ARCADIS Design & Consultancy for natural and built assets

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Mr. Mark E. Detterman, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

ENVIRONMENT

Subject:
Third Quarter and Fourth Quarter 2015
Semi-Annual Groundwater Monitoring Report
Former BP Station No. 11126
1700 Powell Street, Emeryville, California
Regulatory Site No: RO0000066

Date:
February 12, 2016

Contact:
Hollis Phillips

Phone:
415.432.6903

Email:
hollis.phillips@arcadis.com

Our ref:
GP09BPNA.C044.N0000

Dear Mr. Detterman:

Arcadis U.S., Inc. (Arcadis) has prepared this Third Quarter and Fourth Quarter 2015 Semi-Annual Groundwater Monitoring Report on behalf of Atlantic Richfield Company (ARCO), a BP affiliated company, for the former ARCO service station listed below.

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

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 contents of this report, please contact Hollis Phillips by telephone (415.432.6903), or by e-mail (hollis.phillips@arcadis.com).

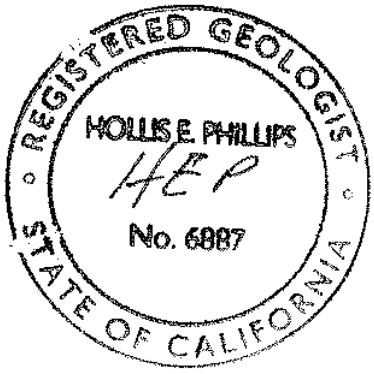
Sincerely,
Arcadis U.S. Inc.

Prepared by:

JameyPeterson
Project Environmental Scientist

Approved by:

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



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GeoTracker upload
ACEH FTP site upload

Mr. Mark E. Detterman, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject:
Third Quarter and Fourth Quarter 2015
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GP09BPNA.C044.N0000

Dear Mr. Detterman:

Arcadis U.S., Inc. (Arcadis) has prepared this Third Quarter and Fourth Quarter 2015 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).

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, 2015)

- Prepared and submitted the *First Quarter and Second Quarter 2015 Semi-Annual Groundwater Monitoring Report*, dated August 7, 2015, to Alameda County Environmental Health (ACEH).
- Conducted groundwater sampling for the Third Quarter 2015 for MW-12 on July 10, 2015.
- Submitted the *Groundwater Monitoring Well Installation Report*, dated August 24, 2015, to ACEH.
- Conducted groundwater monitoring and sampling for the Fourth Quarter 2015 on December 8 and December 16, 2015.

Work Proposed – Reporting Period (January to June, 2016)

- Submit this *Third Quarter and Fourth Quarter 2015 Semi-Annual Groundwater Monitoring Report*, contained herein.
- Perform groundwater monitoring and sampling for MW-12 during First Quarter 2016.
- Perform groundwater monitoring and sampling activities for MW-1 through MW-12 during Second Quarter 2016.

2. Background

The Site is an active 76-branded gasoline station. A site historical summary is included as Attachment 1. 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 associated with the Site is conducted on a semi-annual frequency during the second and fourth quarters of each year. Fourth Quarter 2015 groundwater monitoring was conducted on December 8 and December 16, 2015 by Broadbent and Associates, Inc. (BAI) personnel. 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 2015 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 2015 sampling event are included in Attachments 2 and 3, respectively.

BAI personnel measured depth to groundwater in MW-1 through MW-12 prior to sampling. Groundwater elevations ranged from 4.33 feet (MW-11 on December 8, 2015) to 6.07 feet (MW-12 on December 16, 2015).

Groundwater samples were collected on December 8, 2015 from monitoring wells MW-1 through MW-12, consistent with the current monitoring schedule. Samples were submitted to TestAmerica Laboratories, Inc. (TA), of Pleasanton, California, a California Department of Public Health certified analytical laboratory. Groundwater samples were collected again on December 16, 2015 because one or more of the

containers for the December 8 samples from MW-1, MW-3, MW-4, MW-5, MW-7, and MW-12 were broken or leaking upon arrival at TA.

Groundwater samples collected from MW-1 through MW-12 were tested for the following constituents as directed by ACEH in their letter dated June 30, 2014:

- Naphthalene by United States Environmental Protection Agency (USEPA) Method 8260B; and
- Polycyclic aromatic hydrocarbons (PAH) by USEPA Method 8270.

Groundwater samples collected from MW-1 and MW-3 through MW-12 were additionally tested for the following constituents:

- Total petroleum hydrocarbons as DRO (C12-C22) using USEPA Test Method 8015B with Silica Gel Cleanup.

Groundwater samples collected from MW-1 through MW-9 and MW-12 were additionally tested for the following constituents:

- Total petroleum hydrocarbons as gasoline range organics (GRO; C6-C12) using USEPA Method 8260B Modified; and
- 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, MW-9, and MW-12 were additionally tested for the following constituents:

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

Groundwater samples collected from MW-2 and MW-12 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 0.009 feet of vertical drop per foot of horizontal distance (ft/ft) on December 8, 2015. Historical data indicate the groundwater flow direction is predominately toward the southwest as shown on Figure 5.
- GRO was detected in 6 of the 10 groundwater monitoring well samples with concentrations ranging from 60 µg/L (MW-12) to 2,900 µg/L (MW-2). GRO concentrations were below laboratory reporting limits at 4 of the 10 wells.

- DRO was detected in 8 of the 11 groundwater monitoring well samples with concentrations ranging from 51 µg/L (MW-12) to 2,000 µg/L (MW-6). DRO concentrations were below laboratory reporting limits at the other 3 wells.
- Benzene was detected in 4 of the 6 groundwater monitoring well samples with concentrations ranging from 1.9 µg/L (MW-5) to 340 µg/L (MW-2). Benzene concentrations were below laboratory reporting limits at the other 2 wells.
- Toluene was detected in 2 out of the 6 groundwater monitoring well samples with concentrations of 0.80 µg/L at MW-5 and 4.7 µg/L at MW-9. Toluene concentrations were below laboratory reporting limits at 4 of the 6 wells.
- Ethylbenzene was detected in the groundwater monitoring well sample collected from MW-1 with a concentration of 2.5 µg/L. Ethylbenzene concentrations were below laboratory reporting limits in the other 5 wells.
- Xylenes were detected in the groundwater monitoring well samples collected from MW-1 with a concentration of 1.2 µg/L and MW-5 with a concentration of 3.6 µg/L. Xylene concentrations were below laboratory reporting limits in 4 out of the 6 wells.
- MTBE was detected in 9 out of the 10 groundwater monitoring well samples with concentrations ranging from 0.74 µg/L (MW-6) to 360 µg/L (MW-2). The MTBE concentration was below the laboratory reporting limit in 1 well.
- TBA was detected in 8 out of 10 groundwater monitoring samples, with concentrations ranging from 250 µg/L (MW-12) to 43,000 µg/L (MW-2). TBA concentrations were below laboratory reporting limits in 2 out of 10 wells.
- TAME was not detected in any of the 10 groundwater monitoring well samples.
- DIPE, ETBE, 1,2-DCA, and EDB were not detected in the groundwater monitoring well samples collected from MW-2 and MW-12.
- Concentrations of PAHs were largely not detected above their respective laboratory reporting limits in groundwater samples collected from MW-1 through MW-12. Acenaphthene was detected in 4 groundwater samples, with concentrations ranging from 0.16 µg/L (MW-9) to 0.57 µg/L (MW-5). Benzo[b]fluoranthene was detected in MW-6 with a concentration of 0.21 µg/L. Fluoranthene was detected in the groundwater sample collected from MW-6 with a concentration of 0.25 µg/L. Fluorene was detected in 3 groundwater monitoring well samples with concentrations ranging from 0.10 µg/L (MW-12) to 0.33 µg/L (MW-5). Naphthalene was detected in 5 groundwater monitoring well samples, with concentrations ranging from 0.19 µg/L (MW-12) to 1.3 µg/L (MW-2). Phenanthrene was detected in 2 groundwater samples, with concentrations of 0.23 µg/L (MW-12) and 0.35 µg/L (MW-5). Finally, pyrene

was detected in 3 groundwater monitoring well samples, with concentrations ranging from 0.11 µg/L (MW-10) to 0.42 µg/L (MW-6). 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 for MW-1 through MW-11 and quarterly monitoring at MW-12.

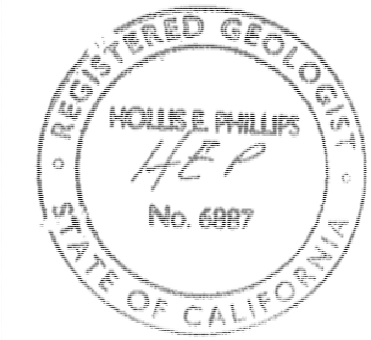
The results from MW-12 for the fourth quarter 2015 groundwater monitoring event are generally consistent with the results from the third quarter 2015 groundwater monitoring event when comparing the TA results. In both quarters, concentrations of most constituents were either below or slightly above laboratory reporting limits with the exception of TBA, which was detected considerably above laboratory reporting limits. Concentrations of TBA in the fourth quarter 2015 were consistent with the data from the third quarter 2015.

Two more groundwater monitoring events are planned for groundwater evaluation purposes at MW-12. Subsequent events will occur on a quarterly basis. The next groundwater sampling event is planned for March 2016.

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

Sincerely,

Arcadis U.S., Inc.



Prepared by:

Jamey Peterson
Project Environmental Scientist

Approved by:

Hollis E. Phillips, P.G.
Project Manager/Principal Geologist

Copies:

GeoTracker and ACEH FTP site uploads

Enclosures:

Tables

1 Well Construction Details
2 Summary of Groundwater Monitoring Data
3 Groundwater Analytical Data for Polycyclic Aromatic Hydrocarbons

Figures

1 Site Vicinity Map
2 Site Plan
3 Groundwater Elevation Contour Map – December 8, 2015
4 Groundwater Hydrocarbon Concentration Map – December 8 and 16, 2015
5 Groundwater Flow Direction Rose Diagram

Attachments

1 Previous Investigations and Site History Summary
2 Groundwater Sampling Data Package
3 Certified Laboratory Analytical Report

TABLES

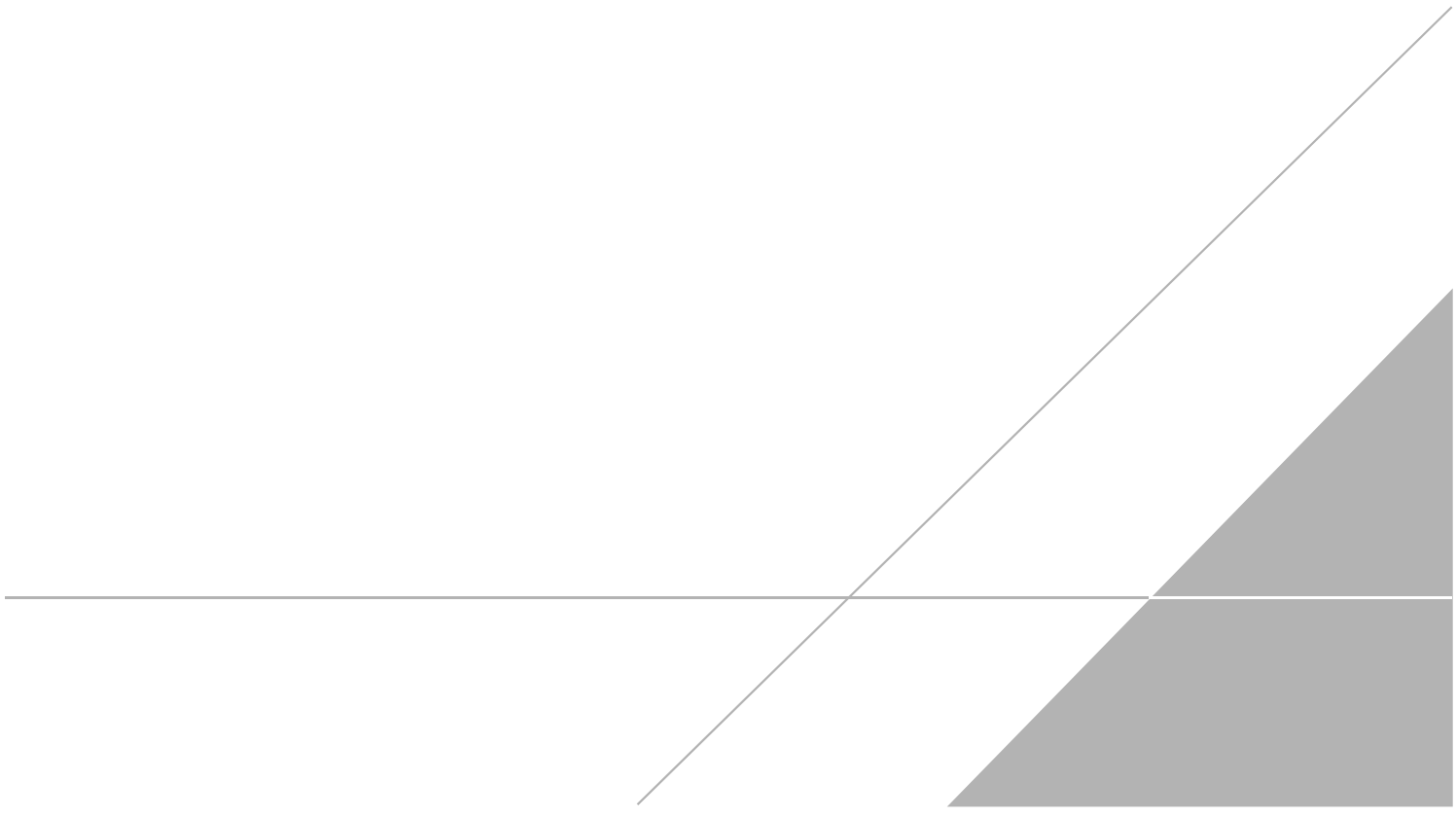


Table 1
Well Construction Details
Former BP Station No. 11126
1700 Powell Street
Emeryville, California

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	
MW-12	6/25/2015	14	2	4	14	10	

Notes:

Well casing and screens constructed with polyvinyl chloride (PVC) piping

bgs = Below ground surface

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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
CPT-01	1/6/2011		--	--	--	--	<50	--	<0.50	<0.50	<0.50	<1.0	14	63	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	
CPT-02	1/6/2011		--	--	--	--	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	
GP-5	11/24/2014		--	--	--	--	2,400	460	2.1	1.8	1.2	3.1	11	<20	<0.50	<0.50	<0.50	<0.50	5.1	--	--	
GP-6	11/24/2014		--	--	--	--	600	10,000	<0.50	<0.50	<0.50	1.6	9.8	<20	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	
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	
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	
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	
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	--	--	--	--	--	--	--	--	
MW-1	2/19/2003		7.76	3.00	--	4.76	1,500	--	180	<5.0	<5.0	15	610	--	--	--	--	--	--	--	--	
MW-1	6/6/2003		7.76	5.52	--	2.24	4,600	--	620	<25	<25	55	1,400	<1,000	--	<25	<25	--	<25	<5,000	--	
MW-1	8/7/2003		7.76	5.55	--	2.21	2,000	--	290	<5.0	<5.0	15	920	560	<5.0	<5.0	<5.0	<5.0	12	<1,000	--	
MW-1	11/20/2003		7.76	5.41	--	2.35	2,800	--	420	11	11	53	250	<200	--	<5.0	<5.0	--	<5.0	1,800	--	
MW-1	4/28/2004		7.76	5.33	--	2.43	1,600	--	100	5.3	<5.0	8.8	200	950	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	8/26/2004		7.76	4.03	--	3.73	1,700	--	220	7.2	15	35	180	320	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-1	12/1/2004		7.76	3.93	--	3.83	2,100	--	380	8	34	76	170	300	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	
MW-1	2/2/2005		7.76	3.61	--	4.15	1,100	--	150	3	12	14	160	6,700	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-1	4/25/2005		10.16	3.75	--	6.41	930	--	140	3.6	5.3	11	200	5,000	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	
MW-1	9/30/2005		10.16	3.54	--	6.62	4,600	--	1,000	15	78	150	250	1,200	<5.0	13	<5.0	<5.0	<5.0	<500	--	
MW-1	12/28/2005		10.16	3.26	--	6.90	1,500	--	200	5.7	32	58	140	1,800	<5.0	<10	<5.0	--	<5.0	<1,000	--	
MW-1	3/23/2006		10.16	3.40	--	6.76	580	--	42	<5.0	10	20	40	2,800	<5.0	<10	<5.0	<5.0	<5.0	<1,000	--	
MW-1	6/5/2006		10.16	2.97	--	7.19	900	--	230	2.5	28	71	160	1,900	<2.5	<5.0	<2.5	<2.5	<2.5	<500	--	
MW-1	9/19/2006		10.16	3.67	--	6.49	1,600	--	240	3.4	11	23	180	1,000	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-1	12/1/2006		10.16	3.64	--	6.52	1,400	--	86	4.3	7	19	150	930	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-1	3/1/2007		10.16	3.55	--	6.61	4,200	--	340	7	34	46	160	510	<2.0	<4.0	<2.0	<2.0	2	<1,000	--	
MW-1	6/1/2007		10.16	3.53	--	6.63	2,100	--	200	3.4	34	59	140	1,500	<2.0	<4.0	<2.0	<2.0	2.2	<1,000	--	
MW-1	9/13/2007		10.16	4.88	--	5.28	540	--	74	2.4	5.4	10	59	1,300	<2.0	<4.0	<2.0	<2.0	<2.0	1,100	--	
MW-1	11/21/2007		10.16	3.70	--	6.46	1,800	--	67	6.2	3.5	12	200	1,300	<2.0	<4.0	<2.0	<2.0	2.7	<1,000	--	
MW-1	2/29/2008		10.16	3.49	--	6.67	970	--	100	1.9	37	32	25	1,200	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-1	5/23/2008		10.16	4.26	--	5.90	1,300	--	170	3.5	15	26	120	1,800	<0.5	<1.0	<0.5	<0.5	1.4	<250	--	
MW-1	9/26/2008		10.16	4.29	--	5.87	1,800	--	26	6.1	<1.0	10	120	1,400	<1.0	<1.0	<1.0	<1.0	1.9	<250	--	
MW-1	12/23/2008		10.16	3.79	--	6.37	1,600	--	14	6.1	1.2	9.7	75	940	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-1	3/9/2009		10.16	3.29	--	6.87	2,100	--	200	5.6	16	29	88	1,300	<1.0	<1.0	<1.0	<1.0	1.7	<250	--	
MW-1	5/28/2009		10.16	4.02	--	6.14	880	--	64	1.5	3.4	9.4	48	1,800	<1.0	<1.0	<1.0	<1.0	1.3	<250	0.46	
MW-1	12/10/2009		10.16	3.92	--	6.24	1,300	--	46	6.9	2.6	10	65	560	<0.50	<0.50	<0.50	<0.50	1.1	<100	0.47	
MW-1	6/29/2010		10.16	3.60	--	6.56	530	--	18	1.3	<0.50	4.3	<0.50	2,000	<0.50	<0.50	<0.50	<0.50	1.2	<100	0.53	(P)
MW-1	12/30/2010		10.16	3.55	--	6.61	1,000	--	19	3.2	1.4	8.2	46	1,900	<0.50	<0.50	<0.50	<0.50	1.0	<250	0.57	(P)
MW-1	6/29/2011		10.16	3.58	--	6.58	60	--	<0.50	<0.50	<0.50	<1.0	3.9	840	--	--	--	--	<0.50	--	0.40	(P)
MW-1	1/30/2012		10.16	3.82	--	6.34	1,100	--	42	4.5	0.90	7.2	64	900	--	--	--	--	1.3	--	0.66	(P)
MW-1	6/27/2012		10.16	3.79	--	6.37	420	--	15	0.74	<0.50	3.1	18	1,400	--	--	--	--	0.83	--	1.62	(P)
MW-1	12/7/2012		10.16	3.30	--	6.86	700	--	6.3	2.3	<0.50	4.8	32	1,400	--	--	--	--	0.81	--	1.64	
MW-1	6/6/2013		10.16	3.73	--	6.43	240	--	11	6.7	14	9.8	6.9	170	--	--	--	--	<0.50	--	1.09	
MW-1	12/13/2013		10.16	3.88	--	6.28	680	--	23	3.2	3.4	9.9	36	1,500	--	--	--	--	1.7	--	2.90	
MW-1	6/30/2014		10.16	3.77	--	6.39	160	--	7.8	0.58	<0.50	<1.0	4.2	970	--	--	--	--	<0.50	--	0.23	
MW-1	12/16/2014		10.16	0.00	--	10.16	<50	790	<0.50	<0.50	<0.50	<1.0	<0.50	<20	--	--	--	--	<0.50	--	7.18	(Well full of water.)
MW-1	6/18/2015		10.24	4.32	--	5.92	210 J5J3	600	<20	<5	<1	<60	3.99	593	--	--	--	--	<1.00	--	0.18	
MW-1	12/8/2015		10.24	4.45	--	5.79	580	--	31	<0.50	2.5	1.2	3.7	650	--	--	--	--	<0.50	--	2.10	
MW-1	12/16/2015		10.24	4.25	--	5.99	--	210	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/4/1992	Dup	8.56	5.88	--	2.68	12,000	--	3,200	980	<0.5	1,900	--	--	--	--	--	--	--	--	--	(Dup)
MW-2	11/4/1992		8.56	5.88	--	2.68	12,000	--	3,900	1,300	<0.5	2,300	--	--	--	--	--	--	--	--	--	
MW-2	10/12/1993		8.56	6.29	--	2.27	4,500	--	3,400	180	230	940	442	--	--	--	--	--	--	--	--	
MW-2	2/15/1994	Dup	8.56	--	--	--	2,000	--	430	270	28	390	127	--	--	--	--	--	--	--	4	(Dup)
MW-2	2/15/1994		8.56	--	--	--	1,800	--	290	160	14	250	--	--	--	--	--	--	--	--	--	
MW-2	5/11/1994	Dup	8.56	5.17	--	3.39	15,000	--	5,600	1,500	470	2,000	740	--	--	--	--	--	--	--	--	(Dup)
MW-2	5/11/1994		8.56	5.17	--	3.39	14,000	--	3,900	1,200	440	1,900	953	--	--	--	--	--	--	--	8.90	
MW-2	8/1/1994		8.56	5.43	--	3.13	8,200	--	3,000	420	230	680	1,676	--	--	--	--	--	--	--	2.60	
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	(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	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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	4.59	--	3.97	22,000	--	720	<100	<100	<100	18,000	48,000	--	<100	<100	--	200	<20,000	--	
MW-2	4/28/2004		8.56	4.37	--	4.19	<25,000	--	690	<250	<250	<250	31,000	59,000	<250	<250	<250	<250	<250	<50,000	--	
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	<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	<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)

