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Alameda County Environmental Health
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Alameda, California 94502

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

ENVIRONMENT

Dear Mr. Detterman:

Date:
August 7, 2015

ARCADIS U.S., Inc. (ARCADIS) has prepared this First Quarter and Second 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.

Contact:
Hollis Phillips

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

Phone:
415.432.6903

Email:
hollis.phillips@arcadis-us.com

I declare, to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct. If you have any questions or comments regarding the content of this report, please contact Rob Moniz by telephone (925.296.7839), or by e-mail (Robert.Moniz@arcadis-us.com), or contact Hollis Phillips by telephone (415.432.6903), or by e-mail (Hollis.Phillips@arcadis-us.com).


Our ref:
GP09BPNA.C044.N0000

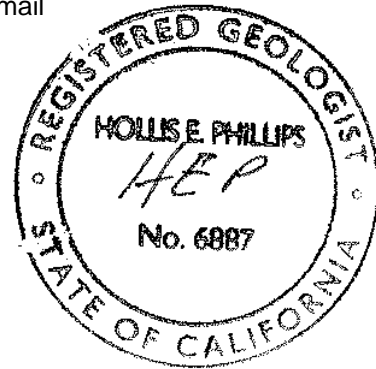
Sincerely,
ARCADIS U.S. Inc.

Prepared by:


Rob Moniz
Geologist

Approved by:


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



Copies:
GeoTracker upload
ACEH FTP site upload

Imagine the result



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

Subject:

**First Quarter and Second Quarter 2015–
Semi-Annual Groundwater Monitoring Report**

Former BP Station No. 11126
1700 Powell Street, Emeryville, California
Regulatory Site No: RO0000066

Dear Mr. Detterman:

ARCADIS U.S., Inc. (ARCADIS) has prepared this *First Quarter and Second 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 (January to June, 2015)

- Prepared and submitted the *Third Quarter and Fourth Quarter 2014 Semi-Annual Groundwater Monitoring Report*, dated February 9, 2015, to Alameda County Environmental Health (ACEH).
- Conducted groundwater monitoring and sampling for the Second Quarter 2015 on June 18, 2015.

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Work Proposed – Reporting Period (July to December, 2015)

- Submit this *First and Second Quarter 2015 Semi-Annual Groundwater Monitoring Report*, contained herein.
- Perform groundwater monitoring and sampling activities during Fourth Quarter, 2015.
- Prepare the *Monitoring Well Installation Report* which includes the *Data Gaps Investigation* (due August 21, 2015).

2. Background

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

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

3. Groundwater Monitoring/Sampling Activities and Results

Groundwater monitoring associated with the Site is conducted on a semi-annual frequency during the second and fourth quarters of each year. Second Quarter 2015 groundwater monitoring was conducted on June 18, 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 Second 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 Second Quarter 2015 sampling event are included in Appendices B and C, respectively.

BAI personnel measured depth to groundwater in MW-1 through MW-11 prior to sampling. Depth to groundwater measurements ranged from 4.32 feet (MW-1) to 10.02 feet (MW-11).

Groundwater samples were collected on June 18, 2015 from monitoring wells MW-1 through MW-11, consistent with the current monitoring schedule. Samples were submitted to ESC Lab Sciences (ESC), of Mount Juliet, Tennessee, a California Department of Public Health certified analytical laboratory. This was the first set of samples from this project sent to the ESC. The majority of the analytical results were similar to previous data (performed by Test America Inc.; TA), however the concentrations of diesel range organics (DRO) were elevated compared to historical data.

Soon after the results were received, ARCADIS sampled a newly installed site monitoring well, MW-12. Results from MW-12 will be discussed in the *Monitoring Well Installation Report* which includes the *Data Gaps Investigation*, due August 21, 2015. Split samples were collected from MW-12, one analyzed by ESC and one by the former laboratory, TA. TA measured <50 µg/L, whereas ESC measured 8,800 µg/L in the split sample. Originally ESC indicated there was nothing wrong with their results, however after a second review of their standard operating procedures, they determined that the silica gel clean-up step was missed. When they reran the split sample ensuring that the silica gel cleanup step was included, they got a new result of 180 µg/L. Regarding the results for MW-1 through MW-11 (presented herein), ESC declared all procedures were followed, and it was only the MW-12 data that was in error. Another possible issue with the ESC results is that they report DRO data as carbon chain C12-C22. The screening level standards are based off of C10-C28 (which TA compares against), and this shift in carbon range may also be an explanation for the skewed data. For these reasons, ARCADIS believes DRO data from ESC may not accurately reflect current concentrations, and will return to using Test America for all future analyses at this site.

Groundwater samples collected from MW-1 through MW-11 were tested for the following constituents as directed by ACEH in their letter dated June 30, 2014:

- Total petroleum hydrocarbons as DRO (C12-C22) using United States Environmental Protection Agency (USEPA) Test Method 8015B with Silica Gel Cleanup;
- Naphthalene by USEPA Method 8260B; and
- Polycyclic aromatic hydrocarbons (PAH) by USEPA Method 8270.

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

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

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

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

- Di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), 1,2-Dichloroethane (1,2-DCA), 1,2-Dibromoethane (EDB), and Ethanol 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 0.09 ft/ft. (Figure 3). Historical data indicate the groundwater flow direction is predominately toward the southwest as shown on Figure 5.
- GRO was detected above the laboratory reporting limit of 100 µg/L in six of the nine groundwater monitoring well samples with concentrations ranging from 120 micrograms per liter (µg/L; MW-4) to 5,600 µg/L (MW-2). GRO concentrations were below the laboratory reporting limit at three of the nine wells, (MW-3), (MW-6), and (MW-7).
- DRO was detected above the laboratory reporting limit of 100 µg/L in each of the eleven groundwater monitoring well samples with concentrations ranging from 110 µg/L (MW-11) to 7,400 µg/L (MW-6). As indicated above, this is not consistent with historical monitoring events. ARCADIS believes DRO data from ESC may not accurately reflect current concentrations, and will therefore return to using Test America for all future analyses.
- Benzene was detected in three of the five groundwater monitoring well samples with concentrations ranging from 1.63 µg/L (MW-9) to 909 µg/L (MW-2). Benzene

concentrations were below laboratory reporting limits in two groundwater monitoring well samples during this reporting period (MW-1 and MW-7).

- Toluene was detected in two of the five groundwater monitoring well samples with concentrations ranging from 7.08 µg/L (MW-9) to 12.9 µg/L (MW-2). Toluene concentrations were below analytical reporting limits in three of the five groundwater monitoring well samples this reporting period (MW-1, MW-5, and MW-7).
- Ethylbenzene was detected in two of the five groundwater monitoring well samples with concentrations ranging from 0.479 µg/L (MW-9) to 8.49 µg/L (MW-2). Ethylbenzene concentrations were below analytical reporting limits in four groundwater monitoring well samples this reporting period (MW-1, MW-5, and MW-7).
- Xylenes were detected in three of the five groundwater monitoring well samples at a concentration ranging from 2.94 µg/L (MW-5) to 15.4 µg/L (MW-2). Xylene concentrations were below analytical reporting limits in two groundwater monitoring well samples this reporting period (MW-1 and MW-7).
- MTBE was detected in all of the nine groundwater monitoring well samples with concentrations ranging from 0.398 µg/L (MW-8) to 152 µg/L (MW-9).
- TBA was detected in all of the nine groundwater monitoring well samples with concentrations ranging from 30.3 µg/L (MW-6) to 15,500 µg/L (MW-2).
- TAME was detected in one of nine groundwater monitoring well samples at a concentration of 4.47 µg/L (MW-9). TAME concentrations were below analytical reporting limits in eight groundwater monitoring well samples this reporting period (MW-1 through MW-8).
- DIPE, ETBE, 1,2-DCA, EDB and Ethanol were not detected above analytical reporting limits in the groundwater samples collected from MW-2.
- Concentrations of PAHs, including naphthalene, were generally not detected above respective laboratory reporting limits in groundwater samples collected from MW-1 through MW-11. Naphthalene was detected in groundwater samples collected from MW-1, MW-2, MW-4, MW-6, MW-7, and MW-9 at concentrations ranging from 0.031 µg/L (MW-7) to 4.1 µg/L (MW-2). Naphthalene was not detected in the groundwater samples collected from the remaining 5 groundwater

monitoring wells. Table 3 presents the groundwater sample analytical data for individual PAH results.

5. Recommendations

Based on the observed groundwater concentrations, ARCADIS recommends continued groundwater monitoring and sampling on a semi-annual basis and will use Test America to analyze samples. ARCADIS recommends continued DRO monitoring at wells MW-1, MW-2, and MW-6. Because naphthalene and PAHs results are not above screening levels, ARCADIS recommends no further analysis for those constituents.

If you have any questions or comments regarding the contents of this report, please contact Rob Moniz by telephone (925.296.7839), or by e-mail (Robert.Moniz@arcadis-us.com), or contact Hollis Phillips by telephone (415.432.6903), or by e-mail (Hollis.Phillips@arcadis-us.com).

Sincerely,

ARCADIS

Prepared by:

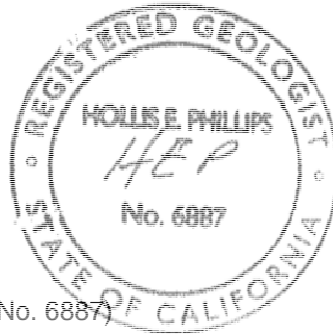


Rob Moniz
Geologist

Approved by:



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



Enclosures:

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

- Figure 1 Site Vicinity Map
- Figure 2 Site Plan
- Figure 3 Groundwater Elevation Contour Map – June 18, 2015
- Figure 4 Groundwater Hydrocarbon Concentration Map – June 18, 2015
- Figure 5 Groundwater Flow Direction Rose Diagram

Appendix A Previous Investigations and Site History Summary
Appendix B Groundwater Sampling Data Package
Appendix C Certified Laboratory Analytical Report

Copies: GeoTracker and ACEH FTP site uploads

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TABLES

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

Well I.D.	Drill Date	Well		Screen		Screen Length (feet)	Comments
		Depth (feet bgs)	Diameter (inches)	Top (feet bgs)	Bottom (feet bgs)		
Groundwater Monitoring Wells							
MW-1	10/20/1992	12	2	4	12	8	
MW-2	10/20/1992	12	2	5	12	7	
MW-3	10/20/1992	12	2	5	12	7	
MW-4	10/20/1992	12	2	5	12	7	
MW-5	9/2/1993	13.5	2	3.5	13.5	10	
MW-6	9/3/1993	14	2	4	14	10	
MW-7	9/3/1993	14	2	4	14	10	
MW-8	9/3/1993	14	2	4	14	10	
MW-9	9/3/1993	14	4	4	14	10	
MW-10	4/15/2005	20	2	7	17	10	
MW-11	4/15/2005	24	2	7	17	10	
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
Historical Groundwater Monitoring and Analytical Results
Former BP Station No. 11126
1700 Powell St., Emeryville, CA 94608

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

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-1	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	--		
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	--	0.18		
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	--	--	--	--	--	--	--	4.00	(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)

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-2	11/2/1995		8.56	5.55	--	3.01	20,000	--	3,800	1,200	570	2,700	15,000	--	--	--	--	--	--	--	7.30	
MW-2	2/5/1996	Dup	8.56	5.10	--	3.46	910	--	290	180	19	137	93	--	--	--	--	--	--	--	--	(Dup)
MW-2	2/5/1996		8.56	5.10	--	3.46	1,200	--	320	220	26	187	99	--	--	--	--	--	--	--	2.20	
MW-2	4/24/1996	Dup	8.56	--	--	--	<500	--	70	22	<10	61	<50	--	--	--	--	--	--	--	7.00	(Dup)
MW-2	4/24/1996		8.56	--	--	--	<500	--	100	30	<10	71	<100	--	--	--	--	--	--	--	--	
MW-2	7/15/1996		8.56	5.40	--	3.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	7/16/1996		8.56	--	--	--	12,000	--	3,300	1,400	250	2,610	1,400	--	--	--	--	--	--	--	7.80	
MW-2	7/30/1996		8.56	5.44	--	3.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/4/1996		8.56	7.06	--	1.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/5/1996	Dup	8.56	--	--	--	9,200	--	1,300	170	<25	2,240	1,100	--	--	--	--	--	--	--	--	(Dup)
MW-2	11/5/1996		8.56	--	--	--	7,200	--	1,400	230	38	2,110	1,100	--	--	--	--	--	--	--	7.40	
MW-2	5/17/1997		8.56	5.77	--	2.79	570	--	42	<5.0	5	60	210	--	--	--	--	--	--	--	6.90	
MW-2	8/11/1997		8.56	5.71	--	2.85	6,300	--	1,800	130	86	397	2,400	--	--	--	--	--	--	--	8.50	
MW-2	11/17/1997		8.56	6.91	--	1.65	2,400	--	220	30	33	259	130	--	--	--	--	--	--	--	7.90	
MW-2	1/29/1998		8.56	4.61	--	3.95	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	6.20	
MW-2	6/22/1998		8.56	4.80	--	3.76	4,200	--	640	150	120	650	560	--	--	--	--	--	--	--	5.40	
MW-2	12/30/1998		8.56	5.21	--	3.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	6/23/1999		8.56	5.30	--	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	9/23/1999		8.56	4.75	--	3.81	3,800	--	760	19	210	960	910	--	--	--	--	--	--	--	--	
MW-2	12/28/1999		8.56	4.51	--	4.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	3/22/2000		8.56	4.21	--	4.35	2,500	--	780	17	44	270	2,800	--	--	--	--	--	--	--	--	
MW-2	5/26/2000		8.56	4.66	--	3.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	9/6/2000		8.56	4.71	--	3.85	3,700	--	1,200	5.5	12	170	12,000	--	--	--	--	--	--	--	--	
MW-2	9/15/2000		8.56	4.74	--	3.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	12/11/2000		8.56	4.79	--	3.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	3/29/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-2	6/27/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-2	9/19/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-2	12/28/2001		8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-2	3/12/2002		8.56	4.25	--	4.31	26,000	--	1,160	4.4	61	171	37,300	--	--	--	--	--	--	--	--	
MW-2	6/13/2002		8.56	4.94	--	3.62	18,000	--	578	<50	<50	<100	84,600	--	--	--	--	--	--	--	--	
MW-2	9/6/2002		8.56	5.23	--	3.33	26,000	--	440	<50	<50	<50	45,000	--	--	--	--	--	--	--	--	
MW-2	12/13/2002		8.56	4.94	--	3.62	69,000	--	1,200	<500	<500	<500	98,000	--	--	--	--	--	--	--	--	
MW-2	2/19/2003		8.56	4.14	--	4.42	78,000	--	1,100	<500	<500	<500	81,000	--	--	--	--	--	--	--	--	
MW-2	6/6/2003		8.56	4.66	--	3.90	120,000	--	1,100	<1,000	<1,000	<1,000	72,000	<40,000	--	<1,000	<1,000	--	1,300	<200,000	--	
MW-2	8/7/2003		8.56	4.90	(SHEEN)	3.66	71,000	--	590	<500	<500	<500	83,000	45,000	<500	<500	<500	<500	1,300	<100,000	--	(Sheen)
MW-2	11/20/2003		8.56	4.59	--	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	--	

