrysene	ND		0.10		ug/L			12/22/14 21:14	1
Benzo[a]pyrene	ND		0.10		ug/L			12/22/14 21:14	1
Benzo[b]fluoranthene	ND		0.10		ug/L			12/22/14 21:14	1
Benzo[k]fluoranthene	ND		0.10		ug/L			12/22/14 21:14	1
Benzo[g,h,i]perylene	ND		0.10		ug/L			12/22/14 21:14	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L			12/22/14 21:14	1
Fluoranthene	ND		0.10		ug/L			12/22/14 21:14	1
Pyrene	ND		0.10		ug/L			12/22/14 21:14	1
Dibenz(a,h)anthracene	ND		0.10		ug/L			12/22/14 21:14	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	52			29 - 120				12/22/14 21:14	1
Terphenyl-d14	55			45 - 120				12/22/14 21:14	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	410		51		ug/L			12/19/14 18:22	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.3			0 - 5				12/19/14 18:22	1
p-Terphenyl	86			31 - 150				12/19/14 18:22	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-6

Lab Sample ID: 720-61944-6

Matrix: Water

Date Collected: 12/16/14 12:40

Date Received: 12/17/14 09:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			12/17/14 23:28	1
Gasoline Range Organics (GRO)	ND		50		ug/L			12/17/14 23:28	1
-C6-C12									
TBA	ND		20		ug/L			12/17/14 23:28	1
Naphthalene	ND		1.0		ug/L			12/17/14 23:28	1
TAME	ND		0.50		ug/L			12/17/14 23:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130					12/17/14 23:28	1
1,2-Dichloroethane-d4 (Surr)	104		72 - 130					12/17/14 23:28	1
Toluene-d8 (Surr)	98		70 - 130					12/17/14 23:28	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Acenaphthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Acenaphthylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Fluorene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Phenanthrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Pyrene	0.11		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 21:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	52		29 - 120				12/22/14 10:11	12/22/14 21:37	1
Terphenyl-d14	58		45 - 120				12/22/14 10:11	12/22/14 21:37	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	510		50		ug/L		12/18/14 10:22	12/19/14 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.02		0 - 5				12/18/14 10:22	12/19/14 20:48	1
p-Terphenyl	80		31 - 150				12/18/14 10:22	12/19/14 20:48	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-7

Date Collected: 12/16/14 13:10
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-7

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	3.5		1.0		ug/L			12/17/14 23:58	2
Benzene	ND		1.0		ug/L			12/17/14 23:58	2
Ethylbenzene	ND		1.0		ug/L			12/17/14 23:58	2
Toluene	ND		1.0		ug/L			12/17/14 23:58	2
Xylenes, Total	ND		2.0		ug/L			12/17/14 23:58	2
Gasoline Range Organics (GRO) -C6-C12	ND		100		ug/L			12/17/14 23:58	2
TBA	2800		40		ug/L			12/17/14 23:58	2
TAME	ND		1.0		ug/L			12/17/14 23:58	2
Naphthalene	ND		2.0		ug/L			12/17/14 23:58	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130					12/17/14 23:58	2
1,2-Dichloroethane-d4 (Surr)	106		72 - 130					12/17/14 23:58	2
Toluene-d8 (Surr)	98		70 - 130					12/17/14 23:58	2

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Acenaphthene	0.16		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Acenaphthylene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Fluorene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Phenanthrene	0.18		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Anthracene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Benzo[a]anthracene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Chrysene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Benzo[a]pyrene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Benzo[b]fluoranthene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Benzo[k]fluoranthene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Benzo[g,h,i]perylene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Fluoranthene	0.13		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Pyrene	0.16		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Dibenz(a,h)anthracene	ND		0.10		ug/L			12/22/14 10:11	12/22/14 22:00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	48		29 - 120					12/22/14 10:11	12/22/14 22:00
Terphenyl-d14	57		45 - 120					12/22/14 10:11	12/22/14 22:00

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	140		50		ug/L			12/18/14 10:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.02		0 - 5					12/18/14 10:22	1
p-Terphenyl	84		31 - 150					12/18/14 10:22	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-8

Date Collected: 12/16/14 15:15
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-8

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			12/18/14 00:29	1
Gasoline Range Organics (GRO) -C6-C12	110		50		ug/L			12/18/14 00:29	1
TBA	24		20		ug/L			12/18/14 00:29	1
Naphthalene	ND		1.0		ug/L			12/18/14 00:29	1
TAME	ND		0.50		ug/L			12/18/14 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130					12/18/14 00:29	1
1,2-Dichloroethane-d4 (Surr)	107		72 - 130					12/18/14 00:29	1
Toluene-d8 (Surr)	98		70 - 130					12/18/14 00:29	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Acenaphthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Acenaphthylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Fluorene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Phenanthrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 22:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	45		29 - 120				12/22/14 10:11	12/22/14 22:23	1
Terphenyl-d14	49		45 - 120				12/22/14 10:11	12/22/14 22:23	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	73		51		ug/L		12/18/14 10:22	12/19/14 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.02		0 - 5				12/18/14 10:22	12/19/14 18:46	1
p-Terphenyl	82		31 - 150				12/18/14 10:22	12/19/14 18:46	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-9