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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	<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	<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	<25	--	0.65	
MW-2	6/18/2015		11.42	5.22	--	6.20	5,600	2,000	909	12.9 J	8.49	15.4	372	15,500	<5.00	<5.00	<5.00	<5.00	<5.00	<500	6.39	
MW-2	12/8/2015		11.42	5.99	--	5.43	2,900	--	340	<25	<25	<50	360	43,000	<25	<25	<25	<25	<25	--	2.23	
MW-2	12/16/2015		11.42	5.68	--	5.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	5.86	--	2.39	190	2,500	2.7	1.9	<0.5	1.9	51	--	--	--	--	--	--	--	9.20	
MW-3	8/1/1994		8.25	6.13	--	2.12	120	1,300	1.3	<0.5	0.5	1.1	18	--	--	--	--	--	--	--	2.90	
MW-3	10/18/1994		8.25	6.39	--	1.86	100	2,200	2.3	<0.5	<0.5	<0.5	21	--	--	--	--	--	--	--	3.60	
MW-3	1/13/1995		8.25	5.47	--	2.78	<50	970	0.8	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.70	
MW-3	4/13/1995		8.25	5.17	--	3.08	530	<500	8.7	1.9	<0.5	3.9	--	--	--	--	--	--	--	--	8.40	
MW-3	7/11/1995		8.25	5.37	--	2.88	78	2,100	0.57	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.30	
MW-3	11/2/1995		8.25	6.29	--	1.96	250	2,000	0.73	<0.5	<0.5	1.8	270	--	--	--	--	--	--	--	8.30	
MW-3	2/5/1996		8.25	5.80	--	2.45	<50	1,600	<0.5	<1.0	<1.0	2.7	11	--	--	--	--	--	--	--	3.50	
MW-3	4/24/1996		8.25	5.69	--	2.56	<50	2,800	<5.0	<10	<10	<10	150	--	--	--	--	--	--	--	8.60	
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	
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	<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	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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	<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	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-3	3/1/2007		10.73	4.62	--	6.11	<50	120	<0.5	<0.5	<0.5	<1.0	3.8	77	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-3	6/1/2007		10.73	5.53	--	5.20	<50	350	<0.5	<0.5	<0.5	<1.0	3.7	320	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-3	9/13/2007		10.73	6.17	--	4.56	<250	1,200	<2.5	<2.5	<2.5	<5.0	2.6	2,000	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-3	11/21/2007		10.73	6.16	--	4.57	<250	1,600	<2.5	<2.5	<2.5	<5.0	3.4	2,600	<2.5	<5.0	<2.5	<2.5	<2.5	<1,300	--	
MW-3	2/29/2008		10.73	5.38	--	5.35	<50	350	<0.5	<0.5	<0.5	<1.0	0.9	540	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-3	5/23/2008		10.73	6.07	--	4.66	<500	1,100	<5.0	<5.0	<5.0	<10	<5.0	3,200	<5.0	<10	<5.0	<5.0	<5.0	<2,500	--	
MW-3	9/26/2008		10.73	6.46	--	4.27	120	3,000	<1.0	<1.0	<1.0	<1.0	4.8	6,900	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-3	12/23/2008		10.73	6.36	--	4.37	87	2,800	<1.0	<1.0	<1.0	<1.0	4.9	8,200	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-3	3/9/2009		10.73	5.31	--	5.42	<50	900	<1.0	<1.0	<1.0	<1.0	<1.0	55	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-3	5/28/2009		10.73	5.77	--	4.96	<50	1,600	<1.0	<1.0	<1.0	<1.0	2.1	580	<1.0	<1.0	<1.0	<1.0	<1.0	<250	0.19	
MW-3	12/10/2009		10.73	5.67	--	5.06	<50	--	<0.50	<0.50	<0.50	<1.0	0.86	270	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.72	
MW-3	12/18/2009		--	--	--	--	--	450	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	6/29/2010		10.73	5.85	--	4.88	<50	2,700	<0.50	<0.50	<0.50	<1.0	1.9	2,900	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.52	(P)
MW-3	12/30/2010		10.73	4.33	--	6.40	<50	520	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	(P)
MW-3	6/29/2011		10.73	5.00	--	5.73	<50	250	--	--	--	--	0.73	73	--	--	--	--	<0.50	--	0.45	(P)
MW-3	1/30/2012		10.73	5.22	--	5.51	<50	160	--	--	--	--	<0.50	65	--	--	--	--	<0.50	--	1.21	(P)
MW-3	6/27/2012		10.73	5.19	--	5.54	<50	270	--	--	--	--	1.6	250	--	--	--	--	<0.50	--	1.14	(P)
MW-3	12/7/2012		10.73	4.65	--	6.08	<50	110	--	--	--	--	<0.50	20	--	--	--	--	<0.50	--	1.10	
MW-3	6/6/2013		10.73	5.51	--	5.22	<50	300	--	--	--	--	1.9	540	--	--	--	--	<0.50	--	1.38	
MW-3	12/13/2013		10.73	5.77	--	4.96	<50	<49	--	--	--	--	0.54	680	--	--	--	--	<0.50	--	1.92	
MW-3	6/30/2014		10.73	5.56	--	5.17	<50	<47	--	--	--	--	1.5	1,900	--	--	--	--	<0.50	--	1.09	
MW-3	12/16/2014		10.73	4.30	--	6.43	<50	<50	--	--	--	--	<0.50	48	--	--	--	--	<0.50	--	0.79	
MW-3	6/18/2015		10.76	5.62	--	5.14	89 J	710	--	--	--	--	1.74	1,180	--	--	--	--	<1.00	--	0.48	
MW-3	12/8/2015		10.76	5.94	--	4.82	<50	--	--	--	--	--	1.6	6,200	--	--	--	--	<0.50	--	2.27	
MW-3	12/16/2015		10.76	5.56	--	5.20	--	<51	--	--	--	--	--	--	--	--	--	--	--	--	2.38	
MW-4	11/4/1992		8.12	6.66	--	1.46	340	--	4.5	<0.5	4.3	<0.5	--	--	--	--	--	--	--	--	--	
MW-4	10/12/1993		8.12	6.87	--	1.25	160	--	5.8	1.4	0.8	2.7	261	--	--	--	--	--	--	--	--	
MW-4	2/15/1994		8.12	6.61	--	1.51	110	--	4.4	0.7	<0.5	2.5	118	--	--	--	--	--	--	--	4.30	
MW-4	5/11/1994		8.12	5.89	--	2.23	120	--	0.5	0.8	<0.5	<0.5	137	--	--	--	--	--	--	--	9.30	
MW-4	8/1/1994		8.12	6.87	--	1.25	140	--	0.7	2	5.2	15	138	--	--	--	--	--	--	--	3.30	
MW-4	10/18/1994		8.12	6.62	--	1.50	140	--	3.5	<0.5	0.5	<0.5	197	--	--	--	--	--	--	--	3	
MW-4	1/13/1995		8.12	7.27	--	0.85	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.90	
MW-4	4/13/1995		8.12	6.51	--	1.61	73	--	1.2	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	9.90	
MW-4	7/11/1995		8.12	6.21	--	1.91	82	--	0.57	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.20	
MW-4	11/2/1995		8.12	6.78	--	1.34	71	--	1.4	0.96	0.99	2.8	140	--	--	--	--	--	--	--	8.60	
MW-4	2/5/1996		8.12	6.41	--	1.71	<50	--	<5.0	<10	<10	<10	200	--	--	--	--	--	--	--	4.40	
MW-4	4/24/1996		8.12	6.18	--	1.94	<250	--	<2.5	<5.0	<5.0	<5.0	510	--	--	--	--	--	--	--	8.30	
MW-4	7/15/1996		8.12	6.63	--	1.49	<50	--	5.7	<1.0	<1.0	<1.0	550	--	--	--	--	--	--	--	7.40	
MW-4	7/30/1996		8.12	6.34	--	1.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/4/1996		8.12	8.27	--	-0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/5/1996		8.12	--	--	--	460	--	<2.5	11	<5.0	<5.0	620	--	--	--	--	--	--	--	7.30	
MW-4	5/17/1997		8.12	7.00	--	1.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	8/11/1997		8.12	6.81	--	1.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/17/1997		8.12	9.19	--	-1.07	840	--	<0.5	<1.0	<1.0	<1.0	880	--	--	--	--	--	--	--	7.30	
MW-4	1/29/1998		8.12	7.94	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	6/22/1998		8.12	7.49	--	0.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	12/30/1998		8.12	8.21	--	-0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	3/9/1999		8.12	7.70	--	0.42	1,200	--	<1.0	<1.0	<1.0	<1.0	2,000	--	--	--	--	--	--	--	--	
MW-4	6/23/1999		8.12	8.81	--	-0.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/23/1999		8.12	8.32	--	-0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	12/28/1999		8.12	8.21	--	-0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
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	0.49	
MW-4	6/29/2010		10.58	6.57	--	4.01	<500	--	<5.0	<5.0	<5.0	<10	7.3	38,000	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	(P, well purged dry)
MW-4	12/30/2010		10.58	7.32	--	3.26	<500	--	<5.0	<5.0	<5.0	<10	11	31,000	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	(P, well purged dry)
MW-4	6/29/2011		10.58	6.43	--	4.15	<500	610	--	--	--	--	11	30,000	--	--	--	--	<5.0	--	0.45	(P)
MW-4	1/30/2012		10.58	6.72	--	3.86	72	530	--	--	--	--	11	23,000	--	--	--	--	0.50	--	0.55	(P)
MW-4	6/29/2012		10.58	5.50	--	5.08	<500	480	--	--	--	--	9.3	28,000	--	--	--	--	<5.0	--	1.21	(P)
MW-4	12/7/2012		10.58	7.05	--	3.53	<500	330	--	--	--	--	8.7	18,000	--	--	--	--	<0.50	--	1.37	
MW-4	6/6/2013		10.58	6.53	--	4.05	<500	600	--	--	--	--	6.7	26,000	--	--	--	--	<5.0	--	1.30	
MW-4	12/13/2013		10.58	7.15	--	3.43	<500	<49	--	--	--	--	7.2	19,000	--	--	--	--	<5.0	--	3.07	
MW-4	6/30/2014		10.58	5.85	--	4.73	<500	800	--	--	--	--	5.5	24,000	--	--	--	--	<5.0	--	0.22	
MW-4	12/16/2014		10.58	4.61	--	5.97	<1,000	<51	--	--	--	--	<10	18,000	--	--	--	--	<10	--	2.05	
MW-4	6/18/2015		10.62	5.77	--	4.85	120	1,700	--	--	--	--	6.03	13,900	--	--	--	--	<1.00	--	0.74	
MW-4	12/8/2015		10.62	5.65	--	4.97	<1,000	--	--	--	--	--	<10	20,000	--	--	--	--	<10	--	2.20	
MW-4	12/16/2015		10.62	5.54	--	5.08	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	2.08	
MW-5	10/12/1993		7.69	6.01	--	1.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/13/1993		7.69	--	--	--	2,300	--	160	10	<0.5	26	--	--	--	--	--	--	--	--	--	
MW-5	2/15/1994		7.69	5.74	--	1.95	5,100	--	710	16	33	35	153	--	--	--	--	--	--	--	4	
MW-5	5/11/1994		7.69	5.28	--	2.41	11,000	--	1,100	39	110	57	165	--	--	--	--	--	--	--	8	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	8/1/1994		7.69	5.84	--	1.85	9,000	--	730	35	61	41	196	--	--	--	--	--	--	--	2.60	
MW-5	10/18/1994		7.69	6.01	--	1.68	7,800	--	330	30	27	27	559	--	--	--	--	--	--	--	5.60	
MW-5	1/13/1995		7.69	4.74	--	2.95	<500	--	290	6	<5.0	18	--	--	--	--	--	--	--	--	6.80	
MW-5	4/13/1995		7.69	5.50	--	2.19	9,100	--	400	15	52	27	--	--	--	--	--	--	--	--	7.40	
MW-5	7/11/1995		7.69	5.75	--	1.94	7,300	--	390	13	28	23	--	--	--	--	--	--	--	--	7.20	
MW-5	11/3/1995		7.69	6.65	--	1.04	7,200	--	270	15	38	23	200	--	--	--	--	--	--	--	8.40	
MW-5	2/5/1996		7.69	4.83	--	2.86	4,600	--	370	15	53	28	<50	--	--	--	--	--	--	--	1.90	
MW-5	4/24/1996		7.69	6.09	--	1.60	3,000	--	180	<10	32	14	<100	--	--	--	--	--	--	--	8.10	
MW-5	7/15/1996		7.69	6.57	--	1.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	7/16/1996		7.69	--	--	--	<50	--	190	<10	31	16	<100	--	--	--	--	--	--	--	8.30	
MW-5	7/30/1996		7.69	5.61	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	8/12/1996		7.69	--	--	--	2,000	--	150	12	25	18	<50	--	--	--	--	--	--	--	7.60	
MW-5	11/4/1996		7.69	8.25	--	-0.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/5/1996		7.69	--	--	--	5,200	--	42	5.5	13	<5.0	1,700	--	--	--	--	--	--	--	7.40	
MW-5	5/17/1997		7.69	6.95	--	0.74	80	--	0.56	<1.0	<1.0	<1.0	46	--	--	--	--	--	--	--	6.70	
MW-5	8/11/1997		7.69	6.72	--	0.97	2,700	--	20	12	6.7	9.7	1,900	--	--	--	--	--	--	--	8.50	
MW-5	11/17/1997		7.69	9.49	--	-1.80	8,400	--	25	12	8.7	5.4	13,000	--	--	--	--	--	--	--	7.90	
MW-5	1/29/1998		7.69	7.88	--	-0.19	110,000	--	2,500	110	180	589	180,000	--	--	--	--	--	--	--	6.80	
MW-5	6/22/1998		7.69	7.40	--	0.29	4,400	--	47	10	29	21	47	--	--	--	--	--	--	--	6.60	
MW-5	12/30/1998		7.69	6.13	--	1.56	6,000	--	18	9.1	22	16	63	--	--	--	--	--	--	--	--	
MW-5	3/9/1999		7.69	4.79	--	2.90	4,600	--	8.8	5.5	12	11	24	--	--	--	--	--	--	--	--	
MW-5	6/23/1999		7.69	5.95	--	1.74	3,400	--	1,500	8.9	54	87	7,500	--	--	--	--	--	--	--	--	
MW-5	9/23/1999		7.69	5.43	--	2.26	2,600	--	510	14	140	650	580	--	--	--	--	--	--	--	--	
MW-5	12/28/1999		7.69	5.30	--	2.39	3,500	--	900	18	57	140	4,800	--	--	--	--	--	--	--	--	
MW-5	3/22/2000		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	5/26/2000		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	9/6/2000		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	9/15/2000		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	12/11/2000		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	3/29/2001		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	6/27/2001		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	9/19/2001		7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	12/28/2001		7.69	4.65	--	3.04	4,600	--	20	25	16	57	72	--	--	--	--	--	--	--	--	
MW-5	3/12/2002		7.69	5.35	--	2.34	5,100	--	45	14	22	39	32	--	--	--	--	--	--	--	--	
MW-5	6/13/2002		7.69	5.34	--	2.35	2,900	--	32	<12.5	<12.5	<25	616	--	--	--	--	--	--	--	--	
MW-5	9/6/2002		7.69	5.46	--	2.23	3,400	--	23	5.5	<5.0	11	230	--	--	--	--	--	--	--	--	
MW-5	12/13/2002		7.69	5.47	--	2.22	2,500	--	12	9.3	4.6	8.8	110	--	--	--	--	--	--	--	--	
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	<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	--	(Sheen)
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	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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, sampled 6/29/12)
MW-5	6/29/2012		--	--	--	--	3,000	--	1.5	<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-5	6/18/2015		10.20	5.45		4.75	2,400	1,100	1.76	<5.00	<1.00	2.94 (J)	6.98	523	--	--	--	--	<1.00	--	0.24	(Tagged, sampled out of order due to traffic control restrictions.)
MW-5	12/8/2015		10.20	5.53	--	4.67	2,200	--	1.9	0.80	<0.50	3.6	11	720	--	--	--	--	<0.50	--	2.96	
MW-5	12/16/2015		10.20	5.03	--	5.17	--	1,100	--	--	--	--	--	--	--	--	--	--	--	--	4.64	
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	<0.5	<0.5	38	--	--	--	--	--	--	--	3.10	
MW-6	5/11/1994		8.52	6.15	--	2.37	68	--	<0.5	<0.5	<0.5	<0.5	49	--	--	--	--	--	--	--	8.70	
MW-6	8/1/1994		8.52	6.46	--	2.06	91	--	<0.5	<0.5	<0.5	0.6	60	--	--	--	--	--	--	--	2.40	
MW-6	10/18/1994		8.52	6.72	--	1.80	<50	--	<0.5	<0.5	<0.5	<0.5	85	--	--	--	--	--	--	--	6	
MW-6	1/13/1995		8.52	5.95	--	2.57	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7	
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	
MW-6	7/15/1996		8.52	6.39	--	2.13	<250	--	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8	
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	--	--	--	--	--	--	--	--	

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Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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	--	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	--	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	<2.0	<4.0	51	280	<2.0	<2.0	<2.0	<2.0	4.4	<200	--	
MW-6	12/28/2005		11.01	5.49	--	5.52	<50	--	<0.5	<0.5	<0.5	<1.0	16	160	<0.5	<1.0	<0.5	--	2	<100	--	
MW-6	3/23/2006		11.01	4.59	--	6.42	<50	--	<0.5	<0.5	<0.5	<1.0	5.6	35	<0.5	<1.0	<0.5	<0.5	0.91	<100	--	
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	(P)
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	(P)
MW-6	6/29/2011		11.01	5.53	--	5.48	<50	2,100	--	--	--	--	3.6	37	--	--	--	--	<0.50	--	0.03	(P)
MW-6	1/30/2012		11.01	5.89	--	5.12	<50	710	--	--	--	--	4.0	110	--	--	--	--	<0.50	--	0.61	(P)
MW-6	6/27/2012		11.01	5.68	--	5.33	<50	1,200	--	--	--	--	2.2	49	--	--	--	--	0.52	--	0.94	(P)
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-6	6/18/2015		11.04	5.99	--	5.05	38 (J)	7,400	--	--	--	--	1.30	30.3	--	--	--	--	<1.00	--	2.18	
MW-6	12/8/2015		11.04	6.36	--	4.68	<50	2,000	--	--	--	--	0.74	<20	--	--	--	--	<0.50	--	1.99	
MW-6	12/16/2015		11.04	6.09	--	4.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	
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	
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	<10	--	--	--	--	--	--	--	7.80	
MW-7	5/17/1997		7.61	6.42	--	1.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	8/11/1997		7.61	6.06	--	1.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/17/1997		7.61	9.07	--	-1.46	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.10	
MW-7	1/29/1998		7.61	7.44	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	6/22/1998		7.61	7.39	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	2.8	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	<1.0	<1.0	<1.0	<250	--	
MW-7	3/9/2009		10.11	5.65	--	4.46	<50	--	<1.0	<1.0	<1.0	<1.0	4.4	1,300	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-7	5/28/2009		10.11	5.91	--	4.20	<50	--	<1.0	<1.0	<1.0	<1.0	5.7	110	<1.0	<1.0	<1.0	<1.0	<1.0	<250	1.77	
MW-7	12/10/2009		10.11	5.88	(SHEEN)	4.23	62	--	<0.50	<0.50	<0.50	<1.0	6.5	1,200	<0.50	<0.50	<0.50	<0.50	0.56	<100	0.56	(Sheen)
MW-7	6/29/2010		10.11	5.48	--	4.63	<50	--	<0.50	<0.50	<0.50	<1.0	3.0	2,000	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.63	(P)
MW-7	12/30/2010		10.11	4.80	--	5.31	<50	--	<0.50	<0.50	<0.50	<1.0	5.6	3,900	<0.50	<0.50	<0.50	<0.50	0.58	<250	0.65	(P)
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	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	12/16/2014		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-7	6/18/2015		10.13	4.94		5.19	85 (J)	2,900	<1.00	<5.00	<1.00	<3.00	2.19	1,890	--	--	--	--	<1.00	--	0.13	
MW-7	12/8/2015		10.13	5.76	--	4.37	<100	--	<1.0	<1.0	<1.0	<2.0	1.8	2,400	--	--	--	--	<1.0	--	2.15	
MW-7	12/16/2015		10.13	5.26	--	4.87	--	690	--	--	--	--	--	--	--	--	--	--	--	--	3.62	
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	
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	--	--	--	--	--	--	--	--	
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	<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	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