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-2	6/1/2007		11.39	4.34	--	7.05	120,000	--	12,000	6,400	4,200	11,000	17,000	4,900	<100	260	<100	<100	310	<50,000	--		
MW-2	9/13/2007		11.39	5.35	--	6.04	<5,000	--	770	<50	140	<100	2,300	42,000	<50	<100	<50	<50	50	<25,000	--		
MW-2	11/21/2007		11.39	5.19	--	6.20	27,000	--	4,500	220	1,600	2,800	5,200	5,000	<50	<100	<50	<50	160	<25,000	--		
MW-2	2/29/2008		11.39	4.41	--	6.98	44,000	--	6,100	320	3,800	6,600	4,900	2,500	<50	<100	<50	<50	120	<25,000	--		
MW-2	5/23/2008		11.39	5.25	--	6.14	13,000	--	1,700	<50	300	210	2,500	29,000	<50	140	<50	<50	60	<25,000	--		
MW-2	9/26/2008		11.39	5.81	--	5.58	4,800	--	220	12	20	42	960	77,000	<1.0	<1.0	2.8	<1.0	42	<250	--		
MW-2	12/23/2008		11.39	5.50	--	5.89	5,700	--	950	19	170	70	1,800	57,000	<2.0	<2.0	2.4	<2.0	51	<500	--		
MW-2	3/9/2009		11.39	4.35	--	7.04	25,000	--	3,200	73	2,800	2,200	2,200	21,000	<20	<20	<20	<20	82	<5,000	--		
MW-2	5/28/2009		11.39	4.90	--	6.49	55,000	--	4,700	740	3,800	8,100	2,800	2,000	<10	<10	<10	<10	110	<2,500	0.27		
MW-2	12/10/2009		11.39	5.29	--	6.10	2,200	--	250	7.3	13	14	360	44,000	<0.50	0.52	1.4	<0.50	8.7	<100	0.65		
MW-2	6/29/2010		11.39	5.03	--	6.36	5,300	--	800	<25	250	300	770	31,000	<25	<25	<25	<25	<25	<5,000	0.60	(P, odor)	
MW-2	12/30/2010		11.39	4.22	--	7.17	19,000	--	3,500	58	2,000	1,000	1,700	4,700	<25	<25	<25	<25	56	<12,000	--	(P)	
MW-2	6/29/2011		11.39	4.51	--	6.88	12,000	--	3,200	41	920	150	2,100	2,400	<25	<25	<25	<25	77	--	0.41	(P)	
MW-2	1/30/2012		11.39	4.93	--	6.46	13,000	--	3,000	45	640	370	1,700	1,900	<20	<20	<20	<20	60	--	0.63	(P)	
MW-2	6/27/2012		11.39	4.72	--	6.67	23,000	--	3,900	110	2,300	2,000	2,600	2,900	<20	<20	<20	<20	95	--	1.24	(P)	
MW-2	12/7/2012		11.39	4.11	--	7.28	10,000	--	2,600	31	350	72	1,300	3,400	<10	<10	<10	<10	51	--	1.03		
MW-2	6/6/2013		11.39	4.95	--	6.44	20,000	--	6,100	86	670	1,200	2,000	2,600	<10	<10	<10	<10	96	--	1.04		
MW-2	12/13/2013		11.39	5.29	--	6.10	<10,000	--	200	<100	<100	<200	140	32,000	<100	<100	<100	<100	<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	<5	<5	<5	<5	<500	6.39		
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	--	--	--	--	--	--	--	7.00		
MW-3	1/29/1998		8.25	5.10	--	3.15	270	1,700	0.53	<1.0	<1.0	<1.0	330	--	--	--	--	--	--	--	6.40		
MW-3	6/22/1998		8.25	5.50	--	2.75	200	2,200	<0.5	<1.0	<1.0	<1.0	130	--	--	--	--	--	--	--	5.50		
MW-3	12/30/1998		8.25	6.68	--	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	3/9/1999		8.25	5.53	--	2.72	60	840	<1.0	<1.0	<1.0	<1.0	19	--	--	--	--	--	--	--	--	--	
MW-3	6/23/1999		8.25	6.60	--	1.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	9/23/1999		8.25	6.17	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	12/28/1999		8.25	6.00	--	2.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-3	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	--		
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		

Table 2
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1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-3	6/18/2015		10.76	5.62	--	5.14	89 J	710	--	--	--	--	1.74	1,180	--	--	--	--	<1	--	0.48		
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	--	--	--	--	--	--	--	--	3.00	
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	<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	--	--	

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-4	9/30/2005		10.58	7.72	--	2.86	<2,500	--	63	58	46	140	110	30,000	<25	<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	--	0.74		
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	--	--	--	--	--	--	--	4.00		
MW-5	5/11/1994		7.69	5.28	--	2.41	11,000	--	1,100	39	110	57	165	--	--	--	--	--	--	--	8.00		
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		

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-5	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	--	
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)

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-5	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	<1	2.94 J	6.98	523	--	--	--	--	<1	--	0.24	(Tagged, sampled out of order due to traffic control restrictions.)
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	--	--	--	--	--	--	--	6.00	
MW-6	1/13/1995		8.52	5.95	--	2.57	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.00	
MW-6	4/13/1995		8.52	5.44	--	3.08	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.50	
MW-6	7/11/1995		8.52	5.68	--	2.84	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.40	
MW-6	11/2/1995		8.52	6.57	--	1.95	<50	--	<0.5	<0.5	<0.5	<1.0	35	--	--	--	--	--	--	--	8.30	
MW-6	2/5/1996		8.52	6.27	--	2.25	<50	--	<5.0	<10	<10	<10	<100	--	--	--	--	--	--	--	2.20	
MW-6	4/24/1996		8.52	5.95	--	2.57	<250	--	<2.5	<5.0	<5.0	<5.0	62	--	--	--	--	--	--	--	8.00	
MW-6	7/15/1996		8.52	6.39	--	2.13	<250	--	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8.00	
MW-6	7/30/1996		8.52	6.44	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/4/1996		8.52	8.05	--	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/5/1996		8.52	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.30	
MW-6	5/17/1997		8.52	6.75	--	1.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	8/11/1997		8.52	6.48	--	2.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/17/1997		8.52	9.27	--	-0.75	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.70	
MW-6	1/29/1998		8.52	7.98	--	0.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	6/22/1998		8.52	7.68	--	0.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/30/1998		8.52	6.98	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	3/9/1999		8.52	5.90	--	2.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	6/23/1999		8.52	6.93	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	9/23/1999		8.52	6.45	--	2.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/28/1999		8.52	6.33	--	2.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	3/22/2000		8.52	5.15	--	3.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	5/26/2000		8.52	5.72	--	2.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	9/15/2000		8.52	6.02	--	2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/11/2000		8.52	6.20	--	2.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	3/29/2001		8.52	5.34	--	3.18	750	--	<2.5	2.9	<2.5	12	820	--	--	--	--	--	--	--	--	
MW-6	6/27/2001		8.52	6.00	--	2.52	760	--	33	<2.5	<2.5	<7.5	968	--	--	--	--	--	--	--	--	
MW-6	9/19/2001		8.52	6.22	--	2.30	<500	--	<5.0	<5.0	<5.0	<15	879	--	--	--	--	--	--	--	--	
MW-6	12/28/2001		8.52	4.71	--	3.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NS)
MW-6	3/12/2002		8.52	4.96	--	3.56	<500	--	<5.0	<5.0	<5.0	<10	244	--	--	--	--	--	--	--	--	
MW-6	6/13/2002		8.52	5.78	--	2.74	<250	--	<2.5	<2.5	<2.5	<5.0	413	--	--	--	--	--	--	--	--	
MW-6	9/6/2002		8.52	6.14	--	2.38	130	--	<0.5	<0.5	<0.5	<0.5	240	--	--	--	--	--	--	--	--	
MW-6	12/13/2002		8.52	6.05	--	2.47	140	--	<1.0	<1.0	<1.0	<1.0	200	--	--	--	--	--	--	--	--	

Table 2
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Former BP Station No. 11126
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Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-6	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	--	2.18		
MW-7	10/12/1993		7.61	6.14	--	1.47	<50	--	<0.5	<0.5	<0.5	0.7	<5.0	--	--	--	--	--	--	--	--		
MW-7	2/15/1994		7.61	5.88	--	1.73	78	--	<0.5	<0.5	<0.5	0.6	<5.0	--	--	--	--	--	--	--	4.00		
MW-7	5/11/1994		7.61	5.76	--	1.85	70	--	<0.5	<0.5	<0.5	0.9	12	--	--	--	--	--	--	--	9.10		
MW-7	8/1/1994		7.61	5.97	--	1.64	77	--	<0.5	<0.5	<0.5	0.5	182	--	--	--	--	--	--	--	2.50		
MW-7	10/18/1994		7.61	6.24	--	1.37	<50	--	<0.5	<0.5	<0.5	<0.5	52	--	--	--	--	--	--	--	6.30		
MW-7	1/13/1995		7.61	5.39	--	2.22	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	8.20		
MW-7	4/13/1995		7.61	5.17	--	2.44	63	--	<0.5	<0.5	<0.5	1.4	--	--	--	--	--	--	--	--	8.40		
MW-7	7/11/1995		7.61	5.25	--	2.36	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.90		
MW-7	11/2/1995		7.61	6.19	--	1.42	<50	--	<0.5	<0.5	<0.5	<1.0	55	--	--	--	--	--	--	--	8.00		
MW-7	2/5/1996		7.61	5.69	--	1.92	<50	--	<0.5	<1.0	<1.0	<1.0	40	--	--	--	--	--	--	--	1.90		
MW-7	4/24/1996		7.61	5.59	--	2.02	<250	--	<2.5	<5.0	<5.0	<5.0	53	--	--	--	--	--	--	--	8.20		

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-7	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	<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	<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	--		

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-7	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		
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	<5	<1	<3	2.19	1,890	--	--	--	--	<1	--	0.13		
MW-8	10/12/1993		8.60	5.86	--	2.74	<50	--	<0.5	<0.5	<0.5	<0.5	11	--	--	--	--	--	--	--	--	--	
MW-8	2/15/1994		8.60	5.50	--	3.10	380	--	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	3.30		
MW-8	5/11/1994		8.60	5.09	--	3.51	330	--	<0.5	1.2	<0.5	1.9	<5.0	--	--	--	--	--	--	--	8.50		
MW-8	8/1/1994		8.60	5.20	--	3.40	260	--	<0.5	1.2	2.9	5.8	<5.0	--	--	--	--	--	--	--	2.30		
MW-8	10/18/1994		8.60	5.70	--	2.90	82	--	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	6.40		
MW-8	1/13/1995		8.60	4.96	--	3.64	<50	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	6.90		
MW-8	4/13/1995		8.60	5.40	--	3.20	270	--	<0.5	<0.5	<0.5	4.4	--	--	--	--	--	--	--	--	8.40		
MW-8	7/11/1995		8.60	6.01	--	2.59	320	--	<0.5	<0.5	<0.5	3.5	--	--	--	--	--	--	--	--	8.00		
MW-8	11/2/1995		8.60	6.81	--	1.79	100	--	<0.5	<0.5	<0.5	<1.0	<5.0	--	--	--	--	--	--	--	8.70		
MW-8	2/5/1996		8.60	6.12	--	2.48	<50	--	<5.0	<10	<10	<10	<100	--	--	--	--	--	--	--	1.50		
MW-8	4/24/1996		8.60	6.23	--	2.37	<50	--	<5.0	<10	<10	<10	<100	--	--	--	--	--	--	--	8.70		
MW-8	7/15/1996		8.60	6.70	--	1.90	<250	--	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8.40		
MW-8	7/30/1996		8.60	6.64	--	1.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/4/1996		8.60	8.36	--	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/5/1996		8.60	--	--	--	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.20		
MW-8	5/17/1997		8.60	7.03	--	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	8/11/1997		8.60	6.05	--	2.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/17/1997		8.60	9.14	--	-0.54	<50	--	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.70		
MW-8	1/29/1998		8.60	7.90	--	0.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	6/22/1998		8.60	7.72	--	0.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/30/1998		8.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-8	3/9/1999		8.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-8	6/23/1999		8.60	4.70	--	3.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	9/23/1999		8.60	4.22	--	4.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/28/1999		8.60	4.12	--	4.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	3/22/2000		8.60	4.71	--	3.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	5/26/2000		8.60	4.98	--	3.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	9/15/2000		8.60	4.62	--	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/11/2000		8.60	4.77	--	3.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	3/29/2001		8.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-8	6/27/2001		8.60	5.11	--	3.49	570	--	<2.5	<2.5	2.6	<7.5	3.4	--	--	--	--	--	--	--	--	--	
MW-8	9/19/2001		8.60	5.00	--	3.60	<500	--	<5.0	<5.0	<5.0	<15	<5.0	--	--	--	--	--	--	--	--	--	
MW-8	12/28/2001		8.60	4.15	--	4.45	440	--	<0.5	<0.5	0.98	<1.0	6.3	--	--	--	--	--	--	--	--	--	

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1700 Powell St., Emeryville, CA 94608**

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-8	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	--		
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	--	0.13		
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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

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

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1700 Powell St., Emeryville, CA 94608

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes
MW-9	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-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	--	
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	1.00	(P)
MW-10	12/30/2010		12.53	6.62	--	5.91	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<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	

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

Well ID	Date	Type	TOC (ft) ¹	DTW (ft bTOC)	Measured LNAPL Thickness (ft)	GW Elev (ft msl) ¹	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	Notes	
MW-10	12/13/2013		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-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	<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	<0.5	<50	--	
MW-11	12/28/2005		14.55	9.09	--	5.46	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	--	<0.5	<0.5	<100	--	
MW-11	3/23/2006		14.55	8.75	--	5.80	<50	--	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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		

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

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

- ft = Feet
- ft bTOC = Feet below top of casing
- 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
- 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 and again in July 2015.
- 2. Beginning in the first quarter 2003, GRO and VOCs analyzed by EPA Method 8260B.
- 3. 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.
- 4. Data from the June 18th, 2015 sampling event was ran by ESC Laboratories. Data was found to be inconsisent with data from previous years (as analyzed by Test America Inc.). The data is considered questionable and Test America will be used for all future analyses.