Lab Sample ID: 720-61944-9

Matrix: Water

Date Collected: 12/16/14 14:35

Date Received: 12/17/14 09:45

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	110		2.5		ug/L			12/18/14 00:58	5
Benzene	11		2.5		ug/L			12/18/14 00:58	5
Ethylbenzene	ND		2.5		ug/L			12/18/14 00:58	5
Toluene	ND		2.5		ug/L			12/18/14 00:58	5
Xylenes, Total	ND		5.0		ug/L			12/18/14 00:58	5
Gasoline Range Organics (GRO)	850		250		ug/L			12/18/14 00:58	5
-C6-C12									
TBA	640		100		ug/L			12/18/14 00:58	5
TAME	3.7		2.5		ug/L			12/18/14 00:58	5
Naphthalene	ND		5.0		ug/L			12/18/14 00:58	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		67 - 130					12/18/14 00:58	5
1,2-Dichloroethane-d4 (Surr)	104		72 - 130					12/18/14 00:58	5
Toluene-d8 (Surr)	98		70 - 130					12/18/14 00:58	5

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.10		0.10		ug/L			12/22/14 22:46	1
Acenaphthene	ND		0.10		ug/L			12/22/14 22:46	1
Acenaphthylene	ND		0.10		ug/L			12/22/14 22:46	1
Fluorene	ND		0.10		ug/L			12/22/14 22:46	1
Phenanthren	ND		0.10		ug/L			12/22/14 22:46	1
Anthracene	ND		0.10		ug/L			12/22/14 22:46	1
Benzo[a]anthracene	ND		0.10		ug/L			12/22/14 22:46	1
Chrysene	ND		0.10		ug/L			12/22/14 22:46	1
Benzo[a]pyrene	ND		0.10		ug/L			12/22/14 22:46	1
Benzo[b]fluoranthene	ND		0.10		ug/L			12/22/14 22:46	1
Benzo[k]fluoranthene	ND		0.10		ug/L			12/22/14 22:46	1
Benzo[g,h,i]perylene	ND		0.10		ug/L			12/22/14 22:46	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L			12/22/14 22:46	1
Fluoranthene	ND		0.10		ug/L			12/22/14 22:46	1
Pyrene	ND		0.10		ug/L			12/22/14 22:46	1
Dibenz(a,h)anthracene	ND		0.10		ug/L			12/22/14 22:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	51		29 - 120					12/22/14 22:46	1
Terphenyl-d14	54		45 - 120					12/22/14 22:46	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	150		51		ug/L			12/19/14 19:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.04		0 - 5					12/19/14 19:35	1
p-Terphenyl	80		31 - 150					12/19/14 19:35	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-10

Date Collected: 12/16/14 16:25
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-10

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			12/18/14 01:28	1
Surrogate									
4-Bromofluorobenzene	95	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109			67 - 130				12/18/14 01:28	1
Toluene-d8 (Surr)	97			72 - 130				12/18/14 01:28	1
				70 - 130				12/18/14 01:28	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Acenaphthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Acenaphthylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Fluorene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Phenanthrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:09	1
Surrogate									
2-Fluorobiphenyl	68	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Terphenyl-d14	64			29 - 120				12/22/14 10:11	12/22/14 23:09
				45 - 120				12/22/14 10:11	12/22/14 23:09

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		12/18/14 10:22	12/19/14 20:23	1
Surrogate									
Capric Acid (Surr)	0.02	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
p-Terphenyl	93			0 - 5				12/18/14 10:22	12/19/14 20:23
				31 - 150				12/18/14 10:22	1

TestAmerica Pleasanton

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-11

Date Collected: 12/16/14 11:30
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-11

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			12/18/14 01:58	1
Surrogate									
4-Bromofluorobenzene	95	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107			67 - 130				12/18/14 01:58	1
Toluene-d8 (Surr)	98			72 - 130				12/18/14 01:58	1
				70 - 130				12/18/14 01:58	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Acenaphthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Acenaphthylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Fluorene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Phenanthrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 23:32	1
Surrogate									
2-Fluorobiphenyl	78	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Terphenyl-d14	78			29 - 120				12/22/14 10:11	12/22/14 23:32
				45 - 120				12/22/14 10:11	12/22/14 23:32