ARCADIS

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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-8	6/30/2014		11.08	4.18	--	6.90	150	<55	--	--	--	--	<0.50	<20	--	--	--	--	<0.50	--	0.20	
MW-8	12/16/2014		11.08	2.05	--	9.03	110	73	--	--	--	--	<0.50	24	--	--	--	--	<0.50	--	0.41	(Temporarily INA)
MW-8	6/18/2015		11.10	5.06		6.04	240	1,200	--	--	--	--	0.398 (J)	113	--	--	--	--	<1.00	--	0.13	
MW-8	12/8/2015		11.10	5.69	--	5.41	130	140	--	--	--	--	1.1	870	--	--	--	--	<0.50	--	2.03	
MW-8	12/16/2015		11.10	5.27	--	5.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	10/12/1993		8.08	5.66	0.08	2.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	2/15/1994		8.08	5.32	0.05	2.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	5/11/1994		8.08	5.57	--	2.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	8/1/1994		8.08	6.25	--	1.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	10/18/1994		8.08	5.59	0.13	2.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	1/13/1995		8.08	4.42	0.14	3.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	
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	Dup	8.08	5.62	(SHEEN)	2.46	100,000	--	24,000	5,300	3,500	19,300	35,000	--	--	--	--	--	--	--	--	(Dup)(Sheen)
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	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	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	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	--	--	--	--	--	--	--	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	9/15/2000		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	<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	<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	170	<25,000	--	(Sheen)
MW-9	8/26/2004		8.08	3.61	--	4.47	35,000	--	3,700	500	1,300	5,300	6,500	2,600	<50	<50	<50	<50	140	--	--	
MW-9	12/1/2004		8.08	3.99	--	4.09	36,000	--	3,500	<250	1,200	4,300	8,300	<10,000	<250	<250	<250	<250	<250	<50,000	--	
MW-9	2/2/2005		8.08	3.71	(SHEEN)	4.37	21,000	--	1,800	130	670	2,000	3,600	5,600	<50	<50	<50	<50	88	<10,000	--	(Sheen)
MW-9	4/25/2005		10.55	3.31	(SHEEN)	7.24	5,900	--	190	<5.0	120	77	540	1,400	<5.0	<5.0	<5.0	<5.0	14	<1,000	--	(Sheen)
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	--	(Sheen)
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	(P)
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	(P)
MW-9	6/29/2011		10.55	3.72	--	6.83	4,700	--	600	13	370	120	900	960	--	--	--	--	29	--	0.48	(P)
MW-9	1/30/2012		10.55	4.09	--	6.46	2,300	--	210	5.1	10	20	630	1,600	--	--	--	--	20	--	0.75	(P)
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	(P)
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-9	6/18/2015		10.59	4.50		6.09	2,300	1,700	1.63	7.08	0.479 (J)	5.29	152	3,810	--	--	--	--	4.47	--	0.45	
MW-9	12/8/2015		10.59	5.24	--	5.35	1,400	590	17	4.7	<2.5	<5.0	94	8,600	--	--	--	--	<2.5	--	2.42	
MW-9	12/16/2015		10.59	4.57	--	6.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.32	
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	<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	<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	<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	<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	<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	<0.5	<250	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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	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	<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	<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	<0.5	<250	--	
MW-10	11/21/2007		12.53	8.84	--	3.69	<50	--	<0.5	<0.5	<0.5	<1.0	2.2	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-10	2/29/2008		12.53	8.20	--	4.33	<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-10	5/23/2008		12.53	8.49	--	4.04	<50	--	<0.5	<0.5	<0.5	<1.0	2.2	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<250	--	
MW-10	9/26/2008		12.53	9.91	--	2.62	<50	--	<1.0	<1.0	<1.0	<1.0	3	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-10	12/23/2008		12.53	8.60	--	3.93	<50	--	<1.0	<1.0	<1.0	<1.0	2.7	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-10	3/9/2009		12.53	7.68	--	4.85	<50	--	<1.0	<1.0	<1.0	<1.0	<1.0	6.2	<1.0	<1.0	<1.0	<1.0	<1.0	<250	--	
MW-10	5/28/2009		12.53	8.71	--	3.82	<50	--	<1.0	<1.0	<1.0	<1.0	1.3	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<250	2.76	
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	<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	<0.50	<100	1	(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	<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-10	6/18/2015		12.56	7.70	--	4.86	--	1,400	--	--	--	--	--	--	--	--	--	--	--	--	0.49	
MW-10	12/8/2015		12.56	8.01	--	4.55	--	180	--	--	--	--	--	--	--	--	--	--	--	--	1.97	
MW-10	12/16/2015		12.56	7.86	--	4.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	<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	(P)
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	(P)
MW-11	6/29/2011		14.55	9.40	--	5.15	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	--	0.75	(P)
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	(P)
MW-11	12/7/2012		14.55	8.85	--	5.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NSP)
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NSP)
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	--	<51	--	--	--	--	--	--	--	--	--	--	--	--	0.83	
MW-11	6/18/2015		14.57	10.02	--	4.55	--	110	--	--	--	--	--	--	--	--	--	--	--	--	0.73	
MW-11	12/8/2015		14.57	10.24	--	4.33	--	<50	--	--	--	--	--	--	--	--	--	--	--	--	2.08	
MW-11	12/16/2015		14.57	9.94	--	4.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 2
Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station No. 11126
1700 Powell Street
Emeryville, CA 94608

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	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-12 ESC	7/10/2015		10.95	4.99	--	5.96	<32.0	180	<1.0	<5.0	<1.0	<3.0	9.57	119	--	--	--	--	<1.0	--	0.19	Sample tested by ESC
MW-12 TA	7/10/2015		10.95	4.99	--	5.96	<50	<50	<0.50	<0.50	<0.50	<1.0	7.6	290	<0.50	<0.50	<0.50	<0.50	<0.50	<500	0.19	Sample tested by TA
MW-12	12/8/2015		10.95	5.09	--	5.86	60	--	<0.50	<0.50	<0.50	<1.0	5.4	250	<0.50	<0.50	<0.50	<0.50	<0.50	--	1.69	
MW-12	12/16/2015		10.95	4.88	--	6.07	--	51	--	--	--	--	--	--	--	--	--	--	--	--	3.58	

Notes:

ft = Feet
ft bTOC = Feet below top of casing
ft msl = Feet relative to mean sea level
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
J = EPA estimated value below the lowest calibration point
J5J3 = The sample matrix interfered with the ability to make any accurate determination, the associated batch QC was outside the established quality control range
ESC = ESC Lab Sciences
TA= Test America Lab

1. 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.
2. Wells resurveyed on July 1, 2015 with respect to NAVD '88 by Muir Consulting.
3. Beginning in the first quarter 2003, GRO and VOCs analyzed by EPA Method 8260B.
4. 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.
5. Samples from the June 18, 2015 sampling event were tested by ESC Laboratories. Data was found to be inconsistent with data from previous years (as analyzed by Test America Inc.).
The ESC data from June 2015 is considered questionable and Test America will be used for all future analyses.

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

Sample Location	Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene
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
	6/18/2015	0.088	<0.05	<0.05	0.012 J	<0.05	0.0085 J	0.0066 J
	12/8/2015	<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
	6/18/2015	0.44	0.13	0.056	<0.05	<0.05	<0.05	<0.05
	12/8/2015	0.20*	<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
	6/18/2015	<0.05	<0.05	<0.05	0.011 J	<0.05	<0.05	<0.05
	12/8/2015	<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
	6/18/2015	0.073	<0.05	0.024 J	<0.05	<0.05	<0.05	<0.05
	12/8/2015	<0.10*	<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10
MW-5	12/16/2014	0.56	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
	6/18/2015	1.9	0.23	0.17	0.017 J	<0.05	<0.05	<0.05
	12/8/2015	0.57*	<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
	6/18/2015	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	12/8/2015	<0.20	<0.20	<0.20	<0.20	<0.20	0.21	<0.20
MW-7	12/16/2014	0.16	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	6/18/2015	0.083	<0.05	0.015 J	0.022 J	0.012 J	<0.05	0.012 J
	12/8/2015	<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
	6/18/2015	0.043 J	<0.05	0.023 J	<0.05	<0.05	<0.05	<0.05
	12/8/2015	<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
	6/18/2015	0.26	0.067	0.039 J	0.0084 J	<0.05	<0.05	0.0056 J
	12/8/2015	0.16	<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
	6/18/2015	0.3	<0.05	0.039 J	0.016 J	<0.05	<0.05	<0.05
	12/8/2015	0.19	<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
	6/18/2015	0.043 J	<0.05	<0.05	0.011 J	<0.05	<0.05	<0.05
	12/8/15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-12 ESC	7/10/15	0.166	0.227	0.0985	0.0199 BJ	0.0122 J	0.0126 J	0.0115 J
MW-12 TA	7/10/15	0.18	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
MW-12	12/8/15	<0.10*	<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10

Notes:
B= the same analyte is found in the associated blank
-- = not analyzed
PAHs were analyzed in soil by USEPA Method 8270C SIM.
PAHs = polycyclic aromatic hydrocarbons
< = Analyte was not detected above the specified method reporting limit.
J= EPA estimated value below the lowest calibration point
µg/L = micrograms per liter
ESC= ESC Lab Sciences
TA= Test America Lab
* = RPD of the LCS and LCSD exceeds the control limits

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

Sample Location	Date	Benzo[k]fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene
Groundwater Samples (results in µg/L)							
MW-1	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	6/18/2015	<0.05	<0.05	<0.05	0.02 J	0.027 J	<0.05
	12/8/2015	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10
MW-2	12/16/2014	<0.10	<0.10	<0.10	<0.10	0.15	<0.10
	6/18/2015	<0.05	<0.05	<0.05	<0.05	0.27	<0.05
	12/8/2015	<0.10	<0.10	<0.10	<0.10	0.11*	<0.10
MW-3	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	6/18/2015	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	12/8/2015	<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
	6/18/2015	<0.05	<0.05	<0.05	0.044 J	<0.05	<0.05
	12/8/2015	<0.10	<0.10	<0.10	<0.10	<0.10*	<0.10
MW-5	12/16/2014	<0.10	<0.10	<0.10	<0.10	0.28	<0.10
	6/18/2015	<0.05	<0.05	<0.05	0.19	1	<0.05
	12/8/2015	<0.10	<0.10	<0.10	<0.10	0.33*	<0.10
MW-6	12/16/2014	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	6/18/2015	<0.05	<0.05	<0.05	0.039 J	<0.05	<0.05
	12/8/2015	<0.20	<0.20	<0.20	0.25	<0.20	<0.20
MW-7	12/16/2014	<0.10	<0.10	<0.10	0.13	<0.10	<0.10
	6/18/2015	<0.05	<0.05	<0.05	0.025 J	0.019 J	<0.05
	12/8/2015	<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
	6/18/2015	<0.05	<0.05	<0.05	0.03 J	0.025 J	<0.05
	12/8/2015	<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
	6/18/2015	<0.05	<0.05	<0.05	0.025 J	0.15	<0.05
	12/8/2015	<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
	6/18/2015	<0.05	<0.05	<0.05	0.026 J	<0.05	<0.05
	12/8/2015	<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
	6/18/2015	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	12/8/15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-12 ESC	7/10/15	<0.0500	0.0204 J	<0.0500	0.146	0.392	<0.0500
MW-12 TA	7/10/15	<0.11	<0.11	<0.11	<0.11	0.27	<0.11
MW-12	12/8/15	<0.10	<0.10	<0.10	<0.10	0.10*	<0.10

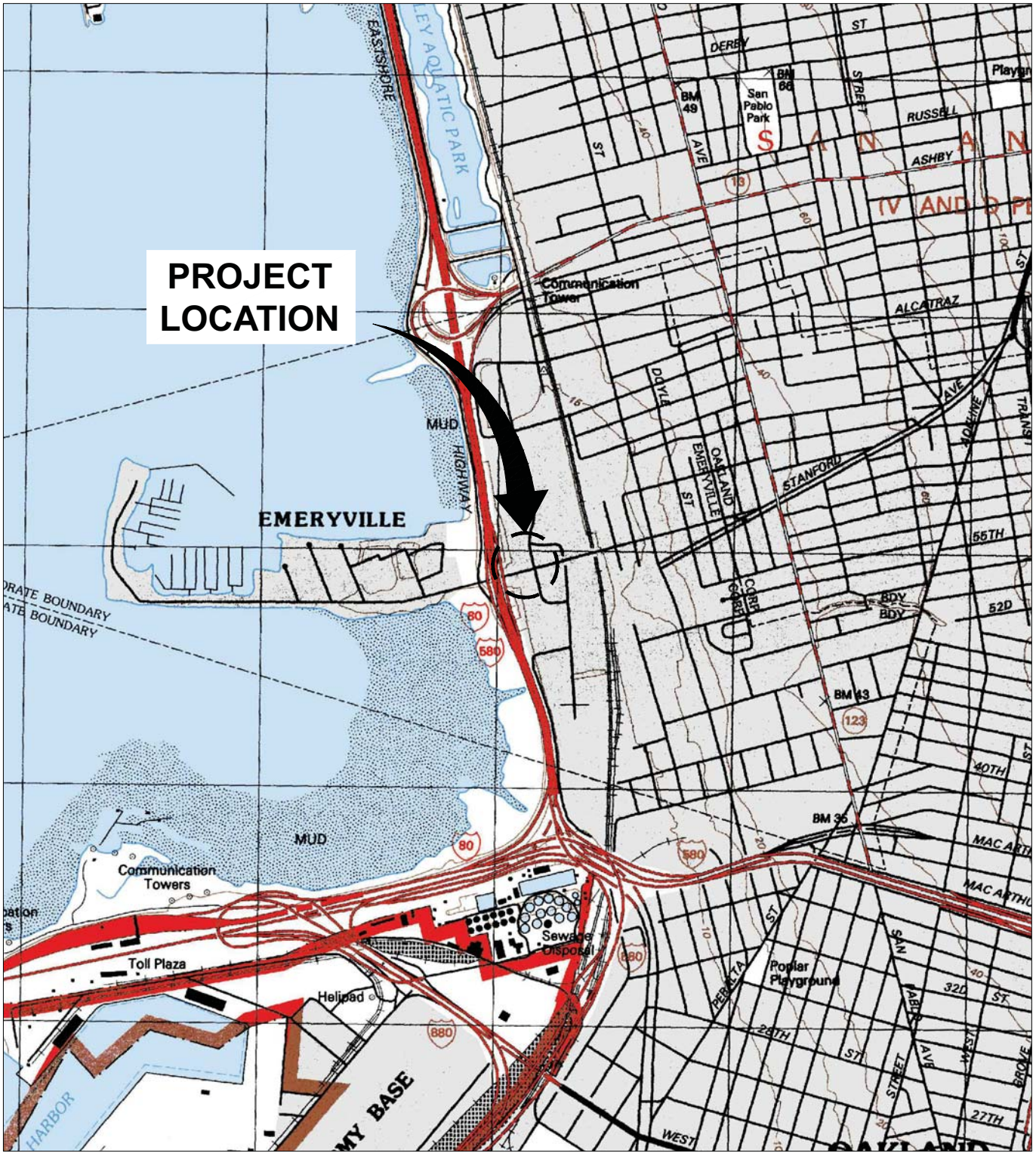
B= the same analyte is found in the associated blank
-- = not analyzed
PAHs were analyzed in soil by USEPA Method 8270C SIM.
PAH = polycyclic aromatic hydrocarbon
< = Analyte was not detected above the specified method reporting limit.
J= EPA estimated value below the lowest calibration point
µg/L = micrograms per liter
ESC= ESC Lab Sciences
TA= Test America Lab
* = RPD of the LCS and LCSD exceeds the control limits

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

Sample Location	Date	Naphthalene	Phenanthrene	Pyrene	1-METHYLNAPHTHALENE	2-METHYLNAPHTHALENE	2-CHLORONAPHTHALENE
Groundwater Samples (results in µg/L)							
MW-1	12/16/2014	<0.10	<0.10	0.10	--	--	--
	6/18/2015	0.31	0.028 J	0.038 J	2.1	1.7	<0.25
	12/8/2015	<0.10	<0.10	<0.10	--	--	--
MW-2	12/16/2014	22	0.11	<0.10	--	--	--
	6/18/2015	4.1	0.17	<0.25	76	62	<0.25
	12/8/2015	1.3	<0.10	<0.10	--	--	--
MW-3	12/16/2014	<0.10	<0.10	<0.10	--	--	--
	6/18/2015	<0.25	0.01 J	0.016 J	0.024 J	0.015 J	<0.25
	12/8/2015	<0.10	<0.10	<0.10	--	--	--
MW-4	12/16/2014	<0.11	<0.11	<0.11	--	--	--
	6/18/2015	0.076 J	0.071	0.071	0.015 J	<0.25	<0.25
	12/8/2015	<0.10	<0.10	<0.10	--	--	--
MW-5	12/16/2014	0.43	0.30	<0.10	--	--	--
	6/18/2015	<0.25	1.1	0.16	56	0.15 J	<0.25
	12/8/2015	0.44	0.35	<0.10	--	--	--
MW-6	12/16/2014	<0.10	<0.10	0.11	--	--	--
	6/18/2015	0.034 J	0.087	0.037 J	<0.25	<0.25	<0.25
	12/8/2015	<0.51	<0.20	0.42	--	--	--
MW-7	12/16/2014	<0.10	0.18	0.16	--	--	--
	6/18/2015	0.031 J	0.055	0.071	0.034 J	0.012 J	<0.25
	12/8/2015	<0.10	<0.10	0.18	--	--	--
MW-8	12/16/2014	<0.10	<0.10	<0.10	--	--	--
	6/18/2015	<0.25	0.057	0.05 J	<0.25	<0.25	<0.25
	12/8/2015	0.38	<0.10	<0.10	--	--	--
MW-9	12/16/2014	0.10	<0.10	<0.10	--	--	--
	6/18/2015	2	0.14	0.036 J	40	1.7	<0.25
	12/8/2015	0.74 B	<0.10	<0.10	--	--	--
MW-10	12/16/2014	<0.10	<0.10	<0.10	--	--	--
	6/18/2015	<0.25	0.023 J	0.054	*<0.25*	*<0.25*	<0.25
	12/8/2015	<0.10	<0.10	0.11	--	--	--
MW-11	12/16/2014	<0.10	<0.10	<0.10	--	--	--
	6/18/2015	<0.25	<0.25	0.013 J	<0.25	<0.25	<0.25
	12/8/15	<0.10	<0.10	<0.10	--	--	--
MW-12 ESC	7/10/15	0.238	0.821	0.13	0.432	0.091	<0.00650
MW-12 TA	7/10/15	0.23	0.61	<0.11	--	--	--
MW-12	12/8/15	0.19	0.23	<0.10	--	--	--

B= the same analyte is found in the associated blank
-- = not analyzed
PAHs were analyzed in soil by USEPA Method 8270C SIM.
PAH = polycyclic aromatic hydrocarbon
< = Analyte was not detected above the specified method reporting limit.
J= EPA estimated value below the lowest calibration point
µg/L = micrograms per liter
ESC= ESC Lab Sciences
TA= Test America Lab
* = RPD of the LCS and LCSD exceeds the control limits

FIGURES



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

0 2000' 4000'