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

Sample Location	Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene
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
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
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
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
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
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
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
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
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
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
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

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

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

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
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
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
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
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
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
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
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
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
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
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

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

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

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
MW-2	12/16/2014	22	0.11	<0.10	--	--	--
	6/18/2015	4.1	0.17	<0.25	76	62	<0.25
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
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
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
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
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
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
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
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
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

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.

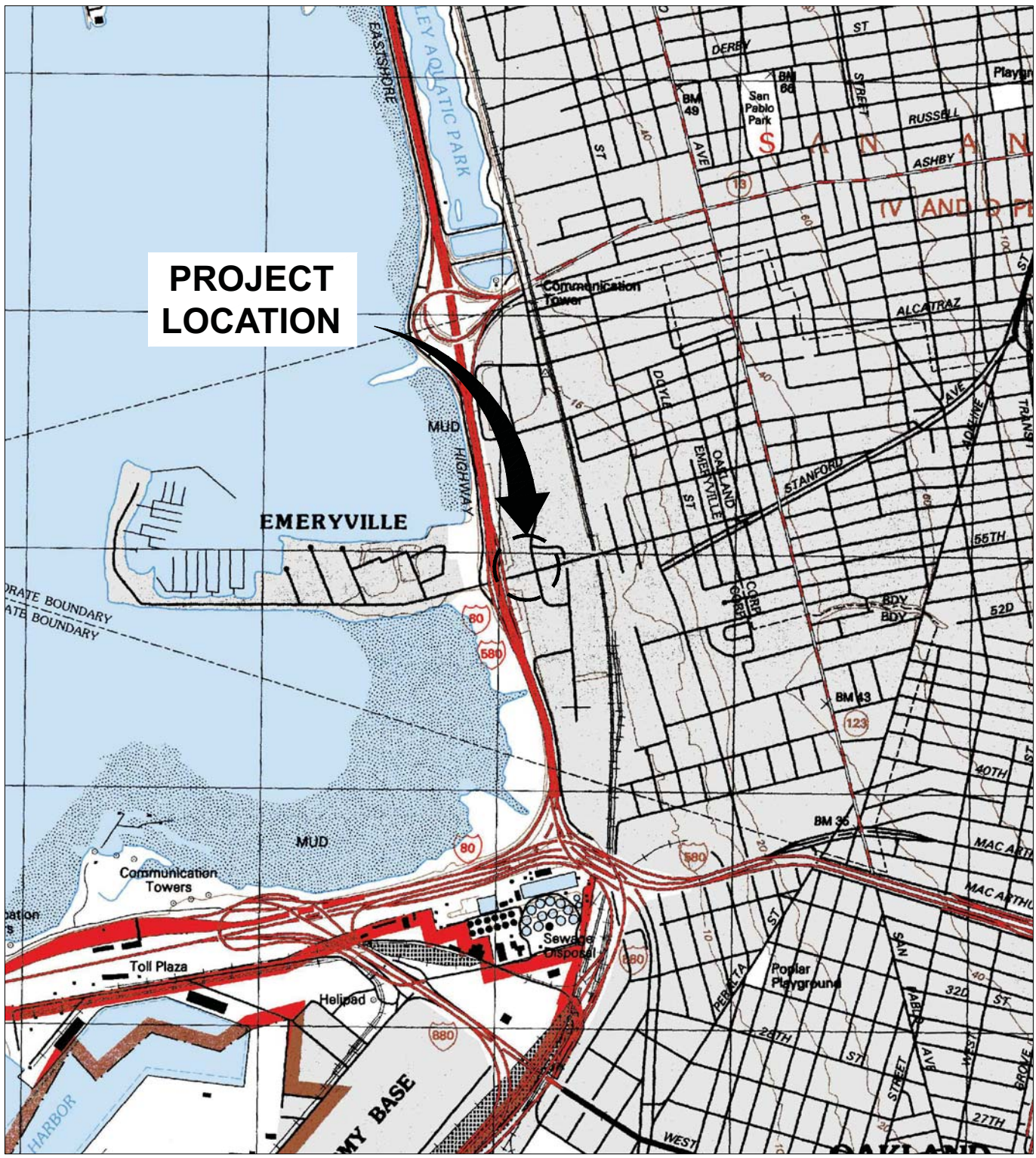
J= EPA estimated value below the lowest calibration point

µg/L = micrograms per liter

ARCADIS

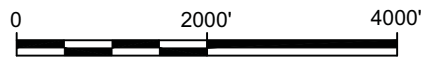
FIGURES

CITY: PETALUMA, CA DIV/GROUP: ENV TEAM 2A
 C:\Users\harris\Desktop\ENV\CAD\PG95BP\NAC04\DWG\G95BP\NAC04-N01.dwg LAYOUT 1 SAVE 7/8/2012 1:34 ACADVE 18.1S (LMS) TEC PAGESSETU SETUP1 PLOTSTYLETABLE ARCADIS.CTB PLOTTE 7/8/2012 1:34 B HARRIS, JESSIC
 XREFS: IMAGES: PROJECTNAME: Oakland Westj



**PROJECT
LOCATION**

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



Approximate Scale: 1 in. = 200



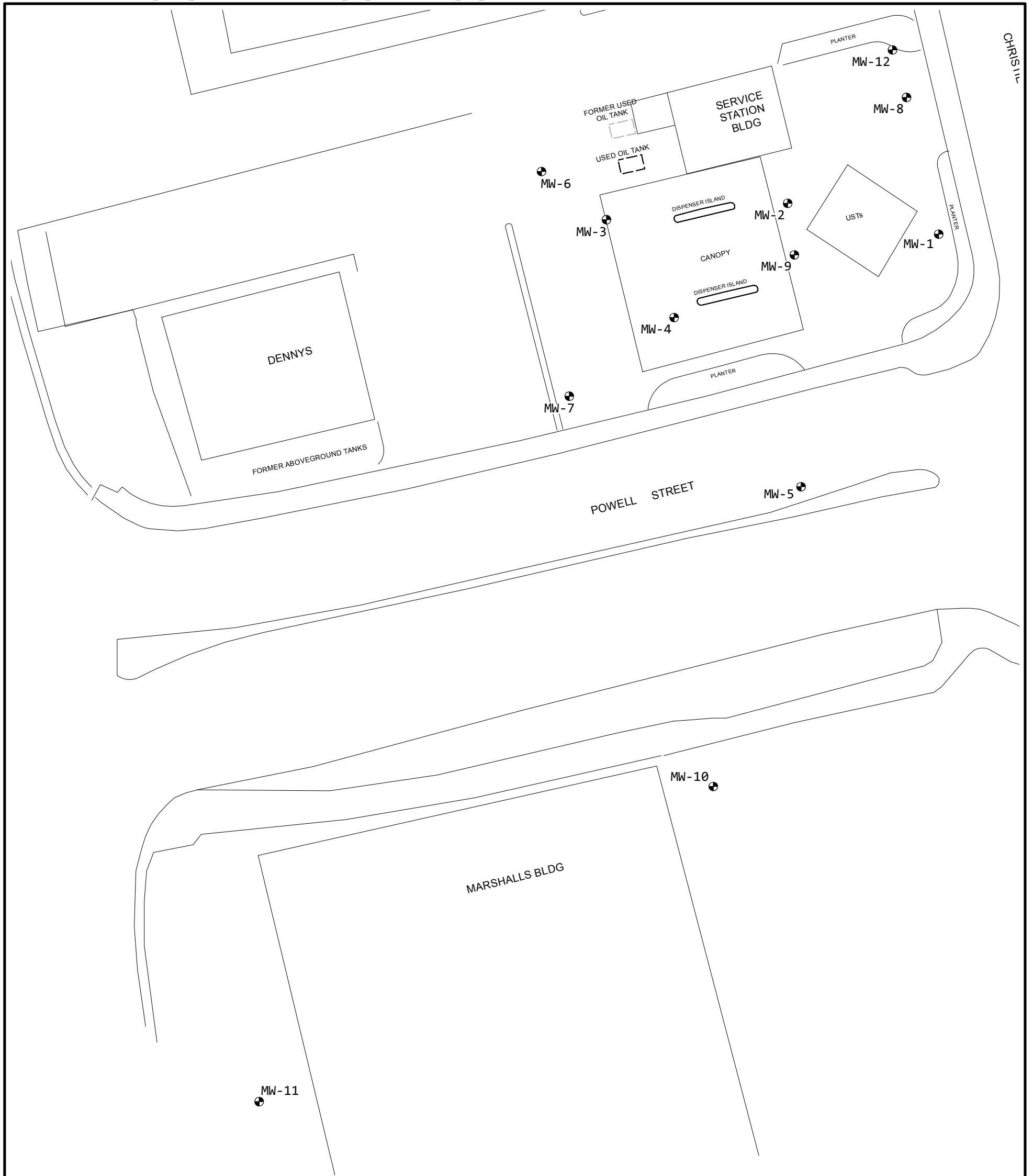
FORMER BP STATION #11126
 1700 POWELL STREET
 EMERYVILLE, CALIFORNIA

SITE VICINITY MAP



FIGURE

1

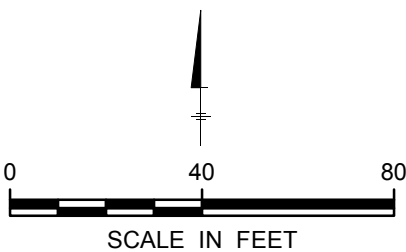


LEGEND:

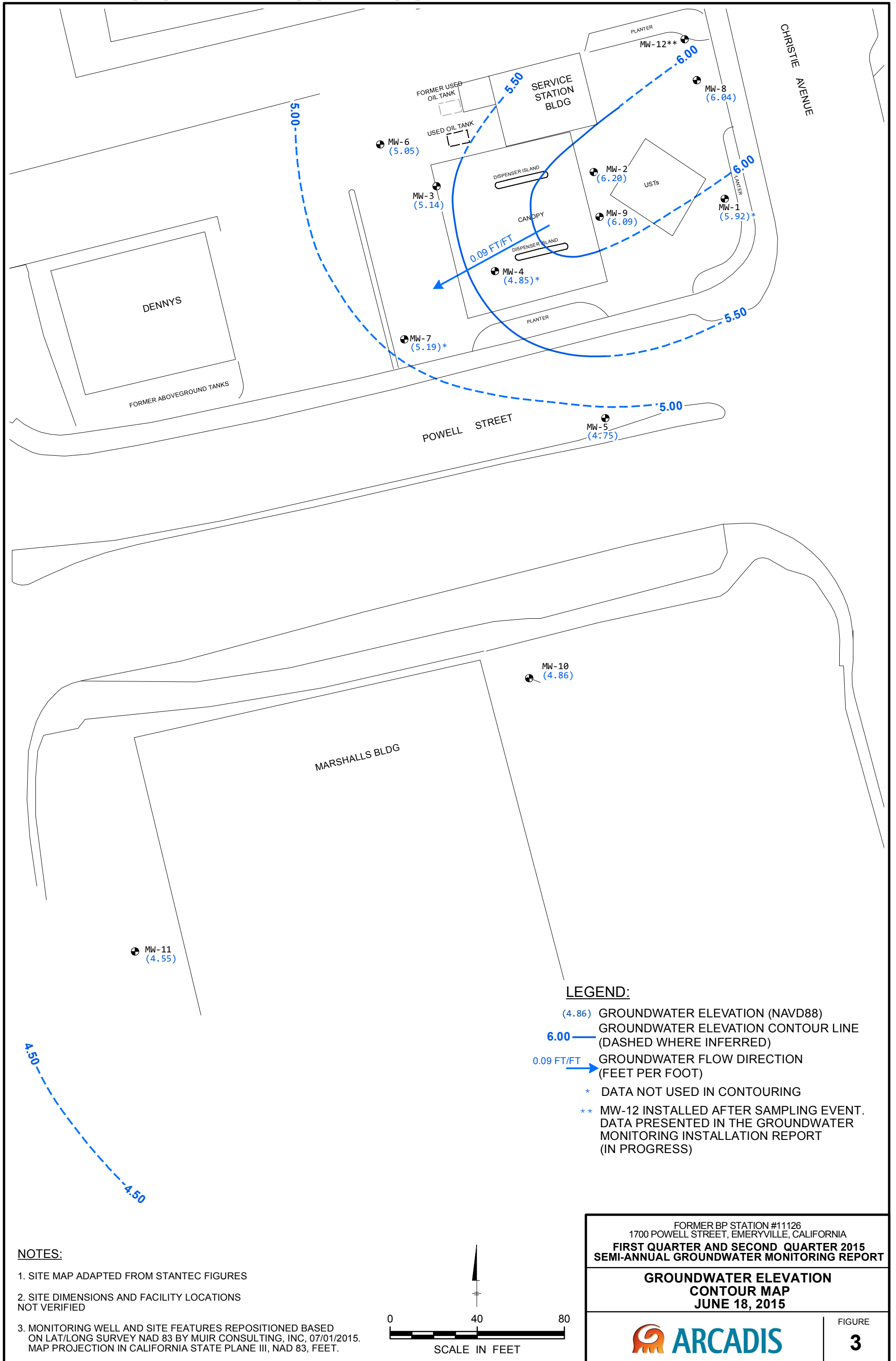
☉ MONITORING WELL LOCATIONS

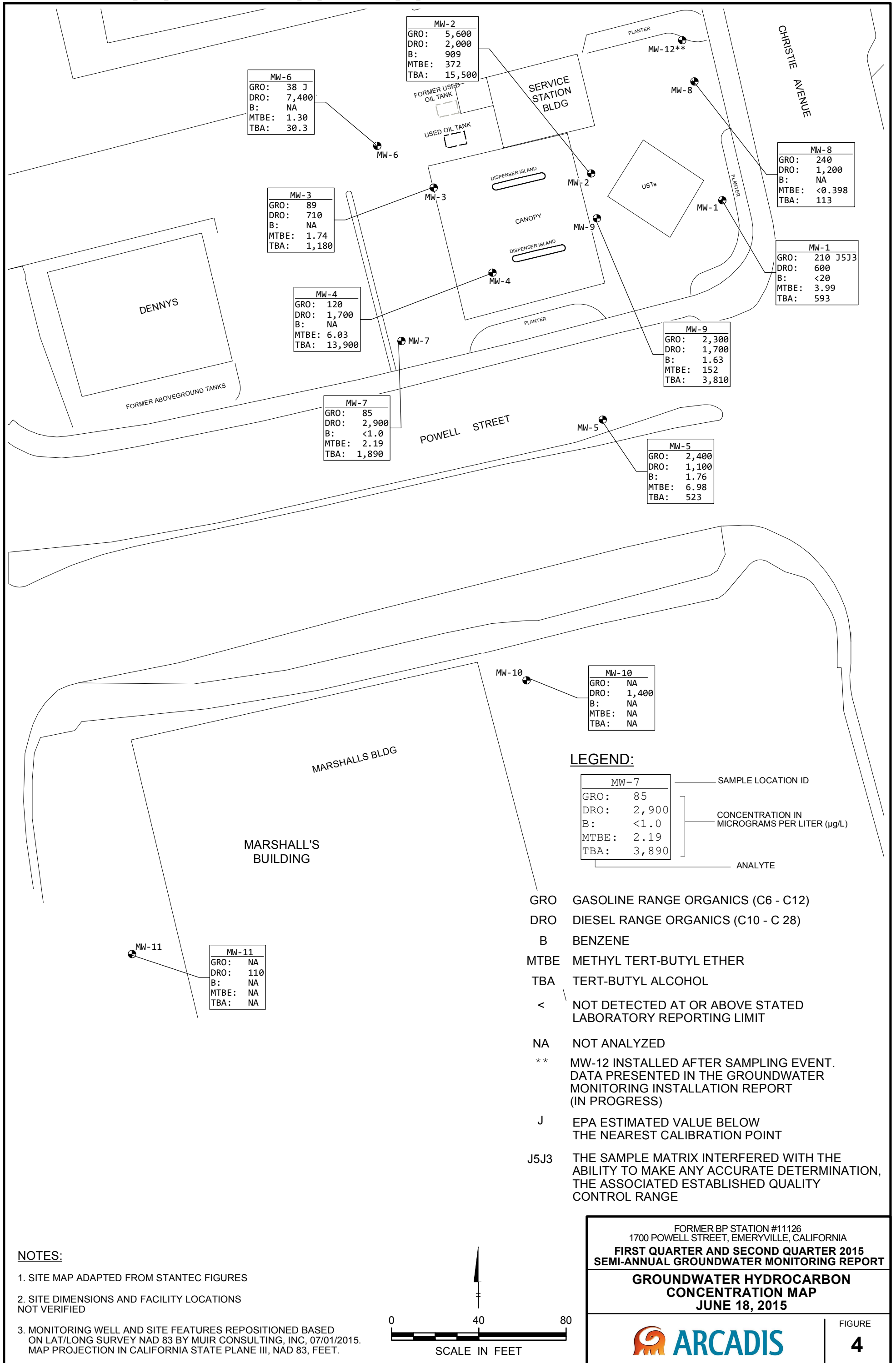
NOTES:

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.

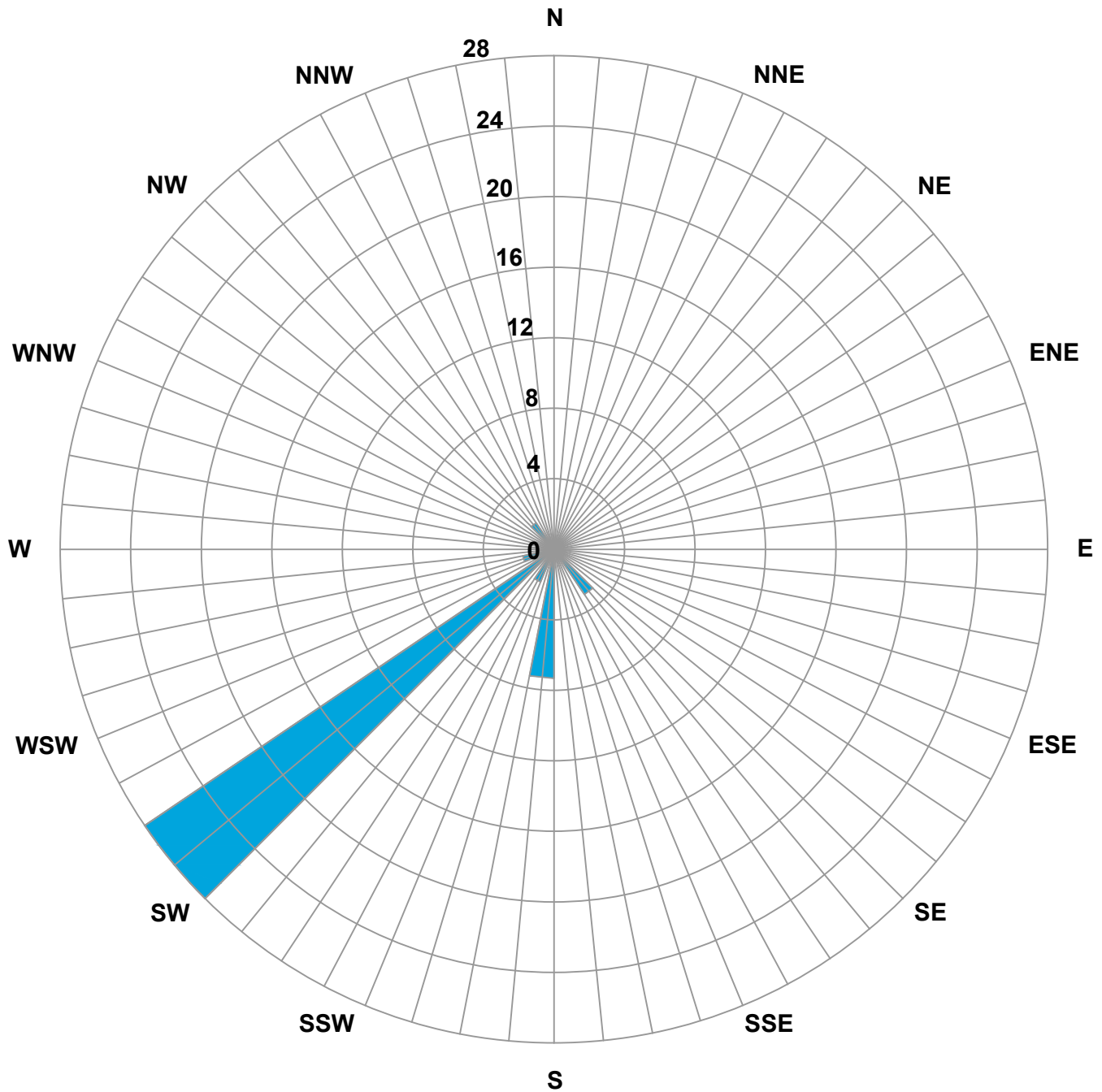


FORMER BP STATION #11126 1700 POWELL STREET, EMERYVILLE, CALIFORNIA	
SITE PLAN	
	FIGURE 2





CITY: SAN RAFAEL, CA DIV/GROUP: ENV/CAD DB: J. HARRIS
 C:\Users\jharris\Desktop\ENV\CAD\GP09BPNAC04\CO00011.GZQ.2015\DWG\GP09BPNAC04+W01.dwg LAYOUT: 5 SAVED: 1/30/2015 2:14 PM ACADVER: 19.1.5 (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ---- PLOTTED: 8/3/2015 5:33 AM BY: HARRIS, JESSICA
 XREFS: IMAGES: PROJECTNAME: ----



LEGEND

CONCENTRIC CIRCLES REPRESENT 46 MONITORING EVENTS CONDUCTED BETWEEN THE FIRST QUARTER 2001 AND THE SECOND QUARTER 2015.

 GROUNDWATER FLOW DIRECTION

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

**GROUNDWATER FLOW DIRECTION
 ROSE DIAGRAM**



Appendix A

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

References

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

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

Former BP Station No. 11126

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

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

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

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

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

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

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

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



Appendix B

Groundwater Sampling Data
Package

Gauging Data

Date 06/18/2015
 Project_Number 09-88-662
 Location 1700 Powell St, Emeryville, CA
 Sampler James Ramos

Well	Date/Time	Well Depth (ft)	Depth To Water (ft)	Depth to LNAPL (ft)	Remarks
MW-1	06/18/2015 07:34	11.89	4.32		All wells gauged prior to sampling
MW-10	06/18/2015 06:59	19.87	7.70		
MW-11	06/18/2015 06:52	23.97	10.02		
MW-2	06/18/2015 07:53	12.04	5.22		
MW-3	06/18/2015 07:23	11.65	5.62		
MW-4	06/18/2015 07:28	11.05	5.77		
MW-5	06/18/2015 09:41	12.51	5.45		Tagged and sampled out of order due to traffic control restrictions
MW-6	06/18/2015 07:08	13.84	5.99		
MW-7	06/18/2015 07:20	13.51	4.94		
MW-8	06/18/2015 07:43	13.91	5.06		
MW-9	06/18/2015 07:37	14.09	4.50		

MW-1

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>11</u>
Project_Number	<u>09-88-662</u>	Well Head Comments		Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>			Initial DTW (ft)	<u>4.32</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>11.89</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
13:07	0		0.52	21.50	7.17	855	-146	156	
13:09	0.5		0.35	21.81	7.17	823	-149	36.3	
13:11	1.0		0.24	21.91	7.16	816	-148	45.7	
13:13	1.5		0.20	22.03	7.16	815	-149	19.2	
13:15	2.0		0.18	22.16	7.16	815	-149	16.5	

Sampling Summary

Sample ID	<u>mw-1</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	
Sample Time	<u>13:20</u>	VOA Un-preserved #	
DTW at Sampling (ft)	<u>5.03</u>	Liter Amber #	
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature



MW-2

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>11.5</u>
Project_Number	<u>09-88-662</u>	Well Head	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>	Comments	<u></u>	Initial DTW (ft)	<u>5.22</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>12.04</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
14:39	0		7.52	26.28	7.24		-39	182	
14:41	0.5		6.89	26.40	7.25		-36	186	
14:43	1.0		6.65	26.50	7.26		-34	185	
14:45	1.5		6.45	24.40	7.40	1480	-175	118	
14:47	2.0		6.39	23.71	7.20	1520	-179	115	

Sampling Summary

Sample ID	<u>mw-2</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	<u></u>
Sample Time	<u>14:50</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>5.36</u>	Liter Amber #	<u></u>
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u>strong hydrocarbon odor</u>

Sampler's Signature



MW-3

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>11</u>
Project_Number	<u>09-88-662</u>	Well Head		Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>	Comments		Initial DTW (ft)	<u>5.62</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>11.65</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
10:24	0		1.33	22.10	7.06	2190	-137	92.8	
10:26	0.5		1.04	21.99	7.06	1910	-136	67.6	
10:28	1.0		0.72	21.86	7.04	1910	-142	48.5	
10:30	1.5		0.52	21.80	7.03	1870	-144	36.6	
10:32	2.0		0.48	21.45	7.01	1850	-144	25.1	

Sampling Summary

Sample ID	<u>mw-3</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	
Sample Time	<u>10:35</u>	VOA Un-preserved #	
DTW at Sampling (ft)	<u>5.69</u>	Liter Amber #	
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature



MW-4

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>11</u>
Project_Number	<u>09-88-662</u>	Well Head Comments	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>			Initial DTW (ft)	<u>5.77</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>11.05</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
12:34	0		1.43	21.85	7.09	2200	-199	74.4	
12:36	0.5		0.80	21.21	7.10	2190	-201	53.8	
12:38	1.0		0.82	21.38	7.15	2150	-193	59	
12:40	1.5		0.77	20.93	7.17	2160	-190	62.7	
12:42	2.0		0.74	20.93	7.15	2160	-185	62.0	

Sampling Summary

Sample ID	<u>mw-4</u>	Purge Rate (LPM)	<u>0.26</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	<u></u>
Sample Time	<u>12:45</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>6.67</u>	Liter Amber #	<u></u>
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature



MW-5

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>11.5</u>
Project_Number	<u>09-88-662</u>	Well Head Comments	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>			Initial DTW (ft)	<u>5.45</u>
Weather Conditions	<u>Cloudy</u>			Well Depth (ft)	<u>12.51</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:42	0		0.42	21.65	7.43	1500	-180	1000	
09:45	0.5		0.26	22.13	7.39	1310	-176	1000	
09:47	1.0		0.26	22.42	7.33	1280	-171	535	
09:49	1.5		0.25	22.70	7.31	1270	-170	218	
09:51	2.0		0.24	22.82	7.27	1260	-170	92.4	

Sampling Summary

Sample ID	<u>mw-5</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	<u></u>
Sample Time	<u>09:55</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>5.81</u>	Liter Amber #	<u></u>
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature



MW-6

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>12.5</u>
Project_Number	<u>09-88-662</u>	Well Head	_____	Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>	Comments	_____	Initial DTW (ft)	<u>5.99</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>13.84</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:05	0		2.28	23.00	7.04	627	-100	267	
11:08	0.5		2.70	23.07	6.95	634	-97	263	
11:10	1.0		2.44	23.46	6.92	698	-113	230	
11:12	1.5		2.24	23.52	7.01	810	-120	188	
11:14	2.0		2.18	23.51	7.02	830	-128	180	