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		12/18/14 10:22	12/19/14 19:59	1
Surrogate									
Capric Acid (Surr)	0.01	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
p-Terphenyl	94			0 - 5				12/18/14 10:22	12/19/14 19:59
				31 - 150				12/18/14 10:22	12/19/14 19:59

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-172761/8

Matrix: Water

Analysis Batch: 172761

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			12/17/14 15:56	1
MTBE	ND		0.50		ug/L			12/17/14 15:56	1
Benzene	ND		0.50		ug/L			12/17/14 15:56	1
EDB	ND		0.50		ug/L			12/17/14 15:56	1
1,2-DCA	ND		0.50		ug/L			12/17/14 15:56	1
Ethylbenzene	ND		0.50		ug/L			12/17/14 15:56	1
Toluene	ND		0.50		ug/L			12/17/14 15:56	1
Xylenes, Total	ND		1.0		ug/L			12/17/14 15:56	1
Gasoline Range Organics (GRO)	ND		50		ug/L			12/17/14 15:56	1
-C6-C12									
DIPE	ND		0.50		ug/L			12/17/14 15:56	1
Ethyl t-butyl ether	ND		0.50		ug/L			12/17/14 15:56	1
TBA	ND		20		ug/L			12/17/14 15:56	1
Naphthalene	ND		1.0		ug/L			12/17/14 15:56	1
TAME	ND		0.50		ug/L			12/17/14 15:56	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	99		67 - 130			1
1,2-Dichloroethane-d4 (Surr)	116		72 - 130			1
Toluene-d8 (Surr)	98		70 - 130			1

Lab Sample ID: LCS 720-172761/11

Matrix: Water

Analysis Batch: 172761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
	%Recovery	Qualifier							
Gasoline Range Organics (GRO)			500	556		ug/L		111	58 - 120
-C6-C12									
Surrogate	LCS	LCS	Limits	Prepared	Analyzed	Dil Fac	%Rec.	Limits	
	%Recovery	Qualifier							
4-Bromofluorobenzene	103		67 - 130			1			
1,2-Dichloroethane-d4 (Surr)	112		72 - 130			1			
Toluene-d8 (Surr)	101		70 - 130			1			

Lab Sample ID: LCS 720-172761/9

Matrix: Water

Analysis Batch: 172761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
	%Recovery	Qualifier							
Methyl tert-butyl ether			25.0	26.0		ug/L		104	62 - 130
MTBE			25.0	26.0		ug/L		104	62 - 130
Benzene			25.0	24.3		ug/L		97	79 - 130
EDB			25.0	27.0		ug/L		108	70 - 130
1,2-DCA			25.0	28.5		ug/L		114	61 - 132
Ethylbenzene			25.0	23.8		ug/L		95	80 - 120
Toluene			25.0	23.1		ug/L		93	78 - 120
DIPE			25.0	24.9		ug/L		99	69 - 134
Ethyl t-butyl ether			25.0	26.5		ug/L		106	70 - 130

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-172761/9

Matrix: Water

Analysis Batch: 172761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS			Unit	D	%Rec	%Rec.
		Result	Qualifier	Limits				
TBA	250	241		ug/L		96	70 - 130	
Naphthalene	25.0	23.7		ug/L		95	70 - 130	
TAME	25.0	27.2		ug/L		109	79 - 130	
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits					
4-Bromofluorobenzene	103		67 - 130					
1,2-Dichloroethane-d4 (Surr)	107		72 - 130					
Toluene-d8 (Surr)	101		70 - 130					

Lab Sample ID: LCSD 720-172761/10

Matrix: Water

Analysis Batch: 172761

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD			Unit	D	%Rec	%Rec.	RPD	RPD	Limit
		Result	Qualifier	Limits							
Methyl tert-butyl ether	25.0	25.8		ug/L		103	62 - 130		1	20	
MTBE	25.0	25.8		ug/L		103	62 - 130		1	20	
Benzene	25.0	24.4		ug/L		97	79 - 130		0	20	
EDB	25.0	26.5		ug/L		106	70 - 130		2	20	
1,2-DCA	25.0	27.5		ug/L		110	61 - 132		3	20	
Ethylbenzene	25.0	22.6		ug/L		91	80 - 120		5	20	
Toluene	25.0	22.4		ug/L		90	78 - 120		3	20	
DIPE	25.0	24.9		ug/L		100	69 - 134		0	20	
Ethyl t-butyl ether	25.0	26.1		ug/L		104	70 - 130		1	20	
TBA	250	246		ug/L		98	70 - 130		2	20	
Naphthalene	25.0	23.8		ug/L		95	70 - 130		0	20	
TAME	25.0	26.8		ug/L		107	79 - 130		2	20	
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits								
4-Bromofluorobenzene	98		67 - 130								
1,2-Dichloroethane-d4 (Surr)	104		72 - 130								
Toluene-d8 (Surr)	101		70 - 130								