Approximate Scale: 1 in. = 200

FORMER BP STATION #11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

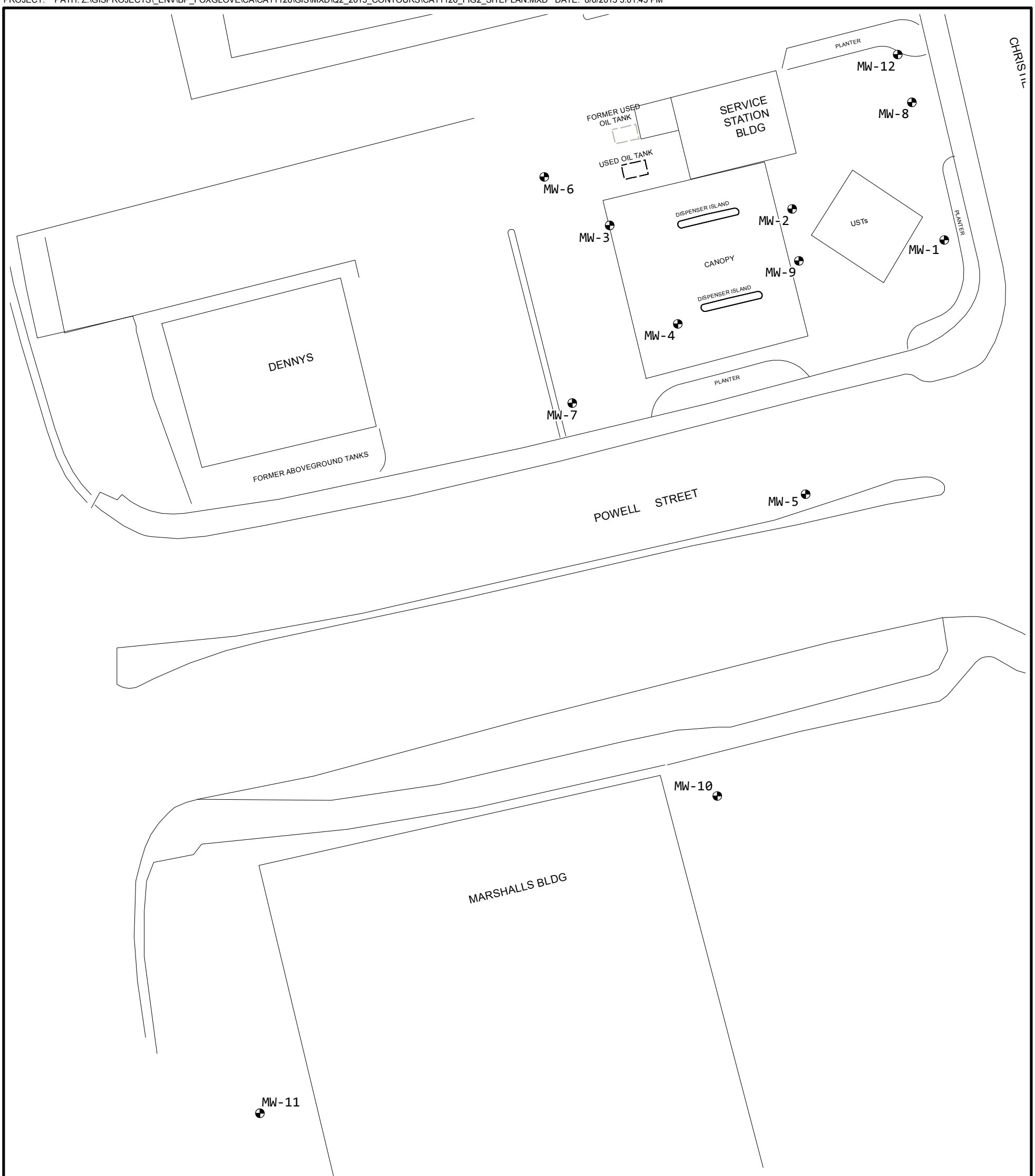
SITE VICINITY MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: PETALUMA, CA DIV/GROUP: ENV TEAM 2A
C:\Users\jharris\Desktop\ENV\CADGP09BPNAC044DWGGP09BPNAC044-N01.dwg LAYOU 1 SAVE 7/8/2012 1:34 ACADVE 18.1S (LMS TEC PAGESETU SETUP1 PLOTSTYLETABLE ARCADIS.CTB PLOTTE 7/8/2012 1:34 B HARRIS, JESSIC
XREFS: IMAGES: PROJECTNAME: ---
Oakland West.j

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: KGPETERS LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISPROJECTS_ENV\BP_FOXGLOVE\CA\CA11126\GIS\MXD\Q2_2015_CONTOURS\CA11126_FIG2_SITEPLAN.MXD DATE: 8/6/2015 3:01:43 PM



LEGEND:

- MONITORING WELL LOCATIONS

NOTES:

1. SITE MAP ADAPTED FROM STANTEC FIGURES
2. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED
3. MONITORING WELL AND SITE FEATURES REPOSITIONED BASED ON LAT/LONG SURVEY NAD 83 BY MUIR CONSULTING, INC, 07/01/2015. MAP PROJECTION IN CALIFORNIA STATE PLANE III, NAD 83, FEET.

0 40 80

SCALE IN FEET

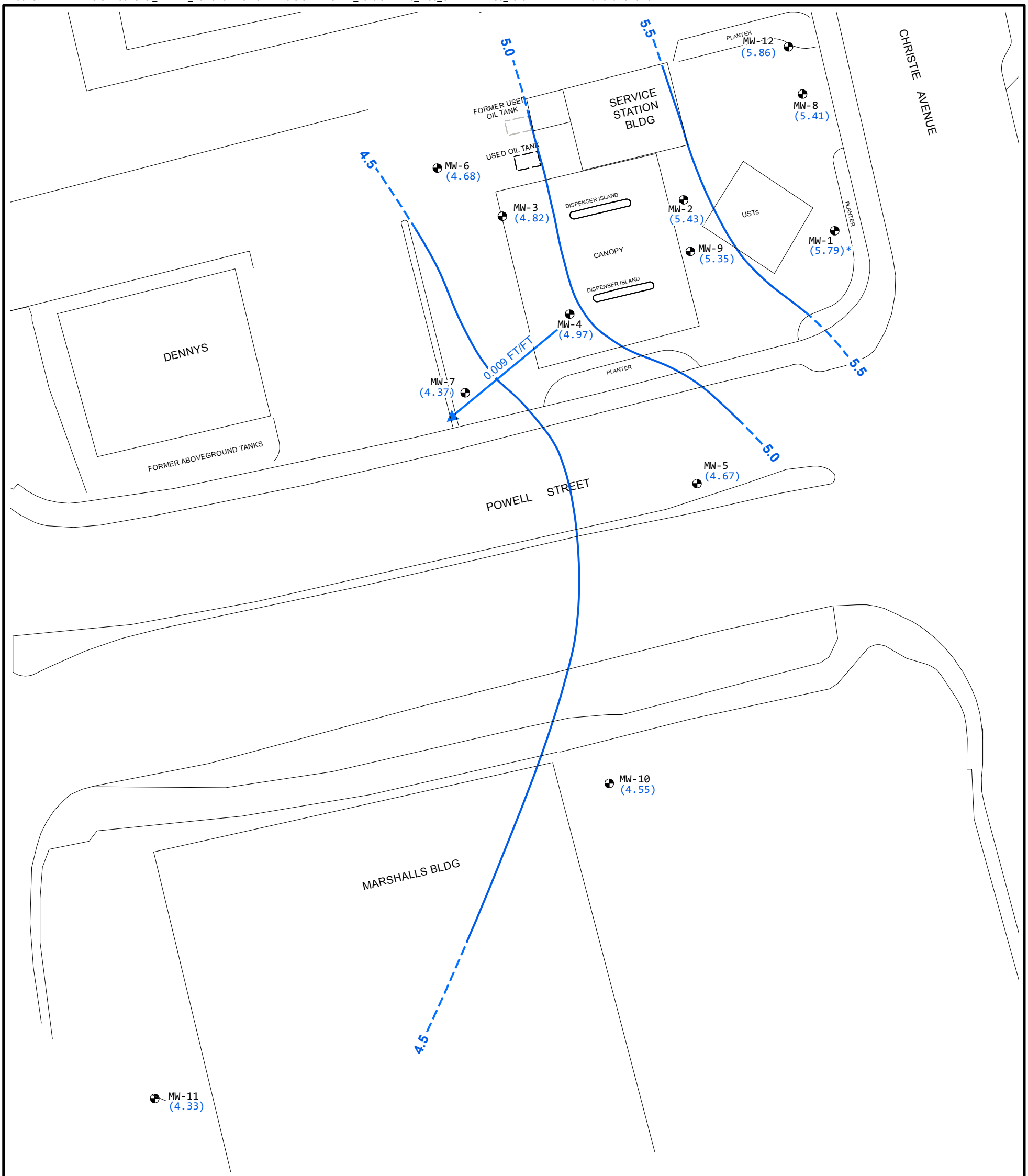
FORMER BP STATION #11126
1700 POWELL STREET, EMERYVILLE, CALIFORNIA

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: KGPETERS LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISPROJECTS_ENV\BP_FOXGLOVE\CA\CA11126\GIS\MXD\SMR2_2015\CA11126_FIG3_GWELEV-DEC8_2015.MXD DATE: 2/9/2016 10:19:40 AM



LEGEND:

- (5.31) GROUNDWATER ELEVATION (NAVD88)
- 5.00 GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- 0.009 FT/FT GROUNDWATER FLOW DIRECTION (FEET PER FOOT)
- * DATA NOT USED IN CONTOURING

NOTES:

1. SITE MAP ADAPTED FROM STANTEC FIGURES
2. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED
3. MONITORING WELL AND SITE FEATURES REPOSITIONED BASED ON LAT/LONG SURVEY NAD 83 BY MUIR CONSULTING, INC, 07/01/2015. MAP PROJECTION IN CALIFORNIA STATE PLANE III, NAD 83, FEET.

0 40 80
SCALE IN FEET

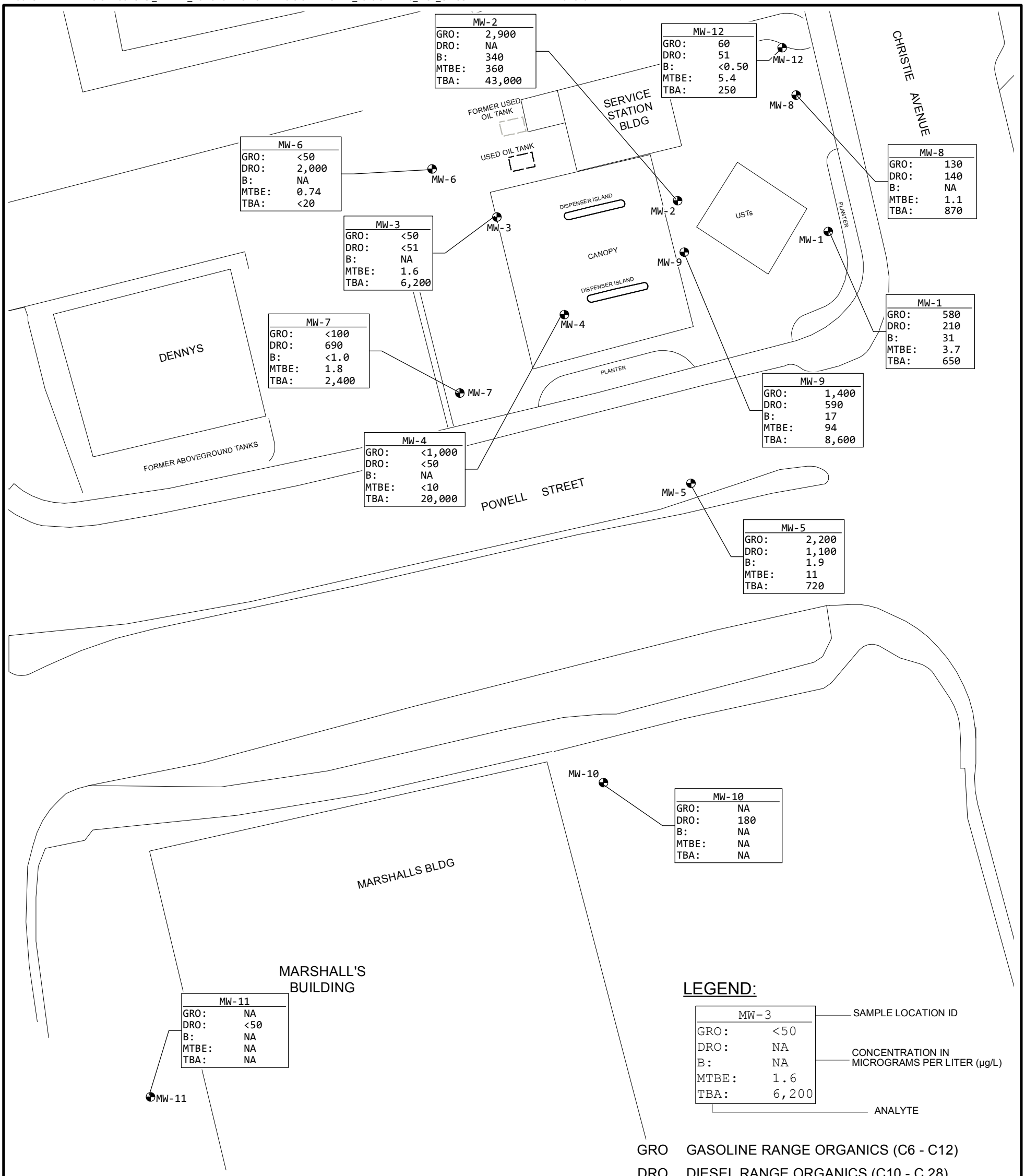
FORMER BP STATION #11126
1700 POWELL STREET, EMERYVILLE, CALIFORNIA
THIRD QUARTER AND FOURTH QUARTER 2015 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

GROUNDWATER ELEVATION CONTOUR MAP DECEMBER 8, 2015

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: KGPETERS LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISPROJECTS_ENV\BP_FOXGLOVE\CA\CA11126\GIS\MXD\SMR2_2015\CA11126_FIG4_GWSUMMARY.MXD DATE: 1/6/2016 12:44:10 PM



LEGEND:

MW-3
GRO: <50
DRO: NA
B: NA
MTBE: 1.6
TBA: 6,200

SAMPLE LOCATION ID

CONCENTRATION IN MICROGRAMS PER LITER (µg/L)

ANALYTE

GRO	GASOLINE RANGE ORGANICS (C6 - C12)
DRO	DIESEL RANGE ORGANICS (C10 - C 28)
B	BENZENE
MTBE	METHYL TERT-BUTYL ETHER
TBA	TERT-BUTYL ALCOHOL
<	NOT DETECTED AT OR ABOVE STATED LABORATORY REPORTING LIMIT
NA	NOT ANALYZED
NS	NOT SAMPLED

NOTES:

1. SITE MAP ADAPTED FROM STANTEC FIGURES
2. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED
3. MONITORING WELL AND SITE FEATURES REPOSITIONED BASED ON LAT/LONG SURVEY NAD 83 BY MUIR CONSULTING, INC, 07/01/2015. MAP PROJECTION IN CALIFORNIA STATE PLANE III, NAD 83, FEET.

0 40 80
SCALE IN FEET

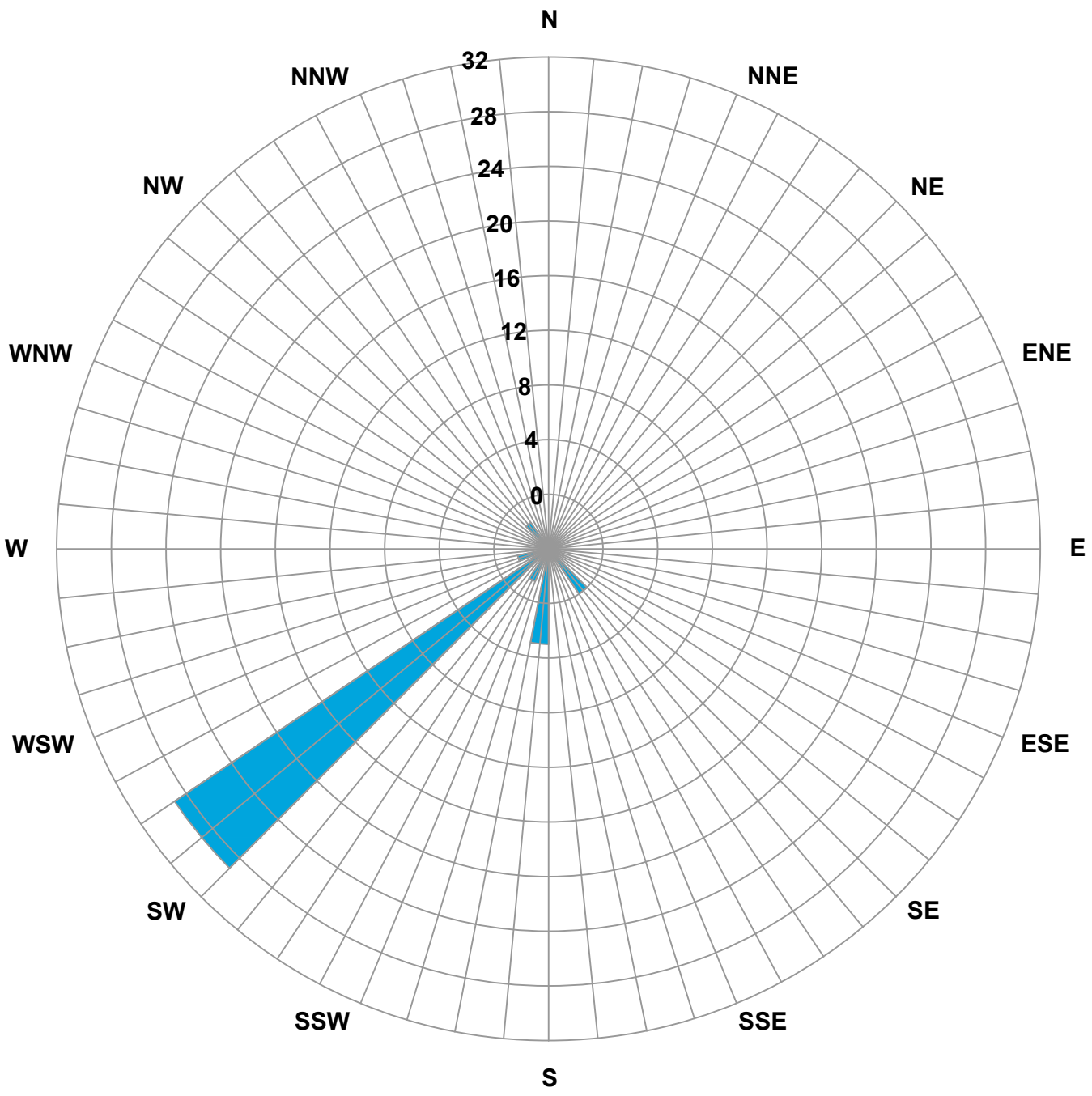
FORMER BP STATION #11126
1700 POWELL STREET, EMERYVILLE, CALIFORNIA

THIRD QUARTER AND FOURTH QUARTER 2015 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

GROUNDWATER HYDROCARBON CONCENTRATION MAP DECEMBER 8 AND 16, 2015

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4



LEGEND

CONCENTRIC CIRCLES REPRESENT 47 MONITORING EVENTS CONDUCTED BETWEEN THE FIRST QUARTER 2001 AND THE FOURTH QUARTER 2015.

GROUNDWATER FLOW DIRECTION

FORMER BP STATION #11126
1700 POWELL STREET, EMERYVILLE, CALIFORNIA
THIRD AND FOURTH QUARTER 2015
SEMI-ANNUAL GROUNDWATER MONITORING REPORT

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5

ATTACHMENT 1

Previous Investigations and Site History Summary

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 (µg/L), with the highest detections in the vicinity of the pump islands and east of the USTs (TES 1989; SECOR 2007).

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).

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. HydropunchTM groundwater samples collected during this investigation contained detectable concentrations of TPHg, TOG, 1,2-dichloroethane (1,2-DCA,), and 1,2-dichlorethene (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 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 (yd3) 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 yd3 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 yd3 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 µg/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 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 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 2015a). 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.

The groundwater monitoring well MW-12 was installed on June 25, 2015 by Cascade Drilling L.P. of Richmond, California and sampled on July 20, 2015. Based on the results, the Groundwater Monitoring Well Installation Report dated August 24, 2015 recommended further monitoring of DRO due to inconsistent groundwater data to more completely assess the extent of DRO in groundwater beneath the site. Groundwater monitoring and sampling data at the newly installed well will be used to assess the lateral extent of the dissolved-phase contaminant plume associated with the Site (Arcadis 2015b).

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.

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.

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Arcadis U.S. Inc. 2015b. Groundwater Monitoring Well Installation Report. Former BP Station No. 11126. August 24.

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.