Sampling Summary

Sample ID	<u>mw-6</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	_____
Sample Time	<u>11:20</u>	VOA Un-preserved #	_____
DTW at Sampling (ft)	<u>6.14</u>	Liter Amber #	_____
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	_____
		Other	_____
		Remarks	_____

Sampler's Signature



MW-7

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>12</u>
Project_Number	<u>09-88-662</u>	Well Head Comments	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>			Initial DTW (ft)	<u>4.94</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>13.51</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
11:50	0		0.21	23.86	7.10	7190	-170	171	
11:52	0.5		0.18	24.13	7.12	6290	-176	112	
11:54	1.0		0.15	24.36	7.13	5730	-181	101	
11:56	1.5		0.14	24.55	7.12	5050	-184	85.5	
11:58	2.0		0.13	24.65	7.12	4980	-186	69.7	

Sampling Summary

Sample ID	<u>mw-7</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	<u></u>
Sample Time	<u>12:00</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>5.10</u>	Liter Amber #	<u></u>
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature



MW-8

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>12.5</u>
Project_Number	<u>09-88-662</u>	Well Head		Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>	Comments		Initial DTW (ft)	<u>5.06</u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u>13.91</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
14:08	0		0.29	23.96	7.15	564	-204	13.1	
14:10	0.5		0.19	24.09	7.16	531	-202	6.6	
14:12	1.0		0.16	24.42	7.13	523	-200	9.7	
14:14	1.50		0.14	24.75	7.09	530	-195	15.5	
14:16	2.0		0.13	25.01	7.05	542	-195	14.7	

Sampling Summary

Sample ID	<u>mw-8</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	
Sample Time	<u>14:20</u>	VOA Un-preserved #	
DTW at Sampling (ft)	<u>5.17</u>	Liter Amber #	
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature



MW-9

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>
Project_Number	<u>09-88-662</u>	Well Head	
Location	<u>1700 Powell St, Emeryville, CA</u>	Comments	
Weather Conditions	<u>Sunny</u>	Pump Inlet Depth (ft)	<u>12.5</u>
Waste Container	<u>Tank</u>	Well Diameter (in)	<u>4</u>
Waste Location	<u>Off site</u>	Initial DTW (ft)	<u>4.50</u>
Sampler	<u>James Ramos</u>	Well Depth (ft)	<u>14.09</u>

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
13:34	0		2.55	22.21	7.29	1150	-177	155	
13:36	0.5		1.08	21.96	7.21	1160	-179	140	
13:38	1.0		0.69	21.87	7.17	1160	-180	124	
13:40	1.5		0.48	21.88	7.14	1150	-181	119	
13:42	2.0		0.45	21.91	7.10	1150	-181	109	

Sampling Summary

Sample ID	<u>mw-9</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	
Sample Time	<u>13:45</u>	VOA Un-preserved #	
DTW at Sampling (ft)	<u>5.09</u>	Liter Amber #	
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	
		Other	
		Remarks	<u>light to moderate hydrocarbon odor</u>

Sampler's Signature



MW-10

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>16</u>
Project_Number	<u>09-88-662</u>	Well Head Comments	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>			Initial DTW (ft)	<u>7.70</u>
Weather Conditions	<u>Cloudy</u>			Well Depth (ft)	<u>19.87</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:06	0		1.62	20.40	7.20	3000	-180	0	
09:08	0.5		0.69	20.98	7.22	2940	-190	402	
09:10	1.0		0.69	21.18	7.20	2920	-186	93	
09:12	1.5		0.50	21.33	7.18	2920	-184	46.9	
09:14	2.0		0.49	21.42	7.17	2930	-181	36.7	

Sampling Summary

Sample ID	<u>mw-10</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	<u></u>
Sample Time	<u>09:20</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>7.79</u>	Liter Amber #	<u></u>
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature



MW-11

Date	<u>06/18/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>19</u>
Project_Number	<u>09-88-662</u>	Well Head		Well Diameter (in)	<u>2</u>
Location	<u>1700 Powell St, Emeryville, CA</u>	Comments		Initial DTW (ft)	<u>10.02</u>
Weather Conditions	<u>Cloudy</u>			Well Depth (ft)	<u>23.97</u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>James Ramos</u>				

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		2.09	20.27	6.73	1210	-36	49.1	
08:24	0.5		1.48	20.50	6.85	1200	-49	43.5	
08:27	1.0		1.07	20.68	7.02	1180	-51	33.9	
08:29	1.5		0.87	20.81	7.07	1170	-38	23.6	
08:31	2.0		0.73	20.90	7.10	1160	-26	19.1	

Sampling Summary

Sample ID	<u>mw-11</u>	Purge Rate (LPM)	<u>0.25</u>
Sample Date	<u>06/18/2015</u>	VOA Preserved #	
Sample Time	<u>08:35</u>	VOA Un-preserved #	
DTW at Sampling (ft)	<u>10.06</u>	Liter Amber #	
Sampled using	<u>Dedicated Pump Tubing</u>	Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature





Appendix C

Certified Laboratory Analytical
Report

Quality Control Summary

SDG: L772150

For: ARCADIS US - San Francisco, CA
Project: CA-11126 - GP09BPNA.C044.C0000
July 02, 2015

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

Volatile TPH by Method 8015

Laboratory Control Sample

Samples L772150-01, -02, -03, -04, -05, -06, -07, -08, and -09 were analyzed in analytical batch WG797577. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

For analytical batch WG797577 matrix spike/matrix spike duplicate analysis was performed on sample L772171-01. The spiked sample was evaluated only for the parameters requested on that sample and did not require the parameters reported in this SDG. Therefore, no data is included in this report for this MS/D sample.

For analytical batch WG797577 matrix spike/matrix spike duplicate analysis was performed on sample L772150-01. The matrix spike recoveries were above laboratory control limits for TPHG C6 - C12. The relative percent difference exceeded laboratory limits for TPHG C6 - C12.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Volatile Organic Compounds by Method 8260B

Laboratory Control Sample

Samples L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, and -12 were analyzed in analytical batch WG797785. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Sample L772150-01 was analyzed in analytical batch WG799174. The laboratory control sample associated with this sample was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Samples L772150-01, -02, -03, -04, -05, -06, -07, -08, and -09 were analyzed in analytical batch WG799701. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

For analytical batch WG797785 matrix spike/matrix spike duplicate analysis was performed on sample L772141-01. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

Quality Control Summary

SDG: L772150

For: ARCADIS US - San Francisco, CA
Project: CA-11126 - GP09BPNA.C044.C0000
July 02, 2015

For analytical batch WG799174 matrix spike/matrix spike duplicate analysis was performed on sample L772317-16. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

For analytical batch WG799701 matrix spike/matrix spike duplicate analysis was performed on sample L772410-24. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes reported from this batch.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM

Laboratory Control Sample

Samples L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, and -11 were analyzed in analytical batch WG797452. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG797452 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Diesel Range Organics California by Method 8015

Laboratory Control Sample

Samples L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, and -11 were analyzed in analytical batch WG797049. The laboratory control sample associated with these samples was within the laboratory control limits for all target analytes reported from this batch. The relative percent difference was within laboratory limits for all target analytes reported from this batch.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG797049 was evaluated using the LCS/LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.



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Report Summary

Thursday July 02, 2015

Report Number: L772150


Samples Received: 06/19/15

Client Project: GP09BPNA.C044.C0000

Description: CA-11126 - GP09BPNA.C044.C0000

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-1
 Collected By : James R
 Collection Date : 06/18/15 13:20

ESC Sample # : L772150-01
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	210	32.	100	ug/l	J5J3	8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	94.0			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Benzene	U	6.62	20.0	ug/l		8260B	07/01/15	20
Toluene	U	0.780	5.00	ug/l		8260B	06/27/15	1
Ethylbenzene	U	0.384	1.00	ug/l		8260B	06/27/15	1
Total Xylenes	U	21.2	60.0	ug/l		8260B	07/01/15	20
Methyl tert-butyl ether	3.99	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	593.	48.0	100.	ug/l		8260B	07/01/15	20
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	96.3			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	91.6			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	600	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	111.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthene	0.088	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.012	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	0.0085	0.0021	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(g,h,i)perylene	0.0066	0.0023	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.020	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	0.027	0.0085	0.050	ug/l	J	8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	0.31	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	0.028	0.0082	0.050	ug/l	J	8270C-S	06/23/15	1
Pyrene	0.038	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
1-Methylnaphthalene	2.1	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	1.7	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-1
 Collected By : James R
 Collection Date : 06/18/15 13:20

ESC Sample # : L772150-01
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery								
Nitrobenzene-d5	97.7			%	Rec.	8270C-S	06/23/15	1
2-Fluorobiphenyl	114.			%	Rec.	8270C-S	06/23/15	1
p-Terphenyl-d14	105.			%	Rec.	8270C-S	06/23/15	1

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July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000

ESC Sample # : L772150-02

Sample ID : MW-5

Site ID : 1700 POWELL ST, EMERYV

Collected By : James R
 Collection Date : 06/18/15 09:55

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	2400	32.	100	ug/l		8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	105.			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Benzene	1.76	0.331	1.00	ug/l		8260B	06/27/15	1
Toluene	U	0.780	5.00	ug/l		8260B	06/27/15	1
Ethylbenzene	U	0.384	1.00	ug/l		8260B	06/27/15	1
Total Xylenes	2.94	1.06	3.00	ug/l	J	8260B	06/27/15	1
Methyl tert-butyl ether	6.98	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	523.	48.0	100.	ug/l		8260B	07/01/15	20
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	88.2			% Rec.	J2	8260B	06/27/15	1
Dibromofluoromethane	93.4			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	92.1			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	90.6			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	1100	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	111.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.17	0.014	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthene	1.9	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	0.23	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.017	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.19	0.016	0.050	ug/l		8270C-S	06/23/15	1
Fluorene	1.0	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	U	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	1.1	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.16	0.012	0.050	ug/l		8270C-S	06/23/15	1
1-Methylnaphthalene	56.	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	0.15	0.0090	0.25	ug/l	J	8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-5
 Collected By : James R
 Collection Date : 06/18/15 09:55

ESC Sample # : L772150-02
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery								
Nitrobenzene-d5	96.0			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	107.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	107.			% Rec.		8270C-S	06/23/15	1

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July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-7
 Collected By : James R
 Collection Date : 06/18/15 12:00

ESC Sample # : L772150-03

Site ID : 1700 POWELL ST, EMERYV

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	85.	32.	100	ug/l	J	8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	95.4			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Benzene	U	0.331	1.00	ug/l		8260B	06/27/15	1
Toluene	U	0.780	5.00	ug/l		8260B	06/27/15	1
Ethylbenzene	U	0.384	1.00	ug/l		8260B	06/27/15	1
Total Xylenes	U	1.06	3.00	ug/l		8260B	06/27/15	1
Methyl tert-butyl ether	2.19	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	1890	120.	250.	ug/l		8260B	07/01/15	50
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	99.4			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	97.5			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	95.6			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	2900	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	103.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.015	0.014	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthene	0.083	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.022	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	0.012	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	0.012	0.0023	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.025	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	0.019	0.0085	0.050	ug/l	J	8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	0.031	0.020	0.25	ug/l	J	8270C-S	06/23/15	1
Phenanthrene	0.055	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.071	0.012	0.050	ug/l		8270C-S	06/23/15	1
1-Methylnaphthalene	0.034	0.0082	0.25	ug/l	J	8270C-S	06/23/15	1
2-Methylnaphthalene	0.012	0.0090	0.25	ug/l	J	8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1

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July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-7
 Collected By : James R
 Collection Date : 06/18/15 12:00

ESC Sample # : L772150-03
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery								
Nitrobenzene-d5	84.8			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	114.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	104.			% Rec.		8270C-S	06/23/15	1

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July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-9
 Collected By : James R
 Collection Date : 06/18/15 13:45

ESC Sample # : L772150-04
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	2300	32.	100	ug/l		8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	101.			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Benzene	1.63	0.331	1.00	ug/l		8260B	06/27/15	1
Toluene	7.08	0.780	5.00	ug/l		8260B	06/27/15	1
Ethylbenzene	0.479	0.384	1.00	ug/l	J	8260B	06/27/15	1
Total Xylenes	5.29	1.06	3.00	ug/l		8260B	06/27/15	1
Methyl tert-butyl ether	152.	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	3810	480.	1000	ug/l		8260B	07/01/15	200
tert-Amyl Methyl Ether	4.47	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	91.3			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	95.9			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	95.3			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	92.2			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	1700	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	114.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.039	0.014	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthene	0.26	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	0.067	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.0084	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	0.0056	0.0023	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.025	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	0.15	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	2.0	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	0.14	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.036	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
1-Methylnaphthalene	40.	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	1.7	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1

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July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-9
 Collected By : James R
 Collection Date : 06/18/15 13:45

ESC Sample # : L772150-04
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery								
Nitrobenzene-d5	109.			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	108.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	107.			% Rec.		8270C-S	06/23/15	1

U = ND (Not Detected)
 RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
 MDL = Minimum Detection Limit = LOD = TRRP SDL

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-2
 Collected By : James R
 Collection Date : 06/18/15 14:50

ESC Sample # : L772150-05

Site ID : 1700 POWELL ST, EMERYV

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	5600	32.	100	ug/l		8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	106.			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Benzene	909.	1.66	5.00	ug/l		8260B	06/27/15	5
Toluene	12.9	3.90	25.0	ug/l	J	8260B	06/27/15	5
Ethylbenzene	8.49	1.92	5.00	ug/l		8260B	06/27/15	5
Total Xylenes	15.4	5.30	15.0	ug/l		8260B	06/27/15	5
1,2-Dichloroethane	U	1.80	5.00	ug/l		8260B	06/27/15	5
1,2-Dibromoethane	U	1.90	5.00	ug/l		8260B	06/27/15	5
Di-isopropyl ether	U	1.60	5.00	ug/l		8260B	06/27/15	5
Ethanol	U	210.	500.	ug/l		8260B	06/27/15	5
Ethyl tert-butyl ether	U	1.35	5.00	ug/l		8260B	06/27/15	5
Methyl tert-butyl ether	372.	1.84	5.00	ug/l		8260B	06/27/15	5
tert-Butyl alcohol	15500	1200	2500	ug/l		8260B	07/01/15	500
tert-Amyl Methyl Ether	U	1.30	5.00	ug/l		8260B	06/27/15	5
Surrogate Recovery								
Toluene-d8	92.3			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	79.8			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	94.9			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	95.9			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	2000	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	99.8			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.056	0.014	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthene	0.44	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	0.13	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	U	0.0041	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	U	0.016	0.050	ug/l		8270C-S	06/23/15	1
Fluorene	0.27	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	4.1	0.020	0.25	ug/l		8270C-S	06/23/15	1