Lab Sample ID: LCSD 720-172761/12

Matrix: Water

Analysis Batch: 172761

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD			Unit	D	%Rec	%Rec.	RPD	RPD	Limit
		Result	Qualifier	Limits							
Gasoline Range Organics (GRO) -C6-C12	500	538		ug/L		108	58 - 120		3	20	
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits								
4-Bromofluorobenzene	99		67 - 130								
1,2-Dichloroethane-d4 (Surr)	106		72 - 130								
Toluene-d8 (Surr)	100		70 - 130								

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-61944-1 MS

Matrix: Water

Analysis Batch: 172761

**Client Sample ID: MW-1
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Methyl tert-butyl ether	ND		25.0	25.2	ug/L	101	60 - 138		
MTBE	ND		25.0	25.2	ug/L	101	60 - 138		
Benzene	ND		25.0	24.7	ug/L	99	60 - 140		
EDB	ND		25.0	25.8	ug/L	103	60 - 140		
1,2-DCA	ND		25.0	27.7	ug/L	111	60 - 140		
Ethylbenzene	ND		25.0	23.1	ug/L	92	60 - 140		
Toluene	ND		25.0	23.1	ug/L	92	60 - 140		
DIPE	ND		25.0	25.4	ug/L	102	60 - 140		
Ethyl t-butyl ether	ND		25.0	26.2	ug/L	105	60 - 140		
TBA	ND		250	238	ug/L	90	60 - 140		
Naphthalene	ND		25.0	23.9	ug/L	96	56 - 140		
TAME	ND		25.0	26.6	ug/L	106	60 - 140		
<hr/>									
Surrogate	MS		MS		Limits	RPD	Limit	%Rec.	Client Sample ID: MW-1 Prep Type: Total/NA
	%Recovery	Qualifier							
4-Bromofluorobenzene	98				67 - 130				
1,2-Dichloroethane-d4 (Surr)	103				72 - 130				
Toluene-d8 (Surr)	100				70 - 130				

Lab Sample ID: 720-61944-1 MSD

Matrix: Water

Analysis Batch: 172761

**Client Sample ID: MW-1
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Methyl tert-butyl ether	ND		25.0	26.3	ug/L	105	60 - 138			4	20
MTBE	ND		25.0	26.3	ug/L	105	60 - 138			4	20
Benzene	ND		25.0	24.5	ug/L	98	60 - 140			1	20
EDB	ND		25.0	26.3	ug/L	105	60 - 140			2	20
1,2-DCA	ND		25.0	26.8	ug/L	107	60 - 140			3	20
Ethylbenzene	ND		25.0	22.5	ug/L	90	60 - 140			3	20
Toluene	ND		25.0	23.0	ug/L	92	60 - 140			0	20
DIPE	ND		25.0	25.5	ug/L	102	60 - 140			0	20
Ethyl t-butyl ether	ND		25.0	26.3	ug/L	105	60 - 140			0	20
TBA	ND		250	237	ug/L	90	60 - 140			0	20
Naphthalene	ND		25.0	24.4	ug/L	97	56 - 140			2	20
TAME	ND		25.0	27.0	ug/L	108	60 - 140			2	20
<hr/>											
Surrogate	MSD		MSD		Limits	RPD	Limit	%Rec.	Client Sample ID: MW-1 Prep Type: Total/NA	RPD	Limit
	%Recovery	Qualifier									
4-Bromofluorobenzene	97				67 - 130						
1,2-Dichloroethane-d4 (Surr)	102				72 - 130						
Toluene-d8 (Surr)	99				70 - 130						

Lab Sample ID: MB 720-172807/4

Matrix: Water

Analysis Batch: 172807

**Client Sample ID: Method Blank
Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			12/18/14 09:00	1

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-172807/4

Matrix: Water

Analysis Batch: 172807

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Gasoline Range Organics (GRO)	ND				50		ug/L			12/18/14 09:00	1
-C6-C12											
TBA	ND				20		ug/L			12/18/14 09:00	1
Naphthalene	ND				1.0		ug/L			12/18/14 09:00	1
TAME	ND				0.50		ug/L			12/18/14 09:00	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene	95		67 - 130				12/18/14 09:00	1
1,2-Dichloroethane-d4 (Surr)	93		72 - 130				12/18/14 09:00	1
Toluene-d8 (Surr)	95		70 - 130				12/18/14 09:00	1

Lab Sample ID: LCS 720-172807/5

Matrix: Water

Analysis Batch: 172807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier							
Methyl tert-butyl ether	25.0	26.5				ug/L		106	62 - 130	
TBA	250	250				ug/L		100	70 - 130	
Naphthalene	25.0	27.3				ug/L		109	70 - 130	
TAME	25.0	26.5				ug/L		106	79 - 130	