ATTACHMENT 2

Groundwater Sampling Data Package

Initial
Depth to water: 5.09 ft @ 0710

BROADBENT

GROUNDWATER SAMPLING DATA SHEET

Project: Arcadis 11126 Project No.: Date: 12-8-15

Field Representative: KH

Well ID: MW-12 Start Time: 0924 End Time: 0940 Total Time (minutes):

PURGE EQUIPMENT ___ Disp. Bailer ___ 120V Pump ___ Flow Cell
___ Disp. Tubing ___ 12V Pump X Peristaltic Pump Other/ID#:

WELL HEAD INTEGRITY (cap, lock, vault, etc.) Comments:
(Good) Improvement Needed *(circle one)*

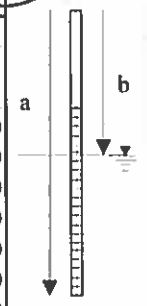
PURGING/SAMPLING METHOD Predetermined Well Volume (Low-Flow) Other: *(circle one)*

PREDETERMINED WELL VOLUME

Casing Diameter | Unit Volume (gal/ft) *(circle one)*

1" | (0.04) 1.25" | (0.08) 2" | (0.17) 3" | (0.38) Other:
4" | (0.66) 6" | (1.50) 8" | (2.60) 12" | (5.81) ___" | (___)

Total Well Depth (a): (ft)
Initial Depth to Water (b): (ft)
Water Column Height (WCH) = (a - b): (ft)
Water Column Volume (WCV) = WCH x Unit Volume: (gal)
Three Casing Volumes = WCV x 3: (gal)
Five Casing Volumes = WCV x 5: (gal)
Pump Depth (if pump used): (ft)



LOW-FLOW

Previous Low-Flow Purge Rate: (lpm)
Total Well Depth (a): 13.93 (ft)
Initial Depth to Water (b): 5.09 (ft)
Pump In-take Depth = b + (a-b)/2: 9.5 (ft)
Maximum Allowable Drawdown = (a-b)/8: (ft)
Low-Flow Purge Rate: 0.25 (Lpm)*
Comments: Cloudy weather

**Low-flow purge rate should be within range of instruments used but should not exceed 0.25 gpm. Drawdown should not exceed Maximum Allowable Drawdown.*

GROUNDWATER STABILIZATION PARAMETER RECORD

Time (24:00)	Cumulative Vol. gal or (L)	Temperature °C	pH	Conductivity (µS) or mS	DO mg/L	ORP mV	Turbidity NTU	NOTES Odor, color, sheen or other
0928	0	20.03	7.99	1830	2.91	-50	90.2	
0930	0.5	20.56	7.97	1950	2.29	-90	82.4	
0932	1.0	20.96	7.95	1880	1.94	-103	36.8	
0934	1.5	21.24	7.94	1780	1.77	-112	19.6	
0936	2.0	21.30	7.93	1640	1.69	-120	15.4	
Previous Stabilized Parameters								

PURGE COMPLETION RECORD X Low Flow & Parameters Stable ___ 3 Casing Volumes & Parameters Stable ___ 5 Casing Volumes
___ Other:

SAMPLE COLLECTION RECORD

Depth to Water at Sampling: 5.59 (ft)
Sample Collected Via: ___ Disp. Bailer X Dedicated Pump Tubing
___ Disp. Pump Tubing Other:
Sample ID: MW-12 Sample Collection Time: 0938 (24:00)
Containers (#): 3 VOA (X preserved or ___ unpreserved) 2 Liter Amber
___ Other: ___ Other:
___ Other: ___ Other:

GEOCHEMICAL PARAMETERS

Parameter	Time	Measurement
DO (mg/L)		
Ferrous Iron (mg/L)		
Redox Potential (mV)		
Alkalinity (mg/L)		
Other:		
Other:		

Signature:

Initial Depth to water : 4.88 @ 1040

BROADBENT

GROUNDWATER SAMPLING DATA SHEET

Page 1 of 1

Project: Arcadis 11126 Project No.: Date: 12/16/15

Field Representative: KH

Well ID: MW-12 Start Time: 1150 End Time: 1210 Total Time (minutes): 20

PURGE EQUIPMENT ___ Disp. Bailer ___ 120V Pump X Flow Cell ___ Disp. Tubing ___ 12V Pump X Peristaltic Pump Other/ID#:

WELL HEAD INTEGRITY (cap, lock, vault, etc.) Comments:

(Good) Improvement Needed *(circle one)*

PURGING/SAMPLING METHOD Predetermined Well Volume Low-Flow Other: *(circle one)*

PREDETERMINED WELL VOLUME

Casing Diameter | Unit Volume (gal/ft) *(circle one)*

1" | (0.04) 1.25" | (0.08) 2" | (0.17) 3" | (0.38) Other: ___" | (___)

4" | (0.66) 6" | (1.50) 8" | (2.60) 12" | (5.81)

Total Well Depth (a): ___ (ft)

Initial Depth to Water (b): ___ (ft)

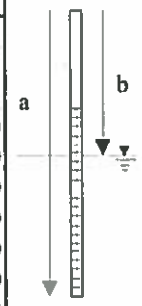
Water Column Height (WCH) = (a - b): ___ (ft)

Water Column Volume (WCV) = WCH x Unit Volume: ___ (gal)

Three Casing Volumes = WCV x 3: ___ (gal)

Five Casing Volumes = WCV x 5: ___ (gal)

Pump Depth (if pump used): ___ (ft)



LOW-FLOW

Previous Low-Flow Purge Rate: ___ (lpm)

Total Well Depth (a): 13.93 (ft)

Initial Depth to Water (b): 4.88 (ft)

Pump In-take Depth = b + (a-b)/2: ___ (ft)

Maximum Allowable Drawdown = (a-b)/8: ___ (ft)

Low-Flow Purge Rate: 0.25 (Lpm)*

Comments:

**Low-flow purge rate should be within range of instruments used but should not exceed 0.25 gpm. Drawdown should not exceed Maximum Allowable Drawdown.*

GROUNDWATER STABILIZATION PARAMETER RECORD

Time (24:00)	Cumulative Vol. gal or (L)	Temperature °C	pH	Conductivity µS or (mS)	DO mg/L	ORP mV	Turbidity NTU	NOTES Odor, color, sheen or other
1151	0	17.71	6.12	1.80	5.87	-132	16.9	
1153	0.5	19.01	6.12	1.76	4.02	-143	19.7	
1155	1.0	19.41	6.12	1.70	3.58	-146	14.2	
Previous Stabilized Parameters								

PURGE COMPLETION RECORD X Low Flow & Parameters Stable ___ 3 Casing Volumes & Parameters Stable ___ 5 Casing Volumes ___ Other:

SAMPLE COLLECTION RECORD

Depth to Water at Sampling: 4.97 (ft)

Sample Collected Via: ___ Disp. Bailer X Dedicated Pump Tubing ___ Disp. Pump Tubing Other:

Sample ID: ~~MW-12~~ MW-12 Sample Collection Time: 1200 (24:00)

Containers (#): ___ VOA (___ preserved or ___ unpreserved) 2 Liter Amber

___ Other: ___ Other:

___ Other: ___ Other:

GEOCHEMICAL PARAMETERS

Parameter	Time	Measurement
DO (mg/L)		
Ferrous Iron (mg/L)		
Redox Potential (mV)		
Alkalinity (mg/L)		
Other:		
Other:		

Signature:

Revision: 3/15/2013

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-3

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
				Well Depth (ft)	
Weather Conditions	Sunny				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:15	0		4.26	19.38	6.24	622	41	9.7	
12:22	0.5		2.39	19.91	6.23	613	51	10.6	
12:23	1.0		2.38	19.97	6.23	612	49	10.6	

Sampling Summary

Sample ID	mw-3	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	12:30	VOA Un-preserved #	
DTW at Sampling (ft)	5.72	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-4

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:59	0		3.50	19.50	6.25	1800	-127	0	
13:03	0.5		2.17	20.14	6.26	1740	-149	0	
13:04	1.0		2.08	20.33	6.26	1730	-153	0	

Sampling Summary

Sample ID	mw-4	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	13:10	VOA Un-preserved #	
DTW at Sampling (ft)	5.65	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-5

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9.5
Project_Number	09-88-662	Well Head Comments	Sampled out of order due to traffic control restrictions	Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:17	0		3.62	18.16	6.21	1920	-97	41.4	
11:23	0.5		4.91	18.85	6.18	1810	-108	56.5	
11:25	1.0		4.64	19.04	6.16	1830	-104	96.9	

Sampling Summary

Sample ID	mw-5	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	11:30	VOA Un-preserved #	
DTW at Sampling (ft)	5.45	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-7

Date	12/16/2015	Well Head Integrity	Need repair	Pump Inlet Depth (ft)	10
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:42	0		4.18	20.24	6.34	4880	-152	75.3	
12:44	0.5		3.65	20.44	6.33	4800	-154	82.8	
12:45	1.0		3.62	20.46	6.31	4440	-157	94.6	

Sampling Summary

Sample ID	mw-7	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	12:55	VOA Un-preserved #	
DTW at Sampling (ft)	5.45	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-9

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	8
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
				Well Depth (ft)	
Weather Conditions	Sunny				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
13:17	0		5.48	19.28	6.30	667	-124	0	
13:23	0.5		4.19	19.46	6.33	655	-132	0	
13:24	1.0		4.32	19.43	6.34	667	-135	0	

Sampling Summary

Sample ID	mw-1	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	13:30	VOA Un-preserved #	
DTW at Sampling (ft)	4.69	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

Gauging Data

Date	12/16/2015
Project_Number	09-88-662
Location	1700 Powell St, Emeryville, CA
Sampler	Kais Hamidi

Well	Date/Time	Well Depth (ft)	Depth To Water (ft)	Depth to LNAPL (ft)	Remarks
MW-1	12/16/2015 10:56	12	4.25		
MW-10	12/16/2015 10:36	16.83	7.86		
MW-11	12/16/2015 10:30	13.96	9.94		
MW-2	12/16/2015 10:59	11.99	5.68		
MW-3	12/16/2015 10:48	11.76	5.56		
MW-4	12/16/2015 10:51	13.5	5.54		
MW-5	12/16/2015 10:55	13.5	5.03		
MW-6	12/16/2015 10:48		6.09		
MW-7	12/16/2015 10:50	13.99	5.26		
MW-8	12/16/2015 10:57	13.96	5.27		
MW-9	12/16/2015 10:57	13.86	4.57		

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-1

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	8
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	4.45
				Well Depth (ft)	12
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:09	0		5.93	20.12	7.87	934	-91	19.9	
12:17	0.5		3.19	20.33	7.87	909	-106	16.8	
12:19	1.0		2.50	20.33	7.86	898	-109	15.9	
12:20	1.5		2.18	20.31	7.86	880	-112	13.1	
12:21	2.0		2.10	20.32	7.86	873	-113	14.7	

Sampling Summary

Sample ID	mw-1	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	12:25	VOA Un-preserved #	
DTW at Sampling (ft)	5.35	Liter Amber #	
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	2
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-10

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	12.5
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	8.01
Weather Conditions	Cloudy			Well Depth (ft)	16.83
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
08:52	0		5.19	19.35	8.23	2560	-65	401	
08:58	0.5		2.75	19.66	8.18	2750	-129	386	
09:00	1.0		2.15	20.44	8.12	2670	-143	335	
09:02	1.5		1.97	20.72	8.07	2610	-148	285	

Sampling Summary

Sample ID	mw-10	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	09:06	VOA Un-preserved #	
DTW at Sampling (ft)	8.10	Liter Amber #	2
Sampled using		Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-11

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	12
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	10.24
				Well Depth (ft)	13.96
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
08:22	0		4.30	19.41	7.96	839	251	13.2	
08:28	0.5		2.55	20.17	7.95	802	19	28	
08:30	1.0		2.26	20.66	7.94	778	-88	32.7	
08:32	1.5		2.08	20.80	7.95	770	-113	23.3	

Sampling Summary

Sample ID	mw-11	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	08:36	VOA Un-preserved #	
DTW at Sampling (ft)	10.33	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-2

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.99
				Well Depth (ft)	11.99
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
13:23	0		4.03	21.29	7.77	1580	-94	68.4	
13:29	0.5		2.65	21.22	7.75	1600	-118	66.2	
13:33	1.0		2.23	21.21	7.73	1600	-132	62.5	

Sampling Summary

Sample ID	mw-2	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	13:35	VOA Un-preserved #	
DTW at Sampling (ft)	6.50	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-3

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.94
				Well Depth (ft)	11.76
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:59	0		9.30	19.46	8.07	4200	3	32.3	
10:05	0.5		4.30	19.92	8.05	4260	-52	25.8	
10:07	1.0		3.01	20.21	8.02	4220	-89	25.1	
10:09	1.5		2.52	20.23	7.99	4020	-104	9.9	
10:11	2.0		2.27	20.19	7.95	3100	-98	11.9	

Sampling Summary

Sample ID	mw-3	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	10:12	VOA Un-preserved #	
DTW at Sampling (ft)	6.12	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-4

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.65
				Well Depth (ft)	11.72
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:41	0		6.18	20.43	7.79	1960	-133	48.9	
11:47	0.5		3.64	20.63	7.78	1950	-169	56.7	
11:49	1.0		2.77	20.72	7.78	1930	-162	56.8	
11:51	1.5		2.25	20.74	7.78	1920	-154	52.6	
11:52	2.0		2.20	20.76	7.78	1910	-152	48.9	

Sampling Summary

Sample ID	mw-4	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	11:55	VOA Un-preserved #	
DTW at Sampling (ft)	6.32	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-5

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9.5
Project_Number	09-88-662	Well Head Comments	sampled out of order due to traffic control restrictions	Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.53
Weather Conditions	Cloudy			Well Depth (ft)	13.5
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
07:45	0		5.49	18.09	8.13	1810	485	81.9	
07:53	0.5		3.13	19.14	8.05	1780	193	114	
07:55	1.0		2.96	19.72	8.03	1740	-60	133	

Sampling Summary

Sample ID	mw-5	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	07:56	VOA Un-preserved #	
DTW at Sampling (ft)	6.21	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-6

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	10
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	6.36
				Well Depth (ft)	13.96
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
10:27	0		1.98	20.14	7.93	526	-103	300	
10:34	0.5		2.81	20.73	7.91	469	-112	353	
10:36	1.0		2.30	21.05	7.91	448	-121	334	
10:38	1.5		2.07	21.14	7.91	485	-129	280	
10:40	2.0		1.99	21.15	7.90	549	-137	260	

Sampling Summary

Sample ID	mw-6	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	10:42	VOA Un-preserved #	
DTW at Sampling (ft)	7.37	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-7

Date	12/08/2015	Well Head Integrity	Need repair	Pump Inlet Depth (ft)	10
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.76
				Well Depth (ft)	13.98
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:04	0		6.04	20.40	7.99	6100	-88	67	
11:10	0.5		3.92	21.24	7.94	6410	-130	71.4	
11:11	1.0		2.84	21.42	7.89	6080	-142	93.0	
11:14	1.5		2.20	21.65	7.82	3450	-142	142	
11:15	2.0		2.15	21.74	7.80	2790	-142	144	

Sampling Summary

Sample ID	mw-7	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	11:18	VOA Un-preserved #	
DTW at Sampling (ft)	6.10	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-8

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	10
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.69
				Well Depth (ft)	13.96
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:59	0		4.21	22	7.79	1000	-77	14.4	
13:05	0.5		2.29	22.69	7.78	906	-126	27	
13:07	1.0		2.03	22.79	7.76	902	-138	25	

Sampling Summary

Sample ID	mw-8	Purge Rate (LPM)	60.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	13:10	VOA Un-preserved #	
DTW at Sampling (ft)	6.34	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-9

Date	12/08/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	10
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	4
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	5.24
				Well Depth (ft)	13.86
Weather Conditions	Cloudy				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:36	0		4.74	20.22	7.86	1140	-84	4.9	
12:41	0.5		3.09	20.38	7.84	1140	-105	3.8	
12:43	1.0		2.42	20.51	7.83	1140	-116	5.2	

Sampling Summary

Sample ID	mw-9	Purge Rate (LPM)	0.25
Sample Date	12/08/2015	VOA Preserved #	3
Sample Time	12:50	VOA Un-preserved #	
DTW at Sampling (ft)	5.54	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature 

Groundwater Monitoring Field Data For
ARCADIS-11126

Gauging Data

Date	12/08/2015
Project_Number	09-88-662
Location	1700 Powell St, Emeryville, CA
Sampler	Kais Hamidi

Well	Date/Time	Well Depth (ft)	Depth To Water (ft)	Depth to LNAPL (ft)	Remarks
MW-1	12/08/2015 07:25	12	4.45		
MW-10	12/08/2015 06:53	16.83	8.01		
MW-11	12/08/2015 06:45	13.96	10.24		
MW-2	12/08/2015 07:28	11.99	5.99		
MW-3	12/08/2015 07:13	11.76	5.94		
MW-4	12/08/2015 07:20	11.72	5.65		
MW-5	12/08/2015 07:24	13.5	5.53		
MW-6	12/08/2015 07:15		6.36		
MW-7	12/08/2015 07:17	13.98	5.76		
MW-8	12/08/2015 07:27	13.96	5.69		
MW-9	12/08/2015 07:26	13.86	5.24		

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-3

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
				Well Depth (ft)	
Weather Conditions	Sunny				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:15	0		4.26	19.38	6.24	622	41	9.7	
12:22	0.5		2.39	19.91	6.23	613	51	10.6	
12:23	1.0		2.38	19.97	6.23	612	49	10.6	

Sampling Summary

Sample ID	mw-3	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	12:30	VOA Un-preserved #	
DTW at Sampling (ft)	5.72	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-4

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:59	0		3.50	19.50	6.25	1800	-127	0	
13:03	0.5		2.17	20.14	6.26	1740	-149	0	
13:04	1.0		2.08	20.33	6.26	1730	-153	0	

Sampling Summary

Sample ID	mw-4	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	13:10	VOA Un-preserved #	
DTW at Sampling (ft)	5.65	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-5

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	9.5
Project_Number	09-88-662	Well Head Comments	Sampled out of order due to traffic control restrictions	Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:17	0		3.62	18.16	6.21	1920	-97	41.4	
11:23	0.5		4.91	18.85	6.18	1810	-108	56.5	
11:25	1.0		4.64	19.04	6.16	1830	-104	96.9	

Sampling Summary

Sample ID	mw-5	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	11:30	VOA Un-preserved #	
DTW at Sampling (ft)	5.45	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-7

Date	12/16/2015	Well Head Integrity	Need repair	Pump Inlet Depth (ft)	10
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:42	0		4.18	20.24	6.34	4880	-152	75.3	
12:44	0.5		3.65	20.44	6.33	4800	-154	82.8	
12:45	1.0		3.62	20.46	6.31	4440	-157	94.6	

Sampling Summary

Sample ID	mw-7	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	12:55	VOA Un-preserved #	
DTW at Sampling (ft)	5.45	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

MW-9

Date	12/16/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	8
Project_Number	09-88-662	Well Head Comments		Well Diameter (in)	2
Location	1700 Powell St, Emeryville, CA			Initial DTW (ft)	
				Well Depth (ft)	
Weather Conditions	Sunny				
Waste Container	Tank				
Waste Location	Off site				
Sampler	Kais Hamidi				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
13:17	0		5.48	19.28	6.30	667	-124	0	
13:23	0.5		4.19	19.46	6.33	655	-132	0	
13:24	1.0		4.32	19.43	6.34	667	-135	0	

Sampling Summary

Sample ID	mw-1	Purge Rate (LPM)	0.25
Sample Date	12/16/2015	VOA Preserved #	
Sample Time	13:30	VOA Un-preserved #	
DTW at Sampling (ft)	4.69	Liter Amber #	2
Sampled using	Dedicated Pump Tubing	Plastic Bottles #	
		Other	
		Remarks	

Groundwater Monitoring Field Data For
ARCADIS-11126

Gauging Data

Date	12/16/2015
Project_Number	09-88-662
Location	1700 Powell St, Emeryville, CA
Sampler	Kais Hamidi

Well	Date/Time	Well Depth (ft)	Depth To Water (ft)	Depth to LNAPL (ft)	Remarks
MW-1	12/16/2015 10:56	12	4.25		
MW-10	12/16/2015 10:36	16.83	7.86		
MW-11	12/16/2015 10:30	13.96	9.94		
MW-2	12/16/2015 10:59	11.99	5.68		
MW-3	12/16/2015 10:48	11.76	5.56		
MW-4	12/16/2015 10:51	13.5	5.54		
MW-5	12/16/2015 10:55	13.5	5.03		
MW-6	12/16/2015 10:48		6.09		
MW-7	12/16/2015 10:50	13.99	5.26		
MW-8	12/16/2015 10:57	13.96	5.27		
MW-9	12/16/2015 10:57	13.86	4.57		

ATTACHMENT 3

Certified Laboratory Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

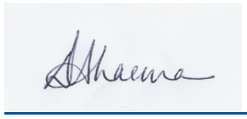
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-69096-1
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:
12/21/2015 3:38:06 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
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Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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)

Job ID: 720-69096-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-69096-1

Comments
No additional comments.

Receipt
The samples were received on 12/9/2015 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.1º C, 3.4º C and 5.9º C.

Receipt Exceptions
Coc says 7 containers per sample----For the ones that did not break we received 5 containers per sample--except MW-1 received 3 voas and 1 amber.

One or more containers for the following samples were received broken or leaking: 1 amber for MW-1, MW-3, MW-4, MW-5, MW-7, and MW-12.

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

GC/MS Semi VOA
Method 8270C SIM: Surrogate recovery for the following sample was outside control limits: MW-10 (720-69096-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM: The method blank for preparation batch 720-193943 contained Naphthalene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8270C SIM: The method blank for preparation batch 193943 contained naphthalene above the reporting limit(RL). There were insufficient samples for re-extracted. Therefore data has been reported.