U = ND (Not Detected)

RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-2
 Collected By : James R
 Collection Date : 06/18/15 14:50

ESC Sample # : L772150-05
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Phenanthrene	0.17	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
1-Methylnaphthalene	76.	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	62.	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	107.			%	Rec.	8270C-S	06/23/15	1
2-Fluorobiphenyl	103.			%	Rec.	8270C-S	06/23/15	1
p-Terphenyl-d14	98.4			%	Rec.	8270C-S	06/23/15	1

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 630 Plaza Drive, Suite 100
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-3
 Collected By : James R
 Collection Date : 06/18/15 10:35

ESC Sample # : L772150-06

Site ID : 1700 POWELL ST, EMERYV

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	89.	32.	100	ug/l	J	8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	95.4			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Methyl tert-butyl ether	1.74	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	1180	240.	500.	ug/l		8260B	07/01/15	100
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	99.4			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	92.3			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	710	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	112.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthene	U	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.011	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	U	0.016	0.050	ug/l		8270C-S	06/23/15	1
Fluorene	U	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	U	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	0.010	0.0082	0.050	ug/l	J	8270C-S	06/23/15	1
Pyrene	0.016	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
1-Methylnaphthalene	0.024	0.0082	0.25	ug/l	J	8270C-S	06/23/15	1
2-Methylnaphthalene	0.015	0.0090	0.25	ug/l	J	8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	100.			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	113.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	98.2			% Rec.		8270C-S	06/23/15	1

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 630 Plaza Drive, Suite 100
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-4
 Collected By : James R
 Collection Date : 06/18/15 12:45

ESC Sample # : L772150-07

Site ID : 1700 POWELL ST, EMERYV

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	120	32.	100	ug/l		8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	94.6			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Methyl tert-butyl ether	6.03	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	13900	2400	5000	ug/l		8260B	07/01/15	1000
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	99.7			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	97.1			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	95.3			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	1700	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	107.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.024	0.014	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthene	0.073	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	U	0.0041	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.044	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	U	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	0.076	0.020	0.25	ug/l	J	8270C-S	06/23/15	1
Phenanthrene	0.071	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.071	0.012	0.050	ug/l		8270C-S	06/23/15	1
1-Methylnaphthalene	0.015	0.0082	0.25	ug/l	J	8270C-S	06/23/15	1
2-Methylnaphthalene	U	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	110.			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	116.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	106.			% Rec.		8270C-S	06/23/15	1

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 630 Plaza Drive, Suite 100
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-6
 Collected By : James R
 Collection Date : 06/18/15 11:20

ESC Sample # : L772150-08

Site ID : 1700 POWELL ST, EMERYV

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	38.	32.	100	ug/l	J	8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	96.7			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Methyl tert-butyl ether	1.30	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	30.3	2.40	5.00	ug/l		8260B	07/01/15	1
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	98.7			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	96.1			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	7400	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	112.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthene	U	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	U	0.0041	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.039	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	U	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	0.034	0.020	0.25	ug/l	J	8270C-S	06/23/15	1
Phenanthrene	0.087	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.037	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
1-Methylnaphthalene	U	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	U	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	83.0			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	111.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	91.2			% Rec.		8270C-S	06/23/15	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 630 Plaza Drive, Suite 100
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-8
 Collected By : James R
 Collection Date : 06/18/15 14:20

ESC Sample # : L772150-09
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TPHG C6 - C12	240	32.	100	ug/l		8015	06/23/15	1
Surrogate Recovery-% a,a,a-Trifluorotoluene(FID)	96.0			% Rec.		8015	06/23/15	1
Volatiles - Oxygenates								
Methyl tert-butyl ether	0.398	0.367	1.00	ug/l	J	8260B	06/27/15	1
tert-Butyl alcohol	113.	12.0	25.0	ug/l		8260B	07/01/15	5
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	06/27/15	1
Dibromofluoromethane	98.3			% Rec.		8260B	06/27/15	1
a,a,a-Trifluorotoluene	104.			% Rec.		8260B	06/27/15	1
4-Bromofluorobenzene	98.4			% Rec.		8260B	06/27/15	1
Diesel Range Organics California								
C12-C22 Hydrocarbons	1200	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	121.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.023	0.014	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthene	0.043	0.010	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	U	0.0041	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.030	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	0.025	0.0085	0.050	ug/l	J	8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	U	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	0.057	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.050	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
1-Methylnaphthalene	U	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	U	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	114.			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	114.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	111.			% Rec.		8270C-S	06/23/15	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-10
 Collected By : James R
 Collection Date : 06/18/15 09:20

ESC Sample # : L772150-10
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diesel Range Organics California C12-C22 Hydrocarbons	1400	25.	100	ug/l		8015	06/23/15	1
Surrogate Recovery o-Terphenyl	105.			% Rec.		8015	06/23/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.039	0.014	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthene	0.30	0.010	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.016	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	0.026	0.016	0.050	ug/l	J	8270C-S	06/23/15	1
Fluorene	U	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	U	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	0.023	0.0082	0.050	ug/l	J	8270C-S	06/23/15	1
Pyrene	0.054	0.012	0.050	ug/l		8270C-S	06/23/15	1
1-Methylnaphthalene	U	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	U	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	107.			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	119.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	98.4			% Rec.		8270C-S	06/23/15	1

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000
 Sample ID : MW-11
 Collected By : James R
 Collection Date : 06/18/15 08:35

ESC Sample # : L772150-11
 Site ID : 1700 POWELL ST, EMERYV
 Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diesel Range Organics California C12-C22 Hydrocarbons	110	25.	100	ug/l		8015	06/24/15	1
Surrogate Recovery o-Terphenyl	117.			% Rec.		8015	06/24/15	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Acenaphthene	0.043	0.010	0.050	ug/l	J	8270C-S	06/23/15	1
Acenaphthylene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(a)anthracene	0.011	0.0041	0.050	ug/l	J	8270C-S	06/23/15	1
Benzo(a)pyrene	U	0.012	0.050	ug/l		8270C-S	06/23/15	1
Benzo(b)fluoranthene	U	0.0021	0.050	ug/l		8270C-S	06/23/15	1
Benzo(g,h,i)perylene	U	0.0023	0.050	ug/l		8270C-S	06/23/15	1
Benzo(k)fluoranthene	U	0.014	0.050	ug/l		8270C-S	06/23/15	1
Chrysene	U	0.011	0.050	ug/l		8270C-S	06/23/15	1
Dibenz(a,h)anthracene	U	0.0040	0.050	ug/l		8270C-S	06/23/15	1
Fluoranthene	U	0.016	0.050	ug/l		8270C-S	06/23/15	1
Fluorene	U	0.0085	0.050	ug/l		8270C-S	06/23/15	1
Indeno(1,2,3-cd)pyrene	U	0.015	0.050	ug/l		8270C-S	06/23/15	1
Naphthalene	U	0.020	0.25	ug/l		8270C-S	06/23/15	1
Phenanthrene	U	0.0082	0.050	ug/l		8270C-S	06/23/15	1
Pyrene	0.013	0.012	0.050	ug/l	J	8270C-S	06/23/15	1
1-Methylnaphthalene	U	0.0082	0.25	ug/l		8270C-S	06/23/15	1
2-Methylnaphthalene	U	0.0090	0.25	ug/l		8270C-S	06/23/15	1
2-Chloronaphthalene	U	0.0065	0.25	ug/l		8270C-S	06/23/15	1
Surrogate Recovery								
Nitrobenzene-d5	98.4			% Rec.		8270C-S	06/23/15	1
2-Fluorobiphenyl	114.			% Rec.		8270C-S	06/23/15	1
p-Terphenyl-d14	103.			% Rec.		8270C-S	06/23/15	1

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REPORT OF ANALYSIS

Hollis Phillips
 ARCADIS
 100 Montgomery Street
 San Francisco, CA 94104

July 02, 2015

Date Received : June 19, 2015
 Description : CA-11126 - GP09BPNA.C044.C0000

ESC Sample # : L772150-12

Sample ID : TRIP BLANK

Site ID : 1700 POWELL ST, EMERYV

Collected By : James R
 Collection Date : 06/18/15 17:00

Project # : GP09BPNA.C044.C0000

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatiles - Oxygenates								
Benzene	U	0.331	1.00	ug/l		8260B	06/27/15	1
Toluene	U	0.780	5.00	ug/l		8260B	06/27/15	1
Ethylbenzene	U	0.384	1.00	ug/l		8260B	06/27/15	1
Total Xylenes	U	1.06	3.00	ug/l		8260B	06/27/15	1
1,2-Dichloroethane	U	0.361	1.00	ug/l		8260B	06/27/15	1
1,2-Dibromoethane	U	0.381	1.00	ug/l		8260B	06/27/15	1
Di-isopropyl ether	U	0.320	1.00	ug/l		8260B	06/27/15	1
Ethanol	U	42.0	100.	ug/l		8260B	06/27/15	1
Ethyl tert-butyl ether	U	0.270	1.00	ug/l		8260B	06/27/15	1
Methyl tert-butyl ether	U	0.367	1.00	ug/l		8260B	06/27/15	1
tert-Butyl alcohol	U	2.40	5.00	ug/l		8260B	06/27/15	1
tert-Amyl Methyl Ether	U	0.260	1.00	ug/l		8260B	06/27/15	1
Surrogate Recovery								
Toluene-d8	99.8			%	Rec.	8260B	06/27/15	1
Dibromofluoromethane	97.5			%	Rec.	8260B	06/27/15	1
a,a,a-Trifluorotoluene	103.			%	Rec.	8260B	06/27/15	1
4-Bromofluorobenzene	91.0			%	Rec.	8260B	06/27/15	1

U = ND (Not Detected)

RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L772150-01	WG797577	SAMP	TPHG C6 - C12	R3046049	J5J3
	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
	WG797452	SAMP	Benzo(b)fluoranthene	R3045339	J
	WG797452	SAMP	Benzo(g,h,i)perylene	R3045339	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Fluorene	R3045339	J
	WG797452	SAMP	Phenanthrene	R3045339	J
	WG797452	SAMP	Pyrene	R3045339	J
L772150-02	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
	WG797452	SAMP	2-Methylnaphthalene	R3045339	J
	WG797785	SAMP	Total Xylenes	R3046255	J
L772150-03	WG797785	SAMP	Toluene-d8	R3046255	J2
	WG797577	SAMP	TPHG C6 - C12	R3046049	J
	WG797452	SAMP	Anthracene	R3045339	J
L772150-04	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
	WG797452	SAMP	Benzo(a)pyrene	R3045339	J
	WG797452	SAMP	Benzo(g,h,i)perylene	R3045339	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Fluorene	R3045339	J
	WG797452	SAMP	Naphthalene	R3045339	J
	WG797452	SAMP	1-Methylnaphthalene	R3045339	J
	WG797452	SAMP	2-Methylnaphthalene	R3045339	J
	WG797452	SAMP	Anthracene	R3045339	J
	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
L772150-05	WG797452	SAMP	Benzo(g,h,i)perylene	R3045339	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Pyrene	R3045339	J
	WG797785	SAMP	Ethylbenzene	R3046255	J
	WG797785	SAMP	Toluene	R3046255	J
L772150-06	WG797577	SAMP	TPHG C6 - C12	R3046049	J
	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
	WG797452	SAMP	Phenanthrene	R3045339	J
	WG797452	SAMP	Pyrene	R3045339	J
	WG797452	SAMP	1-Methylnaphthalene	R3045339	J
	WG797452	SAMP	2-Methylnaphthalene	R3045339	J
	WG797452	SAMP	Anthracene	R3045339	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Naphthalene	R3045339	J
	WG797452	SAMP	1-Methylnaphthalene	R3045339	J
L772150-07	WG797577	SAMP	TPHG C6 - C12	R3046049	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Naphthalene	R3045339	J
	WG797452	SAMP	1-Methylnaphthalene	R3045339	J
	WG797452	SAMP	Anthracene	R3045339	J
L772150-08	WG797577	SAMP	TPHG C6 - C12	R3046049	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Naphthalene	R3045339	J
	WG797452	SAMP	Pyrene	R3045339	J
L772150-09	WG797452	SAMP	Anthracene	R3045339	J
	WG797452	SAMP	Acenaphthene	R3045339	J
	WG797452	SAMP	Fluoranthene	R3045339	J
	WG797452	SAMP	Fluorene	R3045339	J
	WG797452	SAMP	Pyrene	R3045339	J
L772150-10	WG797785	SAMP	Methyl tert-butyl ether	R3046255	J
	WG797452	SAMP	Anthracene	R3045339	J
	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
	WG797452	SAMP	Fluoranthene	R3045339	J
L772150-11	WG797452	SAMP	Phenanthrene	R3045339	J
	WG797452	SAMP	Acenaphthene	R3045339	J
	WG797452	SAMP	Benzo(a)anthracene	R3045339	J
	WG797452	SAMP	Pyrene	R3045339	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



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YOUR LAB OF CHOICE

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile TPH by Method 8015		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797577
Analysis Date:	6/23/2015 3:38:00 PM	Analyst:	621
Instrument ID:	VOCGC1		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
TPHG C6 - C12		< 0.100	< 0.0316	

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
TPHG C6 - C12	1	5.5	5.0362	91.6	66 - 123	

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
TPHG C6 - C12	1	5.5	5.0242	91.3	66 - 123	

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec	Control RPD	Qual
TPHG C6 - C12	1	5.5	5.0362	91.6	5.0242	91.3	66 - 123	0.24	20	



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Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile TPH by Method 8015		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797577
Analysis Date:	6/23/2015 3:38:00 PM	Analyst:	621
Instrument ID:	VOGC1		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Matrix Spike / Matrix Spike Duplicate