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene	80		67 - 130					
1,2-Dichloroethane-d4 (Surr)	96		72 - 130					
Toluene-d8 (Surr)	97		70 - 130					

Lab Sample ID: LCS 720-172807/7

Matrix: Water

Analysis Batch: 172807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier							
Gasoline Range Organics (GRO)	500	510				ug/L		102	58 - 120	
-C6-C12										

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene	99		67 - 130					
1,2-Dichloroethane-d4 (Surr)	97		72 - 130					
Toluene-d8 (Surr)	97		70 - 130					

Lab Sample ID: LCSD 720-172807/6

Matrix: Water

Analysis Batch: 172807

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Methyl tert-butyl ether	25.0	24.8				ug/L		99	62 - 130	7	20
TBA	250	259				ug/L		104	70 - 130	4	20
Naphthalene	25.0	25.4				ug/L		102	70 - 130	7	20
TAME	25.0	25.4				ug/L		101	79 - 130	5	20

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-172807/6

Matrix: Water

Analysis Batch: 172807

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	81		67 - 130
1,2-Dichloroethane-d4 (Surr)	92		72 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCSD 720-172807/8

Matrix: Water

Analysis Batch: 172807

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Gasoline Range Organics (GRO) -C6-C12	500	501		ug/L		100	58 - 120	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		72 - 130
Toluene-d8 (Surr)	96		70 - 130

Method: 8270C SIM - PAHs by GCMS (SIM)

Lab Sample ID: MB 720-173004/1-A

Matrix: Water

Analysis Batch: 173013

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 173004

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Acenaphthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Acenaphthylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Fluorene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Phenanthrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Benzo[a]anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Chrysene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Benzo[a]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Fluoranthene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Pyrene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/22/14 10:11	12/22/14 19:42	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier				
2-Fluorobiphenyl	61		29 - 120	12/22/14 10:11	12/22/14 19:42	1
Terphenyl-d14	77		45 - 120	12/22/14 10:11	12/22/14 19:42	1

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

Lab Sample ID: LCS 720-173004/2-A

Matrix: Water

Analysis Batch: 173013

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 173004

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Naphthalene	10.0	6.32		ug/L	63	19 - 120	
Acenaphthene	10.0	6.30		ug/L	63	24 - 120	
Acenaphthylene	10.0	6.84		ug/L	68	24 - 120	
Fluorene	10.0	6.85		ug/L	69	27 - 120	
Phenanthrene	10.0	6.45		ug/L	64	31 - 120	
Anthracene	10.0	7.34		ug/L	73	44 - 120	
Benzo[a]anthracene	10.0	7.38		ug/L	74	48 - 120	
Chrysene	10.0	6.79		ug/L	68	47 - 120	
Benzo[a]pyrene	10.0	6.81		ug/L	68	43 - 120	
Benzo[b]fluoranthene	10.0	6.30		ug/L	63	42 - 120	
Benzo[k]fluoranthene	10.0	6.89		ug/L	69	42 - 120	
Benzo[g,h,i]perylene	10.0	6.42		ug/L	64	35 - 120	
Indeno[1,2,3-cd]pyrene	10.0	6.43		ug/L	64	36 - 120	
Fluoranthene	10.0	7.20		ug/L	72	43 - 120	
Pyrene	10.0	8.19		ug/L	82	47 - 120	
Dibenz(a,h)anthracene	10.0	6.33		ug/L	63	33 - 120	

LCS LCS

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	72		29 - 120
Terphenyl-d14	75		45 - 120

Lab Sample ID: LCSD 720-173004/3-A

Matrix: Water

Analysis Batch: 173013

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 173004

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Naphthalene	10.0	4.74		ug/L		47	19 - 120	29	35
Acenaphthene	10.0	4.90		ug/L		49	24 - 120	25	35
Acenaphthylene	10.0	5.32		ug/L		53	24 - 120	25	35
Fluorene	10.0	5.34		ug/L		53	27 - 120	25	35
Phenanthrene	10.0	5.24		ug/L		52	31 - 120	21	35
Anthracene	10.0	6.28		ug/L		63	44 - 120	16	35
Benzo[a]anthracene	10.0	6.68		ug/L		67	48 - 120	10	35
Chrysene	10.0	6.18		ug/L		62	47 - 120	9	35
Benzo[a]pyrene	10.0	6.29		ug/L		63	43 - 120	8	35
Benzo[b]fluoranthene	10.0	5.99		ug/L		60	42 - 120	5	35
Benzo[k]fluoranthene	10.0	6.44		ug/L		64	42 - 120	7	35
Benzo[g,h,i]perylene	10.0	6.23		ug/L		62	35 - 120	3	35
Indeno[1,2,3-cd]pyrene	10.0	6.19		ug/L		62	36 - 120	4	35
Fluoranthene	10.0	6.34		ug/L		63	43 - 120	13	35
Pyrene	10.0	7.12		ug/L		71	47 - 120	14	35
Dibenz(a,h)anthracene	10.0	6.13		ug/L		61	33 - 120	3	35