MW-9 (720-69096-9) and MW-8 (720-69096-10)

Method 8270C SIM: Surrogate recovery for the following sample was outside control limits: MW-6 (720-69096-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270C SIM: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 720-194097 recovered outside control limits for the following analytes: Acenaphthene, Acenaphthylene, Fluorene.

Method 8270C SIM: The laboratory control samples (LCS/LCSD) for preparation batch 720-194097 and analytical batch 720-194117 %RPD outside acceptance limits for. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

Method 8270C SIM: Surrogate recovery for the following samples was outside control limits: MW-7 (720-69096-5) and MW-2 (720-69096-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015B: The Diesel Range Organics (DRO) concentration reported for the following sample is due to the presence of discrete peaks: MW-9 (720-69096-9).

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

Organic Prep

Job ID: 720-69096-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method 3510C: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: EPA 8270C SIM: The sample is less than 800 mL : MW-9 (720-69096-9) and MW-8 (720-69096-10)

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

Detection Summary

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

TestAmerica Job ID: 720-69096-1

Client Sample ID: MW-11 — Lab Sample ID: 720-69096-1

No Detections.

Client Sample ID: MW-10 — Lab Sample ID: 720-69096-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.19		0.10		ug/L	1		8270C SIM	Total/NA
Pyrene	0.11		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	180		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-3 — Lab Sample ID: 720-69096-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.6		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
TBA	6200		200		ug/L	10		8260B/CA_LUFT MS	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 720-69096-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.74		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Benzo[b]fluoranthene	0.21		0.20		ug/L	2		8270C SIM	Total/NA
Fluoranthene	0.25		0.20		ug/L	2		8270C SIM	Total/NA
Pyrene	0.42		0.20		ug/L	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	2000		150		ug/L	3		8015B	Silica Gel Cleanup

Client Sample ID: MW-7 — Lab Sample ID: 720-69096-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.8		1.0		ug/L	2		8260B/CA_LUFT MS	Total/NA
TBA	2400		40		ug/L	2		8260B/CA_LUFT MS	Total/NA
Pyrene	0.18		0.10		ug/L	1		8270C SIM	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 720-69096-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TBA	20000		400		ug/L	20		8260B/CA_LUFT MS	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 720-69096-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	11		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Benzene	1.9		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Toluene	0.80		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	3.6		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 720-69096-1

Client Sample ID: MW-5 (Continued) — Lab Sample ID: 720-69096-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C12	2200		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
TBA	720		20		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.44		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.57	*	0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.33	*	0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.35		0.10		ug/L	1		8270C SIM	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 720-69096-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.7		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Benzene	31		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	2.5		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	1.2		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C6-C12	580		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
TBA	650		20		ug/L	1		8260B/CA_LUFT MS	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 720-69096-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	94		2.5		ug/L	5		8260B/CA_LUFT MS	Total/NA
Benzene	17		2.5		ug/L	5		8260B/CA_LUFT MS	Total/NA
Toluene	4.7		2.5		ug/L	5		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C6-C12	1400		250		ug/L	5		8260B/CA_LUFT MS	Total/NA
TBA	8600		100		ug/L	5		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.74	B	0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.16		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	590		100		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-8 — Lab Sample ID: 720-69096-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.1		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C6-C12	130		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
TBA	870		20		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.38	B	0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	140		110		ug/L	1		8015B	Silica Gel Cleanup

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 720-69096-1

Client Sample ID: MW-2 — Lab Sample ID: 720-69096-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	360		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Benzene	340		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C6-C12	2900		2500		ug/L	50		8260B/CA_LUFT MS	Total/NA
TBA	43000		1000		ug/L	50		8260B/CA_LUFT MS	Total/NA
Naphthalene	1.3		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.20	*	0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.11	*	0.10		ug/L	1		8270C SIM	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 720-69096-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	5.4		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C6-C12	60		50		ug/L	1		8260B/CA_LUFT MS	Total/NA
TBA	250		20		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	0.19		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.10	*	0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.23		0.10		ug/L	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-11

Date Collected: 12/08/15 08:36
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Acenaphthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Acenaphthylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Fluorene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Phenanthrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Benzo[a]anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Chrysene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Benzo[a]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*29 - 120*	*12/10/15 10:25*	*12/10/15 20:49*	*1*
Terphenyl-d14	*69*		*45 - 120*	*12/10/15 10:25*	*12/10/15 20:49*	*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		12/15/15 13:04	12/17/15 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.01*		*0 - 5*	*12/15/15 13:04*	*12/17/15 02:07*	*1*
p-Terphenyl	*88*		*31 - 150*	*12/15/15 13:04*	*12/17/15 02:07*	*1*

Client Sample ID: MW-10

Date Collected: 12/08/15 09:09
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Acenaphthene	**0.19**		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Acenaphthylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Fluorene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Phenanthrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Benzo[a]anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Chrysene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Benzo[a]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Pyrene	**0.11**		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*29 - 120*	*12/10/15 10:25*	*12/10/15 21:13*	*1*
Terphenyl-d14	*42*	*X*	*45 - 120*	*12/10/15 10:25*	*12/10/15 21:13*	*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]	**180**		50		ug/L		12/15/15 13:04	12/17/15 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.01*		*0 - 5*	*12/15/15 13:04*	*12/17/15 02:31*	*1*
p-Terphenyl	*72*		*31 - 150*	*12/15/15 13:04*	*12/17/15 02:31*	*1*

Client Sample ID: MW-3

Date Collected: 12/08/15 09:12
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-3

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	**1.6**		0.50		ug/L			12/14/15 12:46	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			12/14/15 12:46	1
TBA	**6200**		200		ug/L			12/15/15 16:21	10
TAME	ND		0.50		ug/L			12/14/15 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*67 - 130*		*12/14/15 12:46*	*1*
4-Bromofluorobenzene	*106*		*67 - 130*		*12/15/15 16:21*	*10*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*12/14/15 12:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*12/15/15 16:21*	*10*
Toluene-d8 (Surr)	*103*		*70 - 130*		*12/14/15 12:46*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/15/15 16:21*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Acenaphthene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Fluorene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Phenanthrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*29 - 120*	*12/14/15 10:08*	*12/14/15 20:47*	*1*
Terphenyl-d14	*58*		*45 - 120*	*12/14/15 10:08*	*12/14/15 20:47*	*1*

Client Sample ID: MW-6

Date Collected: 12/08/15 10:42
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-4

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	**0.74**		0.50		ug/L			12/14/15 13:14	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			12/14/15 13:14	1
TBA	ND		20		ug/L			12/14/15 13:14	1
TAME	ND		0.50		ug/L			12/14/15 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*67 - 130*		*12/14/15 13:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*12/14/15 13:14*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*12/14/15 13:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.51		ug/L		12/10/15 10:25	12/10/15 22:48	5
Acenaphthene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Acenaphthylene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Fluorene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Phenanthrene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Anthracene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Benzo[a]anthracene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Chrysene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Benzo[a]pyrene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Benzo[b]fluoranthene	**0.21**		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Benzo[k]fluoranthene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Benzo[g,h,i]perylene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Indeno[1,2,3-cd]pyrene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Fluoranthene	**0.25**		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Pyrene	**0.42**		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2
Dibenz(a,h)anthracene	ND		0.20		ug/L		12/10/15 10:25	12/11/15 23:41	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*42*		*29 - 120*	*12/10/15 10:25*	*12/10/15 22:48*	*5*
2-Fluorobiphenyl	*36*		*29 - 120*	*12/10/15 10:25*	*12/11/15 23:41*	*2*
Terphenyl-d14	*45*		*45 - 120*	*12/10/15 10:25*	*12/10/15 22:48*	*5*
Terphenyl-d14	*35*	*X*	*45 - 120*	*12/10/15 10:25*	*12/11/15 23:41*	*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]	**2000**		150		ug/L		12/15/15 13:04	12/17/15 02:55	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.08*		*0 - 5*	*12/15/15 13:04*	*12/17/15 02:55*	*3*
p-Terphenyl	*88*		*31 - 150*	*12/15/15 13:04*	*12/17/15 02:55*	*3*

Client Sample ID: MW-7

Date Collected: 12/08/15 11:18
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-5

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	**1.8**		1.0		ug/L			12/14/15 13:42	2
Benzene	ND		1.0		ug/L			12/14/15 13:42	2
Ethylbenzene	ND		1.0		ug/L			12/14/15 13:42	2
Toluene	ND		1.0		ug/L			12/14/15 13:42	2
Xylenes, Total	ND		2.0		ug/L			12/14/15 13:42	2
Gasoline Range Organics (GRO) -C6-C12	ND		100		ug/L			12/14/15 13:42	2
TBA	**2400**		40		ug/L			12/14/15 13:42	2
TAME	ND		1.0		ug/L			12/14/15 13:42	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*67 - 130*		*12/14/15 13:42*	*2*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*12/14/15 13:42*	*2*
Toluene-d8 (Surr)	*105*		*70 - 130*		*12/14/15 13:42*	*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		12/14/15 10:08	12/14/15 21:11	1
Acenaphthene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Fluorene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Phenanthrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Pyrene	**0.18**		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*40*		*29 - 120*	*12/14/15 10:08*	*12/14/15 21:11*	*1*
Terphenyl-d14	*32*	*X*	*45 - 120*	*12/14/15 10:08*	*12/14/15 21:11*	*1*

Client Sample ID: MW-4
Date Collected: 12/08/15 11:55
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-6
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		10		ug/L			12/14/15 14:10	20
Gasoline Range Organics (GRO) -C6-C12	ND		1000		ug/L			12/14/15 14:10	20
TBA	**20000**		400		ug/L			12/14/15 14:10	20
TAME	ND		10		ug/L			12/14/15 14:10	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*67 - 130*		*12/14/15 14:10*	*20*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*12/14/15 14:10*	*20*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/14/15 14:10*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Acenaphthene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Fluorene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Phenanthrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*29 - 120*	*12/14/15 10:08*	*12/14/15 21:35*	*1*
Terphenyl-d14	*49*		*45 - 120*	*12/14/15 10:08*	*12/14/15 21:35*	*1*

Client Sample ID: MW-5

Date Collected: 12/08/15 07:56
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-7

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	**11**		0.50		ug/L			12/14/15 14:37	1
Benzene	**1.9**		0.50		ug/L			12/14/15 14:37	1
Ethylbenzene	ND		0.50		ug/L			12/14/15 14:37	1
Toluene	**0.80**		0.50		ug/L			12/14/15 14:37	1
Xylenes, Total	**3.6**		1.0		ug/L			12/14/15 14:37	1
Gasoline Range Organics (GRO) -C6-C12	**2200**		50		ug/L			12/14/15 14:37	1
TBA	**720**		20		ug/L			12/14/15 14:37	1
TAME	ND		0.50		ug/L			12/14/15 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*67 - 130*		*12/14/15 14:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*12/14/15 14:37*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*12/14/15 14:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.44**		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Acenaphthene	**0.57**	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Fluorene	**0.33**	*	0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Phenanthrene	**0.35**		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*44*		*29 - 120*	*12/14/15 10:08*	*12/14/15 21:58*	*1*
Terphenyl-d14	*45*		*45 - 120*	*12/14/15 10:08*	*12/14/15 21:58*	*1*

Client Sample ID: MW-1

Date Collected: 12/08/15 12:25
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-8

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	**3.7**		0.50		ug/L			12/14/15 15:05	1
Benzene	**31**		0.50		ug/L			12/14/15 15:05	1
Ethylbenzene	**2.5**		0.50		ug/L			12/14/15 15:05	1
Toluene	ND		0.50		ug/L			12/14/15 15:05	1
Xylenes, Total	**1.2**		1.0		ug/L			12/14/15 15:05	1
Gasoline Range Organics (GRO) -C6-C12	**580**		50		ug/L			12/14/15 15:05	1
TBA	**650**		20		ug/L			12/14/15 15:05	1
TAME	ND		0.50		ug/L			12/14/15 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*67 - 130*		*12/14/15 15:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*		*12/14/15 15:05*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*12/14/15 15:05*	*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		12/14/15 10:08	12/14/15 22:22	1
Acenaphthene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Fluorene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Phenanthrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*29 - 120*	*12/14/15 10:08*	*12/14/15 22:22*	*1*
Terphenyl-d14	*59*		*45 - 120*	*12/14/15 10:08*	*12/14/15 22:22*	*1*

Client Sample ID: MW-9

Date Collected: 12/08/15 12:50
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-9

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	**94**		2.5		ug/L			12/14/15 15:33	5
Benzene	**17**		2.5		ug/L			12/14/15 15:33	5
Ethylbenzene	ND		2.5		ug/L			12/14/15 15:33	5
Toluene	**4.7**		2.5		ug/L			12/14/15 15:33	5
Xylenes, Total	ND		5.0		ug/L			12/14/15 15:33	5
Gasoline Range Organics (GRO) -C6-C12	**1400**		250		ug/L			12/14/15 15:33	5
TBA	**8600**		100		ug/L			12/14/15 15:33	5
TAME	ND		2.5		ug/L			12/14/15 15:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*67 - 130*		*12/14/15 15:33*	*5*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*		*12/14/15 15:33*	*5*
Toluene-d8 (Surr)	*107*		*70 - 130*		*12/14/15 15:33*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.74**	**B**	0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Acenaphthene	**0.16**		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Acenaphthylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Fluorene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Phenanthrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Benzo[a]anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Chrysene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Benzo[a]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*29 - 120*	*12/10/15 10:25*	*12/10/15 21:37*	*1*
Terphenyl-d14	*62*		*45 - 120*	*12/10/15 10:25*	*12/10/15 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]	**590**		100		ug/L		12/15/15 13:04	12/17/15 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.1*		*0 - 5*	*12/15/15 13:04*	*12/17/15 01:19*	*1*
p-Terphenyl	*103*		*31 - 150*	*12/15/15 13:04*	*12/17/15 01:19*	*1*

Client Sample ID: MW-8

Date Collected: 12/08/15 13:10
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-10

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	**1.1**		0.50		ug/L			12/14/15 16:01	1
Gasoline Range Organics (GRO) -C6-C12	**130**		50		ug/L			12/14/15 16:01	1
TBA	**870**		20		ug/L			12/14/15 16:01	1
TAME	ND		0.50		ug/L			12/14/15 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*67 - 130*		*12/14/15 16:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*12/14/15 16:01*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*12/14/15 16:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.38**	**B**	0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Acenaphthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Acenaphthylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Fluorene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Phenanthrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Benzo[a]anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Chrysene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Benzo[a]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*29 - 120*	*12/10/15 10:25*	*12/10/15 22:00*	*1*
Terphenyl-d14	*57*		*45 - 120*	*12/10/15 10:25*	*12/10/15 22:00*	*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]	**140**		110		ug/L		12/15/15 13:04	12/17/15 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.0007*		*0 - 5*	*12/15/15 13:04*	*12/17/15 01:43*	*1*
p-Terphenyl	*101*		*31 - 150*	*12/15/15 13:04*	*12/17/15 01:43*	*1*

Client Sample ID: MW-2

Date Collected: 12/08/15 13:35
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	**360**		25		ug/L			12/14/15 16:28	50
Benzene	**340**		25		ug/L			12/14/15 16:28	50
EDB	ND		25		ug/L			12/14/15 16:28	50
1,2-DCA	ND		25		ug/L			12/14/15 16:28	50
Ethylbenzene	ND		25		ug/L			12/14/15 16:28	50
Toluene	ND		25		ug/L			12/14/15 16:28	50
Xylenes, Total	ND		50		ug/L			12/14/15 16:28	50
Gasoline Range Organics (GRO) -C6-C12	**2900**		2500		ug/L			12/14/15 16:28	50
TBA	**43000**		1000		ug/L			12/14/15 16:28	50
DIPE	ND		25		ug/L			12/14/15 16:28	50
TAME	ND		25		ug/L			12/14/15 16:28	50
Ethyl t-butyl ether	ND		25		ug/L			12/14/15 16:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*67 - 130*		*12/14/15 16:28*	*50*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*12/14/15 16:28*	*50*
Toluene-d8 (Surr)	*104*		*70 - 130*		*12/14/15 16:28*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**1.3**		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Acenaphthene	**0.20**	*	0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Fluorene	**0.11**	*	0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Phenanthrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*29 - 120*	*12/14/15 10:08*	*12/14/15 22:45*	*1*
Terphenyl-d14	*32*	*X*	*45 - 120*	*12/14/15 10:08*	*12/14/15 22:45*	*1*

Client Sample ID: MW-12

Date Collected: 12/08/15 09:38
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	**5.4**		0.50		ug/L			12/14/15 16:56	1
Benzene	ND		0.50		ug/L			12/14/15 16:56	1
EDB	ND		0.50		ug/L			12/14/15 16:56	1
1,2-DCA	ND		0.50		ug/L			12/14/15 16:56	1
Ethylbenzene	ND		0.50		ug/L			12/14/15 16:56	1
Toluene	ND		0.50		ug/L			12/14/15 16:56	1
Xylenes, Total	ND		1.0		ug/L			12/14/15 16:56	1
Gasoline Range Organics (GRO) -C6-C12	**60**		50		ug/L			12/14/15 16:56	1
TBA	**250**		20		ug/L			12/14/15 16:56	1
DIPE	ND		0.50		ug/L			12/14/15 16:56	1
TAME	ND		0.50		ug/L			12/14/15 16:56	1
Ethyl t-butyl ether	ND		0.50		ug/L			12/14/15 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*67 - 130*		*12/14/15 16:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*12/14/15 16:56*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/14/15 16:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.19**		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Acenaphthene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Acenaphthylene	ND	*	0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Fluorene	**0.10**	*	0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Phenanthrene	**0.23**		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*36*		*29 - 120*	*12/14/15 10:08*	*12/14/15 23:09*	*1*
Terphenyl-d14	*49*		*45 - 120*	*12/14/15 10:08*	*12/14/15 23:09*	*1*

Surrogate Summary

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

TestAmerica Job ID: 720-69096-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(67-130)	(72-130)	(70-130)
720-69096-3	MW-3	106	96	103
720-69096-3	MW-3	106	95	99
720-69096-3 MS	MW-3	112	96	107
720-69096-3 MSD	MW-3	114	92	108
720-69096-4	MW-6	98	98	105
720-69096-5	MW-7	100	95	105
720-69096-6	MW-4	100	99	102
720-69096-7	MW-5	105	99	112
720-69096-8	MW-1	108	94	105
720-69096-9	MW-9	106	93	107
720-69096-10	MW-8	106	96	105
720-69096-11	MW-2	104	97	104
720-69096-12	MW-12	108	98	102
LCS 720-194081/5	Lab Control Sample	116	90	107
LCS 720-194081/7	Lab Control Sample	106	91	105
LCS 720-194165/6	Lab Control Sample	104	93	101
LCS 720-194165/8	Lab Control Sample	104	96	100
LCSD 720-194081/6	Lab Control Sample Dup	115	89	110
LCSD 720-194081/8	Lab Control Sample Dup	109	91	108
LCSD 720-194165/7	Lab Control Sample Dup	101	92	102
LCSD 720-194165/9	Lab Control Sample Dup	99	95	101
MB 720-194081/4	Method Blank	100	96	102
MB 720-194165/5	Method Blank	107	100	100

Surrogate Legend

BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPH
Lab Sample ID	Client Sample ID	(29-120)	(45-120)
720-69096-1	MW-11	58	69
720-69096-2	MW-10	62	42 X
720-69096-3	MW-3	65	58
720-69096-4	MW-6	42	45
720-69096-4	MW-6	36	35 X
720-69096-5	MW-7	40	32 X
720-69096-6	MW-4	55	49
720-69096-7	MW-5	44	45
720-69096-8	MW-1	48	59
720-69096-9	MW-9	62	62
720-69096-10	MW-8	62	57
720-69096-11	MW-2	48	32 X
720-69096-12	MW-12	36	49
LCS 720-193943/2-A	Lab Control Sample	67	70

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		FBP	TPH										
Lab Sample ID	Client Sample ID	(29-120)	(45-120)										
LCS 720-194097/2-A	Lab Control Sample	41	70										
LCSD 720-193943/3-A	Lab Control Sample Dup	64	67										
LCSD 720-194097/3-A	Lab Control Sample Dup	56	67										
MB 720-193943/1-A	Method Blank	61	80										
MB 720-194097/1-A	Method Blank	53	78										

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPH = Terphenyl-d14

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

Matrix: Water **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)											
		NDA1	PTP1										
Lab Sample ID	Client Sample ID	(0-5)	(31-150)										
720-69096-1	MW-11	0.01	88										
720-69096-2	MW-10	0.01	72										
720-69096-4	MW-6	0.08	88										
720-69096-9	MW-9	0.1	103										
720-69096-10	MW-8	0.0007	101										
LCS 720-194197/2-A	Lab Control Sample		99										
LCSD 720-194197/3-A	Lab Control Sample Dup		100										
MB 720-194197/1-A	Method Blank	0.007	94										

Surrogate Legend

NDA = Capric Acid (Surr)