L772150-01

<u>Analyte</u>	<u>Dil</u>	<u>Spike Value</u>	<u>Sample MS</u>	<u>% Rec</u>	<u>MSD</u>	<u>% Rec</u>	<u>Control Limits</u>	<u>% Rec Qual</u>	<u>RPD</u>	<u>Control Limits</u>	<u>RPD</u>	
TPHG C6 - C12	1	5.5	0.2134	12.425	222	4.8088	83.6	47.5 - 136	J5	88.4	20	J3



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile TPH by Method 8015		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797577
Analysis Date:	6/23/2015 3:38:00 PM	Analyst:	621
Instrument ID:	VOCGC1		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Surrogate Summary

Laboratory	Sample ID	Instrument	File ID	ppm	% Rec	ppm	% Rec
	L772150-01	VOCGC1	0623_10	0.188	94.0		
	L772150-02	VOCGC1	0623_11	0.211	105		
	L772150-03	VOCGC1	0623_12	0.191	95.4		
	L772150-04	VOCGC1	0623_13	0.201	101		
	L772150-05	VOCGC1	0623_14	0.213	106		
	L772150-06	VOCGC1	0623_15	0.191	95.4		
	L772150-07	VOCGC1	0623_16	0.189	94.6		
	L772150-08	VOCGC1	0623_17	0.193	96.7		
	L772150-09	VOCGC1	0623_18	0.192	96.0		
	LCS WG797577	VOCGC1	0623_04	0.193	96.3		
	LCSD WG797577	VOCGC1	0623_05	0.193	96.4		
	LCS WG797577	VOCGC1	0623_06	0.189	94.4		
	LCSD WG797577	VOCGC1	0623_07	0.188	94.0		
	BLANK WG797577	VOCGC1	0623_09	0.191	95.7	0.203	101
	MS WG797577	VOCGC1	0623_20	0.191	95.7		
	MSD WG797577	VOCGC1	0623_21	0.191	95.7		
	MS WG797577	VOCGC1	0623_22	0.530	265 J1		
	MSD WG797577	VOCGC1	0623_23	0.185	92.3		

--A,A,A-TRIFLUOROTOLUENE(FID)

True Value: 0.2 ppm Limits: 62 - 128

--A,A,A-TRIFLUOROTOLUENE(PID)

True Value: 0.2 ppm Limits: 55 - 122



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YOUR LAB OF CHOICE

Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797785
Analysis Date:	6/27/2015 9:51:00 AM	Analyst:	591
Instrument ID:	VOCMS2		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -12		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
1,2-Dibromoethane	106-93-4	< 0.00100	< 0.000381	
1,2-Dichloroethane	107-06-2	< 0.00100	< 0.000361	
Benzene	71-43-2	< 0.00100	< 0.000331	
Di-isopropyl ether	108-20-3	< 0.00100	< 0.000320	
Ethanol	64-17-5	< 0.100	< 0.0420	
Ethyl tert-butyl ether	637-92-3	< 0.00100	< 0.000270	
Ethylbenzene	100-41-4	< 0.00100	< 0.000384	
Methyl tert-butyl ether	1634-04-4	< 0.00100	< 0.000367	
tert-Amyl Methyl Ether	994-05-8	< 0.00100	< 0.000260	
tert-Butyl alcohol	75-65-0	< 0.00500	< 0.00240	
Toluene	108-88-3	< 0.00500	< 0.000780	
Xylenes, Total	1330-20-7	< 0.00300	< 0.00106	



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Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799174
Analysis Date:	7/1/2015 4:43:00 AM	Analyst:	621
Instrument ID:	VOCMS27		
Sample Numbers:	L772150-01		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
1,2-Dibromoethane	106-93-4	< 0.00100	< 0.000381	
1,2-Dichloroethane	107-06-2	< 0.00100	< 0.000361	
Benzene	71-43-2	< 0.00100	< 0.000331	
Di-isopropyl ether	108-20-3	< 0.00100	< 0.000320	
Ethanol	64-17-5	< 0.100	< 0.0420	
Ethyl tert-butyl ether	637-92-3	< 0.00100	< 0.000270	
Ethylbenzene	100-41-4	< 0.00100	< 0.000384	
Methyl tert-butyl ether	1634-04-4	< 0.00100	< 0.000367	
tert-Amyl Methyl Ether	994-05-8	< 0.00100	< 0.000260	
tert-Butyl alcohol	75-65-0	< 0.00500	< 0.00240	
Toluene	108-88-3	< 0.00500	< 0.000780	
Xylenes, Total	1330-20-7	< 0.00300	< 0.00106	



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799701
Analysis Date:	7/1/2015 5:01:00 PM	Analyst:	621
Instrument ID:	VOCMS25		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
1,2-Dibromoethane	106-93-4	< 0.00100	< 0.000381	
1,2-Dichloroethane	107-06-2	< 0.00100	< 0.000361	
Benzene	71-43-2	< 0.00100	< 0.000331	
Di-isopropyl ether	108-20-3	< 0.00100	< 0.000320	
Ethanol	64-17-5	< 0.100	< 0.0420	
Ethyl tert-butyl ether	637-92-3	< 0.00100	< 0.000270	
Ethylbenzene	100-41-4	< 0.00100	< 0.000384	
Methyl tert-butyl ether	1634-04-4	< 0.00100	< 0.000367	
tert-Amyl Methyl Ether	994-05-8	< 0.00100	< 0.000260	
tert-Butyl alcohol	75-65-0	< 0.00500	< 0.00240	
Toluene	108-88-3	< 0.00500	< 0.000780	
Xylenes, Total	1330-20-7	< 0.00300	< 0.00106	

Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797785
Analysis Date:	6/27/2015 9:51:00 AM	Analyst:	591
Instrument ID:	VOCMS2		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -12		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,2-Dibromoethane	1	0.025	0.0263	105	79.8 - 122	
1,2-Dichloroethane	1	0.025	0.0233	93.1	65.3 - 126	
Benzene	1	0.025	0.0246	98.5	73 - 122	
Di-isopropyl ether	1	0.025	0.0254	101	65.1 - 135	
Ethylbenzene	1	0.025	0.0264	106	80.9 - 121	
Methyl tert-butyl ether	1	0.025	0.0268	107	70.1 - 125	
Toluene	1	0.025	0.0261	104	77.9 - 116	
Xylenes, Total	1	0.075	0.0811	108	79.2 - 122	

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,2-Dibromoethane	1	0.025	0.0256	102	79.8 - 122	
1,2-Dichloroethane	1	0.025	0.0228	91.2	65.3 - 126	
Benzene	1	0.025	0.0246	98.3	73 - 122	
Di-isopropyl ether	1	0.025	0.0252	101	65.1 - 135	
Ethylbenzene	1	0.025	0.0269	108	80.9 - 121	
Methyl tert-butyl ether	1	0.025	0.0246	98.3	70.1 - 125	
Toluene	1	0.025	0.0265	106	77.9 - 116	
Xylenes, Total	1	0.075	0.0839	112	79.2 - 122	

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control	% Rec	Control RPD	
							Limits	Qual	% RPD	Limits
1,2-Dibromoethane	1	0.025	0.0263	105	0.0256	102	79.8 - 122		2.6	20
1,2-Dichloroethane	1	0.025	0.0233	93.1	0.0228	91.2	65.3 - 126		2.04	20
Benzene	1	0.025	0.0246	98.5	0.0246	98.3	73 - 122		0.19	20
Di-isopropyl ether	1	0.025	0.0254	101	0.0252	101	65.1 - 135		0.53	20
Ethylbenzene	1	0.025	0.0264	106	0.0269	108	80.9 - 121		2.01	20
Methyl tert-butyl ether	1	0.025	0.0268	107	0.0246	98.3	70.1 - 125		8.53	20
Toluene	1	0.025	0.0261	104	0.0265	106	77.9 - 116		1.78	20
Xylenes, Total	1	0.075	0.0811	108	0.0839	112	79.2 - 122		3.42	20

Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799174
Analysis Date:	7/1/2015 4:43:00 AM	Analyst:	621
Instrument ID:	VOCMS27		
Sample Numbers:	L772150-01		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,2-Dibromoethane	1	0.025	0.0234	93.7	79.8 - 122	
1,2-Dichloroethane	1	0.025	0.0287	115	65.3 - 126	
Benzene	1	0.025	0.0237	94.8	73 - 122	
Di-isopropyl ether	1	0.025	0.0277	111	65.1 - 135	
Ethylbenzene	1	0.025	0.0215	86.2	80.9 - 121	
Methyl tert-butyl ether	1	0.025	0.0276	110	70.1 - 125	
Toluene	1	0.025	0.0220	88.1	77.9 - 116	
Xylenes, Total	1	0.075	0.0653	87.1	79.2 - 122	

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,2-Dibromoethane	1	0.025	0.0254	101	79.8 - 122	
1,2-Dichloroethane	1	0.025	0.0300	120	65.3 - 126	
Benzene	1	0.025	0.0238	95.1	73 - 122	
Di-isopropyl ether	1	0.025	0.0282	113	65.1 - 135	
Ethylbenzene	1	0.025	0.0217	86.8	80.9 - 121	
Methyl tert-butyl ether	1	0.025	0.0294	118	70.1 - 125	
Toluene	1	0.025	0.0225	89.8	77.9 - 116	
Xylenes, Total	1	0.075	0.0662	88.2	79.2 - 122	

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control	% Rec	Control RPD	
							Limits	Qual	% RPD	Limits
1,2-Dibromoethane	1	0.025	0.0234	93.7	0.0254	101	79.8 - 122		7.86	20
1,2-Dichloroethane	1	0.025	0.0287	115	0.0300	120	65.3 - 126		4.37	20
Benzene	1	0.025	0.0237	94.8	0.0238	95.1	73 - 122		0.24	20
Di-isopropyl ether	1	0.025	0.0277	111	0.0282	113	65.1 - 135		1.7	20
Ethylbenzene	1	0.025	0.0215	86.2	0.0217	86.8	80.9 - 121		0.75	20
Methyl tert-butyl ether	1	0.025	0.0276	110	0.0294	118	70.1 - 125		6.64	20
Toluene	1	0.025	0.0220	88.1	0.0225	89.8	77.9 - 116		2	20
Xylenes, Total	1	0.075	0.0653	87.1	0.0662	88.2	79.2 - 122		1.27	20

Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799701
Analysis Date:	7/1/2015 5:01:00 PM	Analyst:	621
Instrument ID:	VOCMS25		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,2-Dibromoethane	1	0.025	0.0268	107	79.8 - 122	
1,2-Dichloroethane	1	0.025	0.0271	108	65.3 - 126	
Benzene	1	0.025	0.0288	115	73 - 122	
Di-isopropyl ether	1	0.025	0.0273	109	65.1 - 135	
Ethylbenzene	1	0.025	0.0259	104	80.9 - 121	
Methyl tert-butyl ether	1	0.025	0.0278	111	70.1 - 125	
Toluene	1	0.025	0.0264	105	77.9 - 116	
Xylenes, Total	1	0.075	0.0789	105	79.2 - 122	

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1,2-Dibromoethane	1	0.025	0.0240	96.2	79.8 - 122	
1,2-Dichloroethane	1	0.025	0.0255	102	65.3 - 126	
Benzene	1	0.025	0.0270	108	73 - 122	
Di-isopropyl ether	1	0.025	0.0258	103	65.1 - 135	
Ethylbenzene	1	0.025	0.0244	97.4	80.9 - 121	
Methyl tert-butyl ether	1	0.025	0.0263	105	70.1 - 125	
Toluene	1	0.025	0.0248	99.4	77.9 - 116	
Xylenes, Total	1	0.075	0.0712	95	79.2 - 122	

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control	% Rec	Control RPD	
							Limits	Qual	% RPD	Limits
1,2-Dibromoethane	1	0.025	0.0268	107	0.0240	96.2	79.8 - 122		10.7	20
1,2-Dichloroethane	1	0.025	0.0271	108	0.0255	102	65.3 - 126		6.15	20
Benzene	1	0.025	0.0288	115	0.0270	108	73 - 122		6.63	20
Di-isopropyl ether	1	0.025	0.0273	109	0.0258	103	65.1 - 135		5.31	20
Ethylbenzene	1	0.025	0.0259	104	0.0244	97.4	80.9 - 121		6.32	20
Methyl tert-butyl ether	1	0.025	0.0278	111	0.0263	105	70.1 - 125		5.48	20
Toluene	1	0.025	0.0264	105	0.0248	99.4	77.9 - 116		5.97	20
Xylenes, Total	1	0.075	0.0789	105	0.0712	95	79.2 - 122		10.2	20

Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797785
Analysis Date:	6/27/2015 9:51:00 AM	Analyst:	591
Instrument ID:	VOCMS2		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -12		

Matrix Spike / Matrix Spike Duplicate

L772141-01

Analyte	Dil	Spike Value	Sample MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD
1,2-Dibromoethane	1	0.025	<0.0004	0.0271	108	0.0252	101	73.8 - 131	7.55	20	
1,2-Dichloroethane	1	0.025	<0.0004	0.0224	89.5	0.0214	85.8	60.7 - 132	4.26	20	
Benzene	1	0.025	0.0679	0.0899	88.2	0.0827	59.3	58.6 - 133	8.36	20	
Di-isopropyl ether	1	0.025	<0.0003	0.0245	98	0.0227	90.7	59.9 - 140	7.82	20	
Ethylbenzene	1	0.025	<0.0004	0.0287	115	0.0264	106	62.7 - 136	8.45	20	
Methyl tert-butyl ether	1	0.025	<0.0004	0.0251	100	0.0237	94.8	61.4 - 136	5.62	20	
Toluene	1	0.025	0.0022	0.0307	114	0.0285	105	67.8 - 124	7.24	20	
Xylenes, Total	1	0.075	0.0068	0.0959	119	0.0879	108	65.6 - 133	8.77	20	



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799174
Analysis Date:	7/1/2015 4:43:00 AM	Analyst:	621
Instrument ID:	VOCMS27		
Sample Numbers:	L772150-01		