LCSD LCSD

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	55		29 - 120
Terphenyl-d14	70		45 - 120

TestAmerica Pleasanton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-172833/1-A

Matrix: Water

Analysis Batch: 172881

Client Sample ID: Method Blank

Prep Type: Silica Gel Cleanup

Prep Batch: 172833

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		12/18/14 10:22	12/20/14 06:07	1
Surrogate									
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
Capric Acid (Sur)	0.001		0 - 5				12/18/14 10:22	12/20/14 06:07	1
p-Terphenyl	102		31 - 150				12/18/14 10:22	12/20/14 06:07	1

Lab Sample ID: LCS 720-172833/2-A

Matrix: Water

Analysis Batch: 172881

Client Sample ID: Lab Control Sample

Prep Type: Silica Gel Cleanup

Prep Batch: 172833

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
	Result	Qualifier							
Diesel Range Organics [C10-C28]			2500	2300		ug/L		92	32 - 119
Surrogate									
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits		D	%Rec.	Limits
	%Recovery	Qualifier							
p-Terphenyl	98				31 - 150				

Lab Sample ID: LCSD 720-172833/3-A

Matrix: Water

Analysis Batch: 172881

Client Sample ID: Lab Control Sample Dup

Prep Type: Silica Gel Cleanup

Prep Batch: 172833

Analyte	MB	MB	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
	Result	Qualifier							
Diesel Range Organics [C10-C28]			2500	2180		ug/L		87	32 - 119
Surrogate									
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits		D	Limits	RPD
	%Recovery	Qualifier							
p-Terphenyl	95				31 - 150				5

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

GC/MS VOA

Analysis Batch: 172761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	1
720-61944-1 MS	MW-1	Total/NA	Water	8260B/CA_LUFT MS	2
720-61944-1 MSD	MW-1	Total/NA	Water	8260B/CA_LUFT MS	3
720-61944-2	MW-2	Total/NA	Water	8260B/CA_LUFT MS	4
720-61944-4	MW-4	Total/NA	Water	8260B/CA_LUFT MS	5
720-61944-5	MW-5	Total/NA	Water	8260B/CA_LUFT MS	6
720-61944-6	MW-6	Total/NA	Water	8260B/CA_LUFT MS	7
720-61944-7	MW-7	Total/NA	Water	8260B/CA_LUFT MS	8
720-61944-8	MW-8	Total/NA	Water	8260B/CA_LUFT MS	9
720-61944-9	MW-9	Total/NA	Water	8260B/CA_LUFT MS	10
720-61944-10	MW-10	Total/NA	Water	8260B/CA_LUFT MS	11
720-61944-11	MW-11	Total/NA	Water	8260B/CA_LUFT MS	12
LCS 720-172761/11	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	13
LCS 720-172761/9	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	14
LCSD 720-172761/10	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-172761/12	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-172761/8	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 172807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	1
LCS 720-172807/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	2
LCS 720-172807/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	3
LCSD 720-172807/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	4
LCSD 720-172807/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	5
MB 720-172807/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	6

GC/MS Semi VOA

Prep Batch: 173004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-1	MW-1	Total/NA	Water	3510C	1
720-61944-2	MW-2	Total/NA	Water	3510C	2

TestAmerica Pleasanton

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

GC/MS Semi VOA (Continued)

Prep Batch: 173004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-3	MW-3	Total/NA	Water	3510C	
720-61944-4	MW-4	Total/NA	Water	3510C	
720-61944-5	MW-5	Total/NA	Water	3510C	
720-61944-6	MW-6	Total/NA	Water	3510C	
720-61944-7	MW-7	Total/NA	Water	3510C	
720-61944-8	MW-8	Total/NA	Water	3510C	
720-61944-9	MW-9	Total/NA	Water	3510C	
720-61944-10	MW-10	Total/NA	Water	3510C	
720-61944-11	MW-11	Total/NA	Water	3510C	
LCS 720-173004/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-173004/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-173004/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 173013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-1	MW-1	Total/NA	Water	8270C SIM	173004
720-61944-2	MW-2	Total/NA	Water	8270C SIM	173004
720-61944-3	MW-3	Total/NA	Water	8270C SIM	173004
720-61944-4	MW-4	Total/NA	Water	8270C SIM	173004
720-61944-5	MW-5	Total/NA	Water	8270C SIM	173004
720-61944-6	MW-6	Total/NA	Water	8270C SIM	173004
720-61944-7	MW-7	Total/NA	Water	8270C SIM	173004
720-61944-8	MW-8	Total/NA	Water	8270C SIM	173004
720-61944-9	MW-9	Total/NA	Water	8270C SIM	173004
720-61944-10	MW-10	Total/NA	Water	8270C SIM	173004
720-61944-11	MW-11	Total/NA	Water	8270C SIM	173004
LCS 720-173004/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	173004
LCSD 720-173004/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	173004
MB 720-173004/1-A	Method Blank	Total/NA	Water	8270C SIM	173004