PTP = p-Terphenyl

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

Lab Sample ID: MB 720-194081/4
Matrix: Water
Analysis Batch: 194081

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			12/14/15 09:32	1
MTBE	ND		0.50		ug/L			12/14/15 09:32	1
Benzene	ND		0.50		ug/L			12/14/15 09:32	1
EDB	ND		0.50		ug/L			12/14/15 09:32	1
1,2-DCA	ND		0.50		ug/L			12/14/15 09:32	1
Ethylbenzene	ND		0.50		ug/L			12/14/15 09:32	1
Toluene	ND		0.50		ug/L			12/14/15 09:32	1
Xylenes, Total	ND		1.0		ug/L			12/14/15 09:32	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			12/14/15 09:32	1
DIPE	ND		0.50		ug/L			12/14/15 09:32	1
Ethyl t-butyl ether	ND		0.50		ug/L			12/14/15 09:32	1
TBA	ND		20		ug/L			12/14/15 09:32	1
TAME	ND		0.50		ug/L			12/14/15 09:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*67 - 130*		*12/14/15 09:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*12/14/15 09:32*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*12/14/15 09:32*	*1*

Lab Sample ID: LCS 720-194081/5
Matrix: Water
Analysis Batch: 194081

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	25.5		ug/L		102	62 - 130
MTBE	25.0	25.5		ug/L		102	62 - 130
Benzene	25.0	24.0		ug/L		96	79 - 130
EDB	25.0	25.4		ug/L		102	70 - 130
1,2-DCA	25.0	23.5		ug/L		94	61 - 132
Ethylbenzene	25.0	25.3		ug/L		101	80 - 120
Toluene	25.0	24.9		ug/L		100	78 - 120
DIPE	25.0	27.3		ug/L		109	69 - 134
Ethyl t-butyl ether	25.0	27.3		ug/L		109	70 - 130
TBA	250	255		ug/L		102	70 - 130
TAME	25.0	27.9		ug/L		112	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

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

Lab Sample ID: LCS 720-194081/7
Matrix: Water
Analysis Batch: 194081

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C12			500	493		ug/L		99	58 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 720-194081/6
Matrix: Water
Analysis Batch: 194081

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	26.2		ug/L		105	62 - 130	3	20
MTBE			25.0	26.2		ug/L		105	62 - 130	3	20
Benzene			25.0	24.4		ug/L		98	79 - 130	2	20
EDB			25.0	26.3		ug/L		105	70 - 130	3	20
1,2-DCA			25.0	23.9		ug/L		96	61 - 132	2	20
Ethylbenzene			25.0	25.1		ug/L		100	80 - 120	1	20
Toluene			25.0	25.3		ug/L		101	78 - 120	1	20
DIPE			25.0	27.4		ug/L		109	69 - 134	0	20
Ethyl t-butyl ether			25.0	27.4		ug/L		110	70 - 130	1	20
TBA			250	262		ug/L		105	70 - 130	3	20
TAME			25.0	28.2		ug/L		113	79 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*115*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 720-194081/8
Matrix: Water
Analysis Batch: 194081

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C12			500	508		ug/L		102	58 - 120	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

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

Lab Sample ID: 720-69096-3 MS
Matrix: Water
Analysis Batch: 194081

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	1.6		25.0	28.6		ug/L		108	60 - 138
MTBE	1.6		25.0	28.6		ug/L		108	60 - 138
Benzene	ND		25.0	24.7		ug/L		99	60 - 140
EDB	ND		25.0	26.4		ug/L		106	60 - 140
1,2-DCA	ND		25.0	24.2		ug/L		97	60 - 140
Ethylbenzene	ND		25.0	24.3		ug/L		97	60 - 140
Toluene	ND		25.0	24.9		ug/L		100	60 - 140
DIPE	ND		25.0	27.9		ug/L		111	60 - 140
Ethyl t-butyl ether	ND		25.0	27.9		ug/L		111	60 - 140
TBA	4100	E	250	4380	E 4	ug/L		104	60 - 140
TAME	ND		25.0	29.2		ug/L		117	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: 720-69096-3 MSD
Matrix: Water
Analysis Batch: 194081

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	1.6		25.0	27.5		ug/L		103	60 - 138	4	20
MTBE	1.6		25.0	27.5		ug/L		103	60 - 138	4	20
Benzene	ND		25.0	24.5		ug/L		98	60 - 140	1	20
EDB	ND		25.0	25.5		ug/L		102	60 - 140	3	20
1,2-DCA	ND		25.0	23.9		ug/L		96	60 - 140	2	20
Ethylbenzene	ND		25.0	24.9		ug/L		100	60 - 140	3	20
Toluene	ND		25.0	25.1		ug/L		100	60 - 140	1	20
DIPE	ND		25.0	27.5		ug/L		110	60 - 140	1	20
Ethyl t-butyl ether	ND		25.0	27.5		ug/L		110	60 - 140	1	20
TBA	4100	E	250	4480	E 4	ug/L		144	60 - 140	2	20
TAME	ND		25.0	28.4		ug/L		114	60 - 140	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 720-194165/5
Matrix: Water
Analysis Batch: 194165

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			12/15/15 08:36	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			12/15/15 08:36	1
TBA	ND		20		ug/L			12/15/15 08:36	1

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

Lab Sample ID: MB 720-194165/5
Matrix: Water
Analysis Batch: 194165

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TAME	ND		0.50		ug/L			12/15/15 08:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*67 - 130*		*12/15/15 08:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*		*12/15/15 08:36*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/15/15 08:36*	*1*

Lab Sample ID: LCS 720-194165/6
Matrix: Water
Analysis Batch: 194165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	25.7		ug/L		103	62 - 130
TBA	250	263		ug/L		105	70 - 130
TAME	25.0	28.1		ug/L		112	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCS 720-194165/8
Matrix: Water
Analysis Batch: 194165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C12	500	398		ug/L		80	58 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-194165/7
Matrix: Water
Analysis Batch: 194165

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	25.3		ug/L		101	62 - 130	2	20
TBA	250	261		ug/L		104	70 - 130	1	20
TAME	25.0	26.7		ug/L		107	79 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: LCSD 720-194165/9
Matrix: Water
Analysis Batch: 194165

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C12			500	387		ug/L		77	58 - 120	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 720-193943/1-A
Matrix: Water
Analysis Batch: 193936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.145		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Acenaphthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Acenaphthylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Fluorene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Phenanthrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Benzo[a]anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Chrysene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Benzo[a]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Fluoranthene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Pyrene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/10/15 10:25	12/10/15 18:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*29 - 120*	*12/10/15 10:25*	*12/10/15 18:27*	*1*
Terphenyl-d14	*80*		*45 - 120*	*12/10/15 10:25*	*12/10/15 18:27*	*1*

Lab Sample ID: LCS 720-193943/2-A
Matrix: Water
Analysis Batch: 193936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193943

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene			10.0	6.63		ug/L		66	19 - 120
Acenaphthene			10.0	6.65		ug/L		67	24 - 120
Acenaphthylene			10.0	7.08		ug/L		71	24 - 120
Fluorene			10.0	7.15		ug/L		72	27 - 120
Phenanthrene			10.0	7.51		ug/L		75	31 - 120
Anthracene			10.0	7.56		ug/L		76	44 - 120

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

Lab Sample ID: LCS 720-193943/2-A
Matrix: Water
Analysis Batch: 193936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193943

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	10.0	7.83		ug/L		78	48 - 120
Chrysene	10.0	7.70		ug/L		77	47 - 120
Benzo[a]pyrene	10.0	6.54		ug/L		65	43 - 120
Benzo[b]fluoranthene	10.0	7.27		ug/L		73	42 - 120
Benzo[k]fluoranthene	10.0	5.93		ug/L		59	42 - 120
Benzo[g,h,i]perylene	10.0	4.64		ug/L		46	35 - 120
Indeno[1,2,3-cd]pyrene	10.0	4.93		ug/L		49	36 - 120
Fluoranthene	10.0	8.17		ug/L		82	43 - 120
Pyrene	10.0	8.53		ug/L		85	47 - 120
Dibenz(a,h)anthracene	10.0	5.11		ug/L		51	33 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*29 - 120*
Terphenyl-d14	*70*		*45 - 120*

Lab Sample ID: LCSD 720-193943/3-A
Matrix: Water
Analysis Batch: 193936

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193943

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	10.0	6.66		ug/L		67	19 - 120	0	35
Acenaphthene	10.0	6.06		ug/L		61	24 - 120	9	35
Acenaphthylene	10.0	6.50		ug/L		65	24 - 120	9	35
Fluorene	10.0	6.57		ug/L		66	27 - 120	9	35
Phenanthrene	10.0	6.91		ug/L		69	31 - 120	8	35
Anthracene	10.0	6.93		ug/L		69	44 - 120	9	35
Benzo[a]anthracene	10.0	7.42		ug/L		74	48 - 120	5	35
Chrysene	10.0	7.20		ug/L		72	47 - 120	7	35
Benzo[a]pyrene	10.0	6.08		ug/L		61	43 - 120	7	35
Benzo[b]fluoranthene	10.0	6.27		ug/L		63	42 - 120	15	35
Benzo[k]fluoranthene	10.0	5.85		ug/L		58	42 - 120	1	35
Benzo[g,h,i]perylene	10.0	4.22		ug/L		42	35 - 120	10	35
Indeno[1,2,3-cd]pyrene	10.0	4.55		ug/L		45	36 - 120	8	35
Fluoranthene	10.0	7.72		ug/L		77	43 - 120	6	35
Pyrene	10.0	8.08		ug/L		81	47 - 120	5	35
Dibenz(a,h)anthracene	10.0	4.69		ug/L		47	33 - 120	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*29 - 120*
Terphenyl-d14	*67*		*45 - 120*

Lab Sample ID: MB 720-194097/1-A
Matrix: Water
Analysis Batch: 194117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Acenaphthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1

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

Lab Sample ID: MB 720-194097/1-A
Matrix: Water
Analysis Batch: 194117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Fluorene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Phenanthrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Benzo[a]anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Chrysene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Benzo[a]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Benzo[b]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Benzo[k]fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Fluoranthene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Pyrene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		12/14/15 10:08	12/14/15 19:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*29 - 120*	*12/14/15 10:08*	*12/14/15 19:36*	*1*
Terphenyl-d14	*78*		*45 - 120*	*12/14/15 10:08*	*12/14/15 19:36*	*1*

Lab Sample ID: LCS 720-194097/2-A
Matrix: Water
Analysis Batch: 194117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 194097

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	10.0	3.70		ug/L		37	19 - 120
Acenaphthene	10.0	3.60		ug/L		36	24 - 120
Acenaphthylene	10.0	4.02		ug/L		40	24 - 120
Fluorene	10.0	4.07		ug/L		41	27 - 120
Phenanthrene	10.0	4.80		ug/L		48	31 - 120
Anthracene	10.0	5.53		ug/L		55	44 - 120
Benzo[a]anthracene	10.0	7.14		ug/L		71	48 - 120
Chrysene	10.0	7.06		ug/L		71	47 - 120
Benzo[a]pyrene	10.0	5.71		ug/L		57	43 - 120
Benzo[b]fluoranthene	10.0	6.26		ug/L		63	42 - 120
Benzo[k]fluoranthene	10.0	5.42		ug/L		54	42 - 120
Benzo[g,h,i]perylene	10.0	4.81		ug/L		48	35 - 120
Indeno[1,2,3-cd]pyrene	10.0	4.68		ug/L		47	36 - 120
Fluoranthene	10.0	7.15		ug/L		72	43 - 120
Pyrene	10.0	7.08		ug/L		71	47 - 120
Dibenz(a,h)anthracene	10.0	4.81		ug/L		48	33 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*41*		*29 - 120*
Terphenyl-d14	*70*		*45 - 120*

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

Lab Sample ID: LCSD 720-194097/3-A
Matrix: Water
Analysis Batch: 194117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 194097

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			10.0	5.22		ug/L		52	19 - 120	34	35
Acenaphthene			10.0	5.25	*	ug/L		52	24 - 120	37	35
Acenaphthylene			10.0	5.86	*	ug/L		59	24 - 120	37	35
Fluorene			10.0	5.87	*	ug/L		59	27 - 120	36	35
Phenanthrene			10.0	6.28		ug/L		63	31 - 120	27	35
Anthracene			10.0	6.66		ug/L		67	44 - 120	19	35
Benzo[a]anthracene			10.0	6.84		ug/L		68	48 - 120	4	35
Chrysene			10.0	6.60		ug/L		66	47 - 120	7	35
Benzo[a]pyrene			10.0	5.22		ug/L		52	43 - 120	9	35
Benzo[b]fluoranthene			10.0	5.63		ug/L		56	42 - 120	11	35
Benzo[k]fluoranthene			10.0	4.92		ug/L		49	42 - 120	10	35
Benzo[g,h,i]perylene			10.0	4.32		ug/L		43	35 - 120	11	35
Indeno[1,2,3-cd]pyrene			10.0	4.14		ug/L		41	36 - 120	12	35
Fluoranthene			10.0	7.40		ug/L		74	43 - 120	3	35
Pyrene			10.0	7.14		ug/L		71	47 - 120	1	35
Dibenz(a,h)anthracene			10.0	4.30		ug/L		43	33 - 120	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*29 - 120*
Terphenyl-d14	*67*		*45 - 120*

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

Lab Sample ID: MB 720-194197/1-A
Matrix: Water
Analysis Batch: 194156

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 194197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		12/15/15 13:04	12/15/15 20:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.007*		*0 - 5*	*12/15/15 13:04*	*12/15/15 20:08*	*1*
p-Terphenyl	*94*		*31 - 150*	*12/15/15 13:04*	*12/15/15 20:08*	*1*

Lab Sample ID: LCS 720-194197/2-A
Matrix: Water
Analysis Batch: 194156

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 194197

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	2180		ug/L		87	32 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*99*		*31 - 150*

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

Lab Sample ID: LCSD 720-194197/3-A
Matrix: Water
Analysis Batch: 194156

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 194197

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	2320		ug/L		93	32 - 119	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*100*		*31 - 150*

GC/MS VOA

Analysis Batch: 194081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-3 MS	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-3 MSD	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-4	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-5	MW-7	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-6	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-7	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-8	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-9	MW-9	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-10	MW-8	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-11	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-69096-12	MW-12	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-194081/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-194081/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-194081/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-194081/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-194081/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 194165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-194165/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-194165/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-194165/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-194165/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-194165/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

GC/MS Semi VOA

Analysis Batch: 193936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-1	MW-11	Total/NA	Water	8270C SIM	193943
720-69096-2	MW-10	Total/NA	Water	8270C SIM	193943

GC/MS Semi VOA (Continued)

Analysis Batch: 193936 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-4	MW-6	Total/NA	Water	8270C SIM	193943
720-69096-9	MW-9	Total/NA	Water	8270C SIM	193943
720-69096-10	MW-8	Total/NA	Water	8270C SIM	193943
LCS 720-193943/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	193943
LCSD 720-193943/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	193943
MB 720-193943/1-A	Method Blank	Total/NA	Water	8270C SIM	193943

Prep Batch: 193943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-1	MW-11	Total/NA	Water	3510C	
720-69096-2	MW-10	Total/NA	Water	3510C	
720-69096-4	MW-6	Total/NA	Water	3510C	
720-69096-9	MW-9	Total/NA	Water	3510C	
720-69096-10	MW-8	Total/NA	Water	3510C	
LCS 720-193943/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-193943/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-193943/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 194007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-4	MW-6	Total/NA	Water	8270C SIM	193943

Prep Batch: 194097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-3	MW-3	Total/NA	Water	3510C	
720-69096-5	MW-7	Total/NA	Water	3510C	
720-69096-6	MW-4	Total/NA	Water	3510C	
720-69096-7	MW-5	Total/NA	Water	3510C	
720-69096-8	MW-1	Total/NA	Water	3510C	
720-69096-11	MW-2	Total/NA	Water	3510C	
720-69096-12	MW-12	Total/NA	Water	3510C	
LCS 720-194097/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-194097/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-194097/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 194117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-3	MW-3	Total/NA	Water	8270C SIM	194097
720-69096-5	MW-7	Total/NA	Water	8270C SIM	194097
720-69096-6	MW-4	Total/NA	Water	8270C SIM	194097
720-69096-7	MW-5	Total/NA	Water	8270C SIM	194097
720-69096-8	MW-1	Total/NA	Water	8270C SIM	194097
720-69096-11	MW-2	Total/NA	Water	8270C SIM	194097
720-69096-12	MW-12	Total/NA	Water	8270C SIM	194097
LCS 720-194097/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	194097
LCSD 720-194097/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	194097
MB 720-194097/1-A	Method Blank	Total/NA	Water	8270C SIM	194097

QC Association Summary

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

TestAmerica Job ID: 720-69096-1

GC Semi VOA

Analysis Batch: 194156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-194197/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	194197
LCSD 720-194197/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	194197
MB 720-194197/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	194197

Prep Batch: 194197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-1	MW-11	Silica Gel Cleanup	Water	3510C SGC	
720-69096-2	MW-10	Silica Gel Cleanup	Water	3510C SGC	
720-69096-4	MW-6	Silica Gel Cleanup	Water	3510C SGC	
720-69096-9	MW-9	Silica Gel Cleanup	Water	3510C SGC	
720-69096-10	MW-8	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-194197/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-194197/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-194197/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 194250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69096-1	MW-11	Silica Gel Cleanup	Water	8015B	194197
720-69096-2	MW-10	Silica Gel Cleanup	Water	8015B	194197
720-69096-4	MW-6	Silica Gel Cleanup	Water	8015B	194197
720-69096-9	MW-9	Silica Gel Cleanup	Water	8015B	194197
720-69096-10	MW-8	Silica Gel Cleanup	Water	8015B	194197

Lab Chronicle

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

TestAmerica Job ID: 720-69096-1

Client Sample ID: MW-11
Date Collected: 12/08/15 08:36
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			193943	12/10/15 10:25	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	193936	12/10/15 20:49	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			194197	12/15/15 13:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194250	12/17/15 02:07	JXL	TAL PLS

Client Sample ID: MW-10
Date Collected: 12/08/15 09:09
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			193943	12/10/15 10:25	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	193936	12/10/15 21:13	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			194197	12/15/15 13:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194250	12/17/15 02:31	JXL	TAL PLS

Client Sample ID: MW-3
Date Collected: 12/08/15 09:12
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	194165	12/15/15 16:21	JRM	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	194081	12/14/15 12:46	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 20:47	MQL	TAL PLS

Client Sample ID: MW-6
Date Collected: 12/08/15 10:42
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	194081	12/14/15 13:14	PRD	TAL PLS
Total/NA	Prep	3510C			193943	12/10/15 10:25	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		5	193936	12/10/15 22:48	MQL	TAL PLS
Total/NA	Prep	3510C			193943	12/10/15 10:25	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		2	194007	12/11/15 23:41	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			194197	12/15/15 13:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		3	194250	12/17/15 02:55	JXL	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-69096-1

Client Sample ID: MW-7
Date Collected: 12/08/15 11:18
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		2	194081	12/14/15 13:42	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 21:11	MQL	TAL PLS

Client Sample ID: MW-4
Date Collected: 12/08/15 11:55
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		20	194081	12/14/15 14:10	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 21:35	MQL	TAL PLS

Client Sample ID: MW-5
Date Collected: 12/08/15 07:56
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	194081	12/14/15 14:37	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 21:58	MQL	TAL PLS

Client Sample ID: MW-1
Date Collected: 12/08/15 12:25
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-8
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	194081	12/14/15 15:05	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 22:22	MQL	TAL PLS

Client Sample ID: MW-9
Date Collected: 12/08/15 12:50
Date Received: 12/09/15 09:50

Lab Sample ID: 720-69096-9
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	194081	12/14/15 15:33	PRD	TAL PLS
Total/NA	Prep	3510C			193943	12/10/15 10:25	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	193936	12/10/15 21:37	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			194197	12/15/15 13:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194250	12/17/15 01:19	JXL	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-69096-1

Client Sample ID: MW-8

Lab Sample ID: 720-69096-10

Date Collected: 12/08/15 13:10

Matrix: Water

Date Received: 12/09/15 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	194081	12/14/15 16:01	PRD	TAL PLS
Total/NA	Prep	3510C			193943	12/10/15 10:25	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	193936	12/10/15 22:00	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			194197	12/15/15 13:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194250	12/17/15 01:43	JXL	TAL PLS

Client Sample ID: MW-2

Lab Sample ID: 720-69096-11

Date Collected: 12/08/15 13:35

Matrix: Water

Date Received: 12/09/15 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		50	194081	12/14/15 16:28	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 22:45	MQL	TAL PLS

Client Sample ID: MW-12

Lab Sample ID: 720-69096-12

Date Collected: 12/08/15 09:38

Matrix: Water

Date Received: 12/09/15 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	194081	12/14/15 16:56	PRD	TAL PLS
Total/NA	Prep	3510C			194097	12/14/15 10:08	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	194117	12/14/15 23:09	MQL	TAL PLS

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 720-69096-1

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 *

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 720-69096-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTMS	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: 720-69096-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-69096-1	MW-11	Water	12/08/15 08:36	12/09/15 09:50
720-69096-2	MW-10	Water	12/08/15 09:09	12/09/15 09:50
720-69096-3	MW-3	Water	12/08/15 09:12	12/09/15 09:50
720-69096-4	MW-6	Water	12/08/15 10:42	12/09/15 09:50
720-69096-5	MW-7	Water	12/08/15 11:18	12/09/15 09:50
720-69096-6	MW-4	Water	12/08/15 11:55	12/09/15 09:50
720-69096-7	MW-5	Water	12/08/15 07:56	12/09/15 09:50
720-69096-8	MW-1	Water	12/08/15 12:25	12/09/15 09:50
720-69096-9	MW-9	Water	12/08/15 12:50	12/09/15 09:50
720-69096-10	MW-8	Water	12/08/15 13:10	12/09/15 09:50
720-69096-11	MW-2	Water	12/08/15 13:35	12/09/15 09:50
720-69096-12	MW-12	Water	12/08/15 09:38	12/09/15 09:50

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

720-69096

Reference #: 165481

Date 12-8-15 Page 1 of 2

12/21/2015

Report To

Attn: Christine Tidwell
Company: BAI
Address: 4820 Business Center Dr #110 Fairfield, CA
Email: khamidi@broadbent.com
Bill To:
Sampled By: Kais Hamidi
Attn:
Phone: 707-455-7290

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) EPA 8260B	HVOCs by EPA 8260B	EPA 8260B: Gas BTEX / Oxygenates DCA, EDB, Ethanol	TEPH EPA 8015B Silica Gel / Diesel Motor Oil Other	SemiVolatile Organics GC/MS EPA 8270C	PNA/PAH's by 8270C / 8270C SIM	Oil and Grease (EPA 1664/9071) Petroleum Total	Pesticides EPA 8081 PCBs EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: 6010B 200.7 Lead LUFT RCRA Other:	Metals: 6020 200.8 (ICP-MS):	W.E.T (STLC) TCLP W.E.T (DI)	Hex. Chrom by EPA 7196 or EPA 7199	pH 9040 SM4500	Spec. Cond. Alkalinity TDS TSS SS	Anions: Cl SO_4 NO_3 F Br NO_2 PO_4	Perchlorate by EPA 314.0	COD EPA 410.4 SM5220D Turbidity	In TBE 4 9270	N 4 y 8270	Number of Containers
MW-11	12-8-15	0836	AQ		X	X																			7
MW-10	12-8-15	0906	AQ	7 HCL	X	X																			7
MW-3	12-8-15	1012	AQ	7	X	X																			7
MW-6	12-8-15	1042	AQ	7	X	X																			7
MW-7	12-8-15	1118	AQ	7	X	X																			7
MW-4	12-8-15	1155	AQ	7	X	X																			7
MW-5	12-8-15	0756	AQ	7	X	X																			7
MW-1	12-8-15	1225	AQ	7	X	X																			7
MW-9	12-8-15	1250	AQ	7	X	X																			7
MW-8	12-8-15	1310	AQ	7	X	X																			7

720-69096 Chain of Custody

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Project Info.