Analysis Batch: 173264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-2	MW-2	Total/NA	Water	8270C SIM	173004

GC Semi VOA

Prep Batch: 172833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
720-61944-2	MW-2	Silica Gel Cleanup	Water	3510C SGC	
720-61944-3	MW-3	Silica Gel Cleanup	Water	3510C SGC	
720-61944-4	MW-4	Silica Gel Cleanup	Water	3510C SGC	
720-61944-5	MW-5	Silica Gel Cleanup	Water	3510C SGC	
720-61944-6	MW-6	Silica Gel Cleanup	Water	3510C SGC	
720-61944-7	MW-7	Silica Gel Cleanup	Water	3510C SGC	
720-61944-8	MW-8	Silica Gel Cleanup	Water	3510C SGC	
720-61944-9	MW-9	Silica Gel Cleanup	Water	3510C SGC	
720-61944-10	MW-10	Silica Gel Cleanup	Water	3510C SGC	
720-61944-11	MW-11	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-172833/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

GC Semi VOA (Continued)

Prep Batch: 172833 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-172833/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-172833/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 172877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61944-1	MW-1	Silica Gel Cleanup	Water	8015B	172833
720-61944-2	MW-2	Silica Gel Cleanup	Water	8015B	172833
720-61944-3	MW-3	Silica Gel Cleanup	Water	8015B	172833
720-61944-4	MW-4	Silica Gel Cleanup	Water	8015B	172833
720-61944-5	MW-5	Silica Gel Cleanup	Water	8015B	172833
720-61944-6	MW-6	Silica Gel Cleanup	Water	8015B	172833
720-61944-7	MW-7	Silica Gel Cleanup	Water	8015B	172833
720-61944-8	MW-8	Silica Gel Cleanup	Water	8015B	172833
720-61944-9	MW-9	Silica Gel Cleanup	Water	8015B	172833
720-61944-10	MW-10	Silica Gel Cleanup	Water	8015B	172833
720-61944-11	MW-11	Silica Gel Cleanup	Water	8015B	172833

Analysis Batch: 172881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-172833/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	172833
LCSD 720-172833/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	172833
MB 720-172833/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	172833

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-1

Date Collected: 12/16/14 16:10

Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172761	12/17/14 19:58	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/23/14 01:04	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 21:12	JXL	TAL PLS

Client Sample ID: MW-2

Date Collected: 12/16/14 16:45

Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		50	172761	12/17/14 21:28	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 20:05	MQL	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		2	173264	12/30/14 04:20	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 17:09	JXL	TAL PLS

Client Sample ID: MW-3

Date Collected: 12/16/14 12:10

Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172807	12/18/14 11:27	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 20:28	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 17:33	JXL	TAL PLS

Client Sample ID: MW-4

Date Collected: 12/16/14 13:45

Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		20	172761	12/17/14 22:28	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 20:51	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 17:57	JXL	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-5

Date Collected: 12/16/14 09:35
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172761	12/17/14 22:58	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 21:14	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 18:22	JXL	TAL PLS

Client Sample ID: MW-6

Date Collected: 12/16/14 12:40
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172761	12/17/14 23:28	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 21:37	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 20:48	JXL	TAL PLS

Client Sample ID: MW-7

Date Collected: 12/16/14 13:10
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		2	172761	12/17/14 23:58	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 22:00	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 19:10	JXL	TAL PLS

Client Sample ID: MW-8

Date Collected: 12/16/14 15:15
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172761	12/18/14 00:29	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 22:23	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 18:46	JXL	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Client Sample ID: MW-9

Date Collected: 12/16/14 14:35
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		5	172761	12/18/14 00:58	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 22:46	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 19:35	JXL	TAL PLS

Client Sample ID: MW-10

Date Collected: 12/16/14 16:25
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172761	12/18/14 01:28	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 23:09	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 20:23	JXL	TAL PLS

Client Sample ID: MW-11

Date Collected: 12/16/14 11:30
Date Received: 12/17/14 09:45

Lab Sample ID: 720-61944-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	172761	12/18/14 01:58	ASC	TAL PLS
Total/NA	Prep	3510C			173004	12/22/14 10:11	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	173013	12/22/14 23:32	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			172833	12/18/14 10:22	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	172877	12/19/14 19:59	JXL	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TestAmerica Pleasanton

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16

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TestAmerica Pleasanton

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP #11126, Emeryville

TestAmerica Job ID: 720-61944-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-61944-1	MW-1	Water	12/16/14 16:10	12/17/14 09:45
720-61944-2	MW-2	Water	12/16/14 16:45	12/17/14 09:45
720-61944-3	MW-3	Water	12/16/14 12:10	12/17/14 09:45
720-61944-4	MW-4	Water	12/16/14 13:45	12/17/14 09:45
720-61944-5	MW-5	Water	12/16/14 09:35	12/17/14 09:45
720-61944-6	MW-6	Water	12/16/14 12:40	12/17/14 09:45
720-61944-7	MW-7	Water	12/16/14 13:10	12/17/14 09:45
720-61944-8	MW-8	Water	12/16/14 15:15	12/17/14 09:45
720-61944-9	MW-9	Water	12/16/14 14:35	12/17/14 09:45
720-61944-10	MW-10	Water	12/16/14 16:25	12/17/14 09:45
720-61944-11	MW-11	Water	12/16/14 11:30	12/17/14 09:45

TestAmerica Pleasanton

TestAmerica Pleasanton
1220 Quarry Lane

100-61944

Chain of Custody Record

158Z8Z
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
12/31/2014

Pleasanton, CA 94566
phone 925.484.1919 fax

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: James Ramos		Site Contact: Nick Vrdoljak		Date: 12/16/2014		COC No:										
Broadbent & Associates, Inc 4820 Business Center Drive, Suite 110 Fairfield, CA 94534 (707) 455-7290 Phone (707) 863-9046 FAX Project Name: ARCADIS 11126 Site: 1700 Powell Street, Emeryville, CA P O # 09-88-662		Tel/Fax: 707-455-7290 / 707-863-9046		Lab Contact:		Carrier:		1 of 1 COCs										
		Analysis Turnaround Time						Sampler Nick Vrdoljak For Lab Use Only: Walk-in Client: Lab Sampling:										
		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS																
		TAT if different from Below STD																
		<input type="checkbox"/> 2 weeks																
		<input type="checkbox"/> 1 week																
		<input type="checkbox"/> 2 days																
		<input type="checkbox"/> 1 day																
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	GRO by 8260	BTEX by 8260	EDB by 8260	TBA, MTBE, TAME by 8260	1,2-DCA by 8260	5 Fuel Oxygenates by 8260	DRO by 8016B (with silica gel trap)	Naphthalene by 8260B	PAHs by 8270	Sample Specific Notes:
MW-1		12/16/2014	1610	G	AQ	7	X X	X	X	X	X	X	X	X	X			
MW-2		12/16/2014	1615	G	AQ	7	X X	X	X	X	X	X	X	X	X			
MW-3		12/16/2014	1220	G	AQ	7	X		X			X	X	X				
MW-4		12/16/2014	1245	G	AQ	7	X		X			X	X	X				
MW-5		12/16/2014	0935	G	AQ	67	X X	X	X			X	X	X				
MW-6		12/16/2014	1240	G	AQ	7	X		X			X	X	X				
MW-7		12/16/2014	350	G	AQ	7	X X	X	X			X	X	X				
MW-8		12/16/2014	515	G	AQ	7	X		X			X	X	X				
MW-9		12/16/2014	1435	G	AQ	7	X X	X				X	X	X				
MW-10		12/16/2014	1625	G	AQ	7						X	X	X				1625
MW-11		12/16/2014	130	G	AQ	7						X	X	X				
TB-11126-12162014		12/16/2014	—	--	AQ	2												ON HOLD
Preservation Used: 1=Ice, 2=HCl; 3=H ₂ SO ₄ ; 4=HNO ₃ ; 5=NaOH; 6=Other										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.										<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for Months								
Special Instructions/QC Requirements & Comments:																		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: /		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: /												
Relinquished by:		Company: REPRO BEAR		Date/Time: 12/16/2014		Received by:		Company: Date/Time:										
Relinquished by:		Company:		Date/Time:		Received by:		Company: Date/Time:										
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: Date/Time:										

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 720-61944-1

Login Number: 61944

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Gonzales, Justinn

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type: GEO_REPORT
Report Title: Third Quarter and Fourth Quarter 2014 –Semi-Annual Groundwater Monitoring Report 020915
Report Type: Monitoring Report - Semi-Annually
Report Date: 2/9/2015
Facility Global ID: T0600100208
Facility Name: BP #11126
File Name: RO#0000066_GWM_R_2015-0209.pdf
Organization Name: ARCADIS
Username: ARCADISBP
IP Address: 69.181.178.58
Submittal Date/Time: 2/9/2015 1:51:24 PM
Confirmation Number: **7581026196**

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