Project Name/ #: Arcadis 111216
PO#: 90-88-662

Sample Receipt

of Containers: 7 Each
Head Space:
Temp:
Credit Card Y/N: If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1604	Signature: Time:	Signature: Time:
Printed Name: Kais Hamidi Date: 12-8-15	Printed Name: Date:	Printed Name: Date:
Company: BAI	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 12-9-15 0950	Signature: Time:	Signature: Time:
Printed Name: Mulben Date: 12-9-15	Printed Name: Date:	Printed Name: Date:
Company: [signature]	Company:	Company:

Rev.10/2012

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) [illegible]-1919 • Fax: (925) [illegible]

Reference #: 165481

Date 12-9-15 Page 2 of 2

90-69096

7/21/2015

Report To

Attn: Kristine Tidwell
Company: BAI
Address: 4820 Business Center Dr #110, Fairfield CA
Email: khamidi@broadbeachinc.com

Bill To:

Sampled By: Kais Hamidi

Attn:

Phone: 707-455-7290

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B	HVOCs by ☒ EPA 8260B	EPA 8260B: ☒ Gas ☒ BTEX ☒ 5 Oxygenates ☒ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☒ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☒ EPA 8270C	PNA/PAH's by ☒ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	MTBE by 8270	N by 8270	Number of Containers
MW-2	12-8-15	1335	AQ	7 HCl	✓	✓	✓	✓	✓	✓													✓	✓	7
MW-12	12-8-15	0935	AQ	7 HCl	✓	✓	✓	✓	✓	✓													✓	✓	7
TB-11126-121815			AQ	☒																					

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Project Info.

Project Name/ #: Arcadis 11126

PO#: 90-55-662

Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers: 7 Each

Head Space:

Temp:

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1604	Signature: Time:	Signature: Time:
Printed Name: Kais Hamidi Date: 12-8-15	Printed Name: Date:	Printed Name: Date:
Company: BAI	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 950	Signature: Time:	Signature: Time:
Printed Name: [signature] Date: 12-9-15	Printed Name: Date:	Printed Name: Date:
Company: [signature]	Company:	Company:

Rev.10/2012

Sharma, Dimple

From: Kristene Tidwell <Ktidwell@broadbentinc.com>
Sent: Thursday, December 10, 2015 10:31 AM
To: Sharma, Dimple
Subject: RE: TestAmerica report files from 720-69096-1 BP #11126, Emeryville
Attachments: image001.jpg

HI Dimple-

Here is what we need for this site-

MW-1 – GRO 8260, PAH 8270, DRO 8015 with Silica Gel, BTEX and TBA/TAME/MTBE 8260
MW-2 - GRO 8260, PAH 8270, DRO 8015 with Silica Gel, BTEX + 5 fuel oxys and 1,2-DCA/EDB 8260
MW-3– GRO 8260, PAH 8270, DRO 8015 with Silica Gel, TBA/TAME/MTBE 8260
MW-4– GRO 8260, PAH 8270, DRO 8015 with Silica Gel, TBA/TAME/MTBE 8260
MW-5– GRO 8260, PAH 8270, DRO 8015 with Silica Gel, BTEX and TBA/TAME/MTBE 8260
MW-6 - GRO 8260, PAH 8270, DRO 8015 with Silica Gel, TBA/TAME/MTBE 8260
MW-7 - GRO 8260, PAH 8270, DRO 8015 with Silica Gel, BTEX and TBA/TAME/MTBE 8260
MW-8 - GRO 8260, PAH 8270, DRO 8015 with Silica Gel, TBA/TAME/MTBE 8260
MW-9 - GRO 8260, PAH 8270, DRO 8015 with Silica Gel, BTEX and TBA/TAME/MTBE 8260
MW-10 - PAH 8270, DRO 8015 with Silica Gel
MW-11- PAH 8270, DRO 8015 with Silica Gel
MW-12 - GRO 8260, PAH 8270, DRO 8015 with Silica Gel, BTEX + 5 fuel oxys and 1,2-DCA/EDB 8260

Notes – where Sample containers are broken and only PAH or DRO can be analyzed, analyze for PAH
- Assuming Naphthalene will be included in PAHs by 8270.

Based on your email regarding container breakage, it looks like we will need to collect additional amber liters for MW-1, MW-3, MW-4, MW-5, MW-7, and MW-12. Looking to do that next week FYI.

I will get you the Arcadis contact person shortly.

Thank you,
Kristene Tidwell, PG, CHG
Associate Hydrogeologist/ Office Manager

4820 Business Center Drive, Suite 110
Fairfield, CA 94534
[T] 707-455-7290 • [F] 707-863-9046 • [C] 707-430-7133
ktidwell@broadbentinc.com

720-69096 Chain of Custody

BROADBENT
www.broadbentinc.com

From: Sharma, Dimple [mailto:dimple.sharma@testamericainc.com]
Sent: Thursday, December 10, 2015 9:36 AM
To: Kristene Tidwell
Subject: TestAmerica report files from 720-69096-1 BP #11126, Emeryville

Hello,

I just want to notify you that a lot of the containers for this job were received broken and we do not have enough sample to do the analyses. Please let me knwo if you want diesel analyzed and or PNAs analyzed since we only have one amber. Also the coc is not filled correctly as more analyses are requested. The column for VOCs, HVOCs and oxys is checked. Please let me know what you want analyzed on the voas.
Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

DIMPLE SHARMA
Senior Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel 925.484.1919
www.testamericainc.com

Reference: [202839]
Attachments: 1

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 720-69096-1

Login Number: 69096
List Number: 1
Creator: Mullen, Joan

List Source: TestAmerica Pleasanton

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.	False	
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	

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: 720-69262-1
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:
12/30/2015 11:13:54 AM
Afsaneh Salimpour, Senior Project Manager
afsaneh.salimpour@testamericainc.com

Designee for

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@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.

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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)

Job ID: 720-69262-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-69262-1

Comments
No additional comments.

Receipt
The samples were received on 12/16/2015 2:31 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 16.9º C.

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

Organic Prep

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

Detection Summary

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-1 — Lab Sample ID: 720-69262-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	210		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-3 — Lab Sample ID: 720-69262-2

No Detections.

Client Sample ID: MW-12 — Lab Sample ID: 720-69262-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	51		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-5 — Lab Sample ID: 720-69262-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1100		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-7 — Lab Sample ID: 720-69262-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	690		51		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-4 — Lab Sample ID: 720-69262-6

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-1
Date Collected: 12/16/15 13:30
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-1
Matrix: Water

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]	210		50		ug/L		12/23/15 11:10	12/24/15 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.04*		*0 - 5*	*12/23/15 11:10*	*12/24/15 14:43*	*1*
p-Terphenyl	*86*		*31 - 150*	*12/23/15 11:10*	*12/24/15 14:43*	*1*

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-3
Date Collected: 12/16/15 12:30
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-2
Matrix: Water

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		12/23/15 11:10	12/24/15 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.0009*		*0 - 5*	*12/23/15 11:10*	*12/24/15 15:07*	*1*
p-Terphenyl	*97*		*31 - 150*	*12/23/15 11:10*	*12/24/15 15:07*	*1*

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-12
Date Collected: 12/16/15 12:00
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-3
Matrix: Water

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]	51		50		ug/L		12/23/15 11:10	12/24/15 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.01*		*0 - 5*	*12/23/15 11:10*	*12/24/15 15:31*	*1*
p-Terphenyl	*88*		*31 - 150*	*12/23/15 11:10*	*12/24/15 15:31*	*1*

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-5
Date Collected: 12/16/15 11:30
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-4
Matrix: Water

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]	1100		50		ug/L		12/23/15 11:10	12/24/15 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.3*		*0 - 5*	*12/23/15 11:10*	*12/24/15 15:55*	*1*
p-Terphenyl	*86*		*31 - 150*	*12/23/15 11:10*	*12/24/15 15:55*	*1*

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-7
Date Collected: 12/16/15 12:55
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-5
Matrix: Water

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]	690		51		ug/L		12/23/15 11:10	12/24/15 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.003*		*0 - 5*	*12/23/15 11:10*	*12/24/15 17:32*	*1*
p-Terphenyl	*67*		*31 - 150*	*12/23/15 11:10*	*12/24/15 17:32*	*1*

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-4
Date Collected: 12/16/15 13:10
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-6
Matrix: Water

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		12/23/15 11:10	12/24/15 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.01*		*0 - 5*	*12/23/15 11:10*	*12/24/15 16:19*	*1*
p-Terphenyl	*99*		*31 - 150*	*12/23/15 11:10*	*12/24/15 16:19*	*1*

Surrogate Summary

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

TestAmerica Job ID: 720-69262-1

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

Matrix: Water

Prep Type: Silica Gel Cleanup

		Percent Surrogate Recovery (Acceptance Limits)									
		NDA1	PTP1								
Lab Sample ID	Client Sample ID	(0-5)	(31-150)								
720-69262-1	MW-1	0.04	86								
720-69262-2	MW-3	0.0009	97								
720-69262-3	MW-12	0.01	88								
720-69262-4	MW-5	0.3	86								
720-69262-5	MW-7	0.003	67								
720-69262-6	MW-4	0.01	99								
LCS 720-194662/2-A	Lab Control Sample		113								
LCSD 720-194662/3-A	Lab Control Sample Dup		112								
MB 720-194662/1-A	Method Blank	0.004	99								

Surrogate Legend

NDA = Capric Acid (Surr)
PTP = p-Terphenyl

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

Lab Sample ID: MB 720-194662/1-A
Matrix: Water
Analysis Batch: 194720

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 194662

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		12/23/15 11:10	12/24/15 19:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.004*		*0 - 5*	*12/23/15 11:10*	*12/24/15 19:57*	*1*
p-Terphenyl	*99*		*31 - 150*	*12/23/15 11:10*	*12/24/15 19:57*	*1*

Lab Sample ID: LCS 720-194662/2-A
Matrix: Water
Analysis Batch: 194720

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 194662

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	1830		ug/L		73	32 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*113*		*31 - 150*

Lab Sample ID: LCSD 720-194662/3-A
Matrix: Water
Analysis Batch: 194720

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 194662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	2400		ug/L		96	32 - 119	27	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*112*		*31 - 150*

QC Association Summary

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

TestAmerica Job ID: 720-69262-1

GC Semi VOA

Prep Batch: 194662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69262-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
720-69262-2	MW-3	Silica Gel Cleanup	Water	3510C SGC	
720-69262-3	MW-12	Silica Gel Cleanup	Water	3510C SGC	
720-69262-4	MW-5	Silica Gel Cleanup	Water	3510C SGC	
720-69262-5	MW-7	Silica Gel Cleanup	Water	3510C SGC	
720-69262-6	MW-4	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-194662/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-194662/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-194662/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 194720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-69262-1	MW-1	Silica Gel Cleanup	Water	8015B	194662
720-69262-2	MW-3	Silica Gel Cleanup	Water	8015B	194662
720-69262-3	MW-12	Silica Gel Cleanup	Water	8015B	194662
720-69262-4	MW-5	Silica Gel Cleanup	Water	8015B	194662
720-69262-5	MW-7	Silica Gel Cleanup	Water	8015B	194662
720-69262-6	MW-4	Silica Gel Cleanup	Water	8015B	194662
LCS 720-194662/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	194662
LCSD 720-194662/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	194662
MB 720-194662/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	194662

Lab Chronicle

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

TestAmerica Job ID: 720-69262-1

Client Sample ID: MW-1
Date Collected: 12/16/15 13:30
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			194662	12/23/15 11:10	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194720	12/24/15 14:43	JXL	TAL PLS

Client Sample ID: MW-3
Date Collected: 12/16/15 12:30
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			194662	12/23/15 11:10	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194720	12/24/15 15:07	JXL	TAL PLS

Client Sample ID: MW-12
Date Collected: 12/16/15 12:00
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			194662	12/23/15 11:10	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194720	12/24/15 15:31	JXL	TAL PLS

Client Sample ID: MW-5
Date Collected: 12/16/15 11:30
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			194662	12/23/15 11:10	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194720	12/24/15 15:55	JXL	TAL PLS

Client Sample ID: MW-7
Date Collected: 12/16/15 12:55
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			194662	12/23/15 11:10	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194720	12/24/15 17:32	JXL	TAL PLS

Client Sample ID: MW-4
Date Collected: 12/16/15 13:10
Date Received: 12/16/15 14:31

Lab Sample ID: 720-69262-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			194662	12/23/15 11:10	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	194720	12/24/15 16:19	JXL	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-69262-1

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 720-69262-1

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 *

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 720-69262-1

Method	Method Description	Protocol	Laboratory
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: 720-69262-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-69262-1	MW-1	Water	12/16/15 13:30	12/16/15 14:31
720-69262-2	MW-3	Water	12/16/15 12:30	12/16/15 14:31
720-69262-3	MW-12	Water	12/16/15 12:00	12/16/15 14:31
720-69262-4	MW-5	Water	12/16/15 11:30	12/16/15 14:31
720-69262-5	MW-7	Water	12/16/15 12:55	12/16/15 14:31
720-69262-6	MW-4	Water	12/16/15 13:10	12/16/15 14:31

Sharma, Dimple

From: Kristene Tidwell <Ktidwell@broadbentinc.com>
Sent: Thursday, December 17, 2015 10:26 AM
To: Sharma, Dimple
Subject: Re: Scanned image from MX-M503N

Sorry dimple- should be dro only for all samples. Will revise the cox this afternoon when I am back in the office.

Sent from my iPhone

> On Dec 17, 2015, at 10:17 AM, Sharma, Dimple <Dimple.Sharma@testamericainc.com> wrote:
>
> E received the attached coc yesterday. Please revise the coc to reflect what analysis needs to be performed. The sampler took the original coc from the sample receiving tech and marked it for everything.
>
> Thanks.
>
> As we approach the upcoming Christmas Holiday observed on Friday, December 25th & Monday, December 28th and New Year's Day Holiday on Friday, January 1st we want you to know that FedEx and UPS will not have scheduled service on 12/25/15 or 1/1/16 so please plan accordingly. Despite this logistics challenge please let us know how we can extend solutions to best support your analytical needs over this holiday period. Please note that if you have BODs that will be sampled on December 18th, 22nd, 23rd, or 28th, or have short hold samples that will arrive on December 24th, 26th, 31st or January 2nd we ask that you communicate and make any necessary confirmed arrangements with your Project Manager in advance to ensure your samples meet all holding time criteria.
> *We are thankful for your business and hope that you have a wonderful and safe holiday.*
> Dimple Sharma
> Senior Project Manager
> TestAmerica
> THE LEADER IN ENVIRONMENTAL TESTING
> 1220 Quarry Lane
> Pleasanton, CA 94566
> Tel 925.484.1919 ext. 103 | Fax 925.600.3002 www.testamericainc.com
>
> -----Original Message-----
> From: sftai@testamericainc.com [mailto:sftai@testamericainc.com]
> Sent: Thursday, December 17, 2015 7:18 AM
> To: Sharma, Dimple
> *Subject: Scanned image from MX-M503N*
>

720-69262 Chain of Custody

> Reply to: sftai@testamericainc.com <sftai@testamericainc.com> Device
> Name: SFPRN03 Device Model: MX-M503N
> Location: Not Set
>
> File Format: PDF MMR(G4)
> Resolution: 200dpi x 200dpi
>
> Attached file is scanned image in PDF format.
> Use Acrobat(R)Reader(R) or Adobe(R)Reader(R) of Adobe Systems Incorporated to view the document.
> Adobe(R)Reader(R) can be downloaded from the following URL:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton, CA 94566-4756
Phone: (925) [illegible]19 • Fax: (925) [illegible]602

720-69262

Reference #: 165 643

Date 12/16/15 Page 1 of 1

12/30/2015

Report To

Attn: Kristine Tidwell
Company: Broadbent & Associates Inc.
Address: 4820 Business Center Dr
Email: ktidwell@broadbentinc.com
Bill To:
Sampled By: IH
Attn:
Phone: 707-455-7290

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.
MW-1	12/16/15	1330		
MW-3	12-16-15	1230		
MW-12	12-16-15	1200		
MW-5	12-16-15	1130		
MW-7	12-16-15	1255		
MW-4	12-16-15	1310		

Volatile Organics GC/MS (VOCs) ☐ EPA 8260B
HVOCs by ☐ EPA 8260B
EPA 8260B: ☒ Gas ☒ BTEX ☐ 5 Oxygenates ☒ DCA, EDB ☒ Ethanol
TEH: LEPA 8015B ☒ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other
SemiVolatile Organics GC/MS ☐ EPA 8270C
PNA/PAH's by ☐ 8270C ☐ SIM
Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total
Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082
CAM17 Metals (EPA 6010/7470/7471) ☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP
Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:
Metals: ☐ 6020 ☐ 200.8 (ICP-MS):
Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199
pH ☐ 9040 ☐ SM4500
☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS
Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4
☐ Perchlorate by EPA 314.0
COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
MTBE by 8270
VOC by 8270
# of Containers

720-69262 Chain of Custody

Project Info.

Project Name/ #: Arcadis 11126
PO#:
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp: 16.9°C

TAT	10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
							STD

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1431	Signature: Time:	Signature: Time:
Printed Name: Kaig Itami Date: 12/16/15	Printed Name: Date:	Printed Name: Date:
Company: BAI	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1431	Signature: Time:	Signature: Time:
Printed Name: Dennis Avalz Date: 12/16/15	Printed Name: Date:	Printed Name: Date:
Company: TA	Company:	Company:

Rev. 10/20

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 720-69262-1

Login Number: 69262
List Number: 1
Creator: Mullen, Joan

List Source: TestAmerica Pleasanton

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 2015 Semi-Annual Groundwater Monitoring Report**
Report Type:	**Monitoring Report - Semi-Annually**
Report Date:	**2/16/2016**
Facility Global ID:	**T0600100208**
Facility Name:	**BP #11126**
File Name:	**CA 11126 160212 BP - 3Q4Q15 SAGWMR.pdf**
Organization Name:	**ARCADIS**
Username:	**ARCADISBP**
IP Address:	**199.19.248.9**
Submittal Date/Time:	**2/16/2016 3:48:48 PM**
Confirmation Number:	**2295134127**