Matrix Spike / Matrix Spike Duplicate

L772317-16

Analyte	Dil	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD Qual
1,2-Dibromoethane	1	0.025	<0.0004	0.0248	99.4	0.0241	96.3	73.8 - 131		3.18	20	
1,2-Dichloroethane	1	0.025	<0.0004	0.0291	117	0.0289	116	60.7 - 132		0.73	20	
Benzene	1	0.025	0.0035	0.0269	93.4	0.0267	92.7	58.6 - 133		0.7	20	
Di-isopropyl ether	1	0.025	<0.0003	0.0277	111	0.0282	113	59.9 - 140		1.86	20	
Ethylbenzene	1	0.025	<0.0004	0.0220	88.1	0.0220	88.1	62.7 - 136		0.01	20	
Methyl tert-butyl ether	1	0.025	0.0777	0.1045	107	0.1021	97.9	61.4 - 136		2.3	20	
Toluene	1	0.025	<0.0008	0.0226	88.2	0.0228	89.3	67.8 - 124		1.21	20	
Xylenes, Total	1	0.075	0.0019	0.0682	88.4	0.0679	88	65.6 - 133		0.45	20	

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799701
Analysis Date:	7/1/2015 5:01:00 PM	Analyst:	621
Instrument ID:	VOCMS25		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Matrix Spike / Matrix Spike Duplicate

L772410-24

Analyte	Dil	Spike		MS	% Rec	MSD	% Rec	Control Limits	% Rec Qual	RPD	Control Limits	RPD
		Value	Sample									
1,2-Dibromoethane	1000	0.025	<0.381	25.182	101	27.286	109	73.8 - 131		8.02	20	
1,2-Dichloroethane	1000	0.025	<0.361	26.324	105	26.132	105	60.7 - 132		0.73	20	
Benzene	1000	0.025	<0.331	27.032	108	28.894	115	58.6 - 133		6.66	20	
Di-isopropyl ether	1000	0.025	<0.32	25.976	104	26.881	108	59.9 - 140		3.42	20	
Ethylbenzene	1000	0.025	<0.384	25.059	100	27.792	111	62.7 - 136		10.3	20	
Methyl tert-butyl ether	1000	0.025	<0.367	26.166	105	27.293	109	61.4 - 136		4.21	20	
Toluene	1000	0.025	<0.78	24.045	96	26.999	108	67.8 - 124		11.6	20	
Xylenes, Total	1000	0.075	<1.06	73.305	97.7	84.305	112	65.6 - 133		14	20	

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797785
Analysis Date:	6/27/2015 9:51:00 AM	Analyst:	591
Instrument ID:	VOCMS2		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -12		

Internal Standard Response and Retention Time Summary

File ID: 0626_65
Analyzed: 06/27/15 010800

	IS1		IS2		IS3		DCB	
	Response	RT	Response	RT	Response	RT	Response	RT
12 Hr. Std	257482	4.34	470256	4.67	76886	5.83	190681	8.21
Upper Limit	515000	4.84	941000	5.17	154000	6.33	381000	8.71
Lower Limit	129000	3.84	235000	4.17	38400	5.33	95300	7.71
Sample ID	Response	RT	Response	RT	Response	RT	Response	RT
L772150-01	230389	4.33	442388	4.67	73737	5.83	162118	8.21
L772150-02	233713	4.34	502321	4.66	78597	5.83	166760	8.21
L772150-03	218651	4.34	415199	4.66	68347	5.83	152463	8.21
L772150-04	224284	4.33	470269	4.66	74793	5.83	164332	8.21
L772150-05	285291	4.34	509669	4.66	78247	5.83	176188	8.21
L772150-06	216837	4.34	415428	4.67	69659	5.83	152812	8.21
L772150-12	237443	4.34	458965	4.67	76034	5.83	161116	8.21
L772150-07	220963	4.34	421518	4.66	69302	5.83	150520	8.21
L772150-08	216735	4.34	418008	4.67	68359	5.83	157838	8.21
L772150-09	208054	4.34	398714	4.66	68055	5.83	151640	8.21
MSD WG797785	284582	4.34	486325	4.67	79509	5.83	188688	8.21
MS WG797785	261764	4.34	457262	4.67	74565	5.83	186551	8.21
LCSD WG797785	257368	4.34	461249	4.66	74292	5.83	181202	8.21
LCS WG797785	257931	4.34	470062	4.67	76430	5.83	190573	8.21
BLANK WG797785	206451	4.34	397533	4.67	68613	5.83	150720	8.21

Legend:

IS1 -- PENTAFLUOROBENZENE
 IS2 -- 1,4-DIFLUOROBENZENE
 IS3 -- 2-BROMO-1-CHLOROPROPANE
 DCB -- 1,4-DICHLOROBENZENE-D4

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799174
Analysis Date:	7/1/2015 4:43:00 AM	Analyst:	621
Instrument ID:	VOCMS27		
Sample Numbers:	L772150-01		

Internal Standard Response and Retention Time Summary

File ID: 0630_35
Analyzed: 07/01/15 005100

	IS1		IS2		IS3		DCB	
	Response	RT	Response	RT	Response	RT	Response	RT
12 Hr. Std	328585	4.39	644272	4.72	114836	5.89	260915	8.28
Upper Limit	657000	4.89	1290000	5.22	230000	6.39	522000	8.78
Lower Limit	164000	3.89	322000	4.22	57400	5.39	130000	7.78
Sample ID	Response	RT	Response	RT	Response	RT	Response	RT
L772150-01	395860	4.39	806743	4.72	143052	5.89	299191	8.28
MSD WG799174	359489	4.39	720193	4.72	127345	5.89	286811	8.28
MS WG799174	340002	4.39	690207	4.72	118597	5.89	274962	8.28
LCSD WG799174	336074	4.39	678215	4.72	118429	5.89	274370	8.28
LCS WG799174	343727	4.39	697754	4.72	121979	5.89	277656	8.28
BLANK WG799174	332722	4.39	663920	4.72	116165	5.89	249176	8.28

Legend:

IS1 -- PENTAFLUOROBENZENE
 IS2 -- 1,4-DIFLUOROBENZENE
 IS3 -- 2-BROMO-1-CHLOROPROPANE
 DCB -- 1,4-DICHLOROBENZENE-D4

Quality Control Summary
SDG: L772150
ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799701
Analysis Date:	7/1/2015 5:01:00 PM	Analyst:	621
Instrument ID:	VOCMS25		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Internal Standard Response and Retention Time Summary

File ID: 0701_32
Analyzed: 07/01/15 125600

	IS1		IS2		IS3		DCB	
	Response	RT	Response	RT	Response	RT	Response	RT
12 Hr. Std	349444	3.78	623541	4.10	95486	5.24	244529	7.64
Upper Limit	699000	4.28	1250000	4.60	191000	5.74	489000	8.14
Lower Limit	175000	3.28	312000	3.60	47700	4.74	122000	7.14
Sample ID	Response	RT	Response	RT	Response	RT	Response	RT
L772150-01	351295	3.79	626593	4.10	94249	5.25	243356	7.65
L772150-02	344226	3.79	601718	4.10	97230	5.25	240746	7.65
L772150-03	349826	3.79	623723	4.10	90975	5.25	240550	7.65
L772150-04	350132	3.79	630971	4.10	94460	5.24	238122	7.65
L772150-05	338279	3.79	613496	4.10	93156	5.24	234542	7.64
L772150-06	339272	3.79	588817	4.10	90565	5.24	244796	7.65
L772150-07	339242	3.79	613473	4.10	91569	5.24	233970	7.64
L772150-08	313629	3.79	572718	4.10	89944	5.24	228128	7.64
L772150-09	335419	3.78	623050	4.10	92340	5.24	240012	7.64
MSD WG799701	372385	3.79	674458	4.10	99265	5.25	258574	7.65
MS WG799701	353370	3.78	645663	4.10	97663	5.24	252725	7.65
LCSD WG799701	368530	3.78	672293	4.10	104410	5.24	258673	7.64
LCS WG799701	372010	3.78	672370	4.10	102736	5.24	256669	7.64
BLANK WG799701	354628	3.79	653254	4.10	93840	5.24	249279	7.65

Legend:

IS1 -- PENTAFLUOROBENZENE
IS2 -- 1,4-DIFLUOROBENZENE
IS3 -- 2-BROMO-1-CHLOROPROPANE
DCB -- 1,4-DICHLOROBENZENE-D4



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797785
Analysis Date:	6/27/2015 9:51:00 AM	Analyst:	591
Instrument ID:	VOCMS2		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -12		

Surrogate Summary

Laboratory Sample ID	Instrument	File ID	BFB		TFT		DFM		TD8	
			ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
L772150-01	VOCMS2	0626_80	0.0366	91.6	0.0409	102	0.0385	96.3	0.0400	100
L772150-02	VOCMS2	0626_81	0.0363	90.6	0.0368	92.1	0.0374	93.4	0.0353	88.2 J2
L772150-03	VOCMS2	0626_82	0.0383	95.6	0.0413	103	0.0390	97.5	0.0398	99.4
L772150-04	VOCMS2	0626_83	0.0369	92.2	0.0381	95.3	0.0384	95.9	0.0365	91.3
L772150-05	VOCMS2	0626_84	0.0384	95.9	0.0380	94.9	0.0319	79.8	0.0369	92.3
L772150-06	VOCMS2	0626_85	0.0369	92.3	0.0417	104	0.0397	99.4	0.0403	101
L772150-07	VOCMS2	0626_86	0.0381	95.3	0.0410	103	0.0388	97.1	0.0399	99.7
L772150-08	VOCMS2	0626_87	0.0385	96.1	0.0414	103	0.0395	98.7	0.0401	100
L772150-09	VOCMS2	0626_88	0.0394	98.4	0.0417	104	0.0393	98.3	0.0401	100
L772150-12	VOCMS2	0626_74	0.0364	91.0	0.0413	103	0.0390	97.5	0.0399	99.8
LCS WG797785	VOCMS2	0626_66	0.0395	98.7	0.0396	98.9	0.0366	91.4	0.0389	97.1
LCSD WG797785	VOCMS2	0626_67	0.0398	99.4	0.0400	100	0.0359	89.7	0.0394	98.4
BLANK WG797785	VOCMS2	0626_70	0.0368	92.0	0.0412	103	0.0406	101	0.0407	102
MS WG797785	VOCMS2	0626_71	0.0379	94.8	0.0391	97.8	0.0344	86.1	0.0379	94.7
MSD WG797785	VOCMS2	0626_72	0.0382	95.4	0.0397	99.2	0.0338	84.5	0.0385	96.2

BFB --4-BROMOFLUOROBENZENE

True Value: 0.04 ppm Limits: 80.1 - 120

TFT --A,A,A-TRIFLUOROTOLUENE

True Value: 0.04 ppm Limits: 90.4 - 116

DFM --DIBROMOFLUOROMETHANE

True Value: 0.04 ppm Limits: 79 - 121

TD8 --TOLUENE-D8

True Value: 0.04 ppm Limits: 90 - 115



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799174
Analysis Date:	7/1/2015 4:43:00 AM	Analyst:	621
Instrument ID:	VOCMS27		
Sample Numbers:	L772150-01		

Surrogate Summary

Laboratory	Sample ID	Instrument	File ID	BFB		TFT		DFM		TD8	
				ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
	L772150-01	VOCMS27	0630_45	0.0370	92.6	0.0380	94.9	0.0417	104	0.0424	106
	LCS WG799174	VOCMS27	0630_36	0.0387	96.7	0.0380	95.0	0.0423	106	0.0423	106
	LCSD WG799174	VOCMS27	0630_37	0.0387	96.8	0.0383	95.7	0.0425	106	0.0425	106
	BLANK WG799174	VOCMS27	0630_40	0.0382	95.4	0.0392	98.0	0.0421	105	0.0428	107
	MS WG799174	VOCMS27	0630_41	0.0394	98.6	0.0380	95.1	0.0422	106	0.0425	106
	MSD WG799174	VOCMS27	0630_42	0.0387	96.6	0.0382	95.5	0.0413	103	0.0422	106

BFB --4-BROMOFLUOROBENZENE

True Value: 0.04 ppm Limits: 80.1 - 120

TFT --A,A,A-TRIFLUOROTOLUENE

True Value: 0.04 ppm Limits: 90.4 - 116

DFM --DIBROMOFLUOROMETHANE

True Value: 0.04 ppm Limits: 79 - 121

TD8 --TOLUENE-D8

True Value: 0.04 ppm Limits: 90 - 115



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG799701
Analysis Date:	7/1/2015 5:01:00 PM	Analyst:	621
Instrument ID:	VOCMS25		
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09		

Surrogate Summary

Laboratory Sample ID	Instrument	File ID	BFB		TFT		DFM		TD8	
			ppm	% Rec	ppm	% Rec	ppm	% Rec	ppm	% Rec
L772150-01	VOCMS25	0701_44	0.0413	103	0.0404	101	0.0417	104	0.0411	103
L772150-02	VOCMS25	0701_45	0.0407	102	0.0429	107	0.0412	103	0.0425	106
L772150-03	VOCMS25	0701_46	0.0428	107	0.0397	99.3	0.0412	103	0.0409	102
L772150-04	VOCMS25	0701_47	0.0402	100	0.0391	97.6	0.0402	100	0.0407	102
L772150-05	VOCMS25	0701_48	0.0403	101	0.0402	100	0.0419	105	0.0411	103
L772150-06	VOCMS25	0701_49	0.0419	105	0.0418	104	0.0413	103	0.0433	108
L772150-07	VOCMS25	0701_50	0.0412	103	0.0406	101	0.0414	103	0.0411	103
L772150-08	VOCMS25	0701_51	0.0408	102	0.0406	102	0.0419	105	0.0411	103
L772150-09	VOCMS25	0701_52	0.0427	107	0.0401	100	0.0430	107	0.0410	103
LCS WG799701	VOCMS25	0701_33	0.0400	100	0.0394	98.4	0.0419	105	0.0409	102
LCSD WG799701	VOCMS25	0701_34	0.0405	101	0.0408	102	0.0423	106	0.0408	102
BLANK WG799701	VOCMS25	0701_37	0.0434	108	0.0402	100	0.0424	106	0.0411	103
MS WG799701	VOCMS25	0701_38	0.0416	104	0.0389	97.2	0.0426	106	0.0419	105
MSD WG799701	VOCMS25	0701_39	0.0416	104	0.0394	98.4	0.0406	101	0.0409	102

BFB --4-BROMOFLUOROBENZENE

True Value: 0.04 ppm Limits: 80.1 - 120

TFT --A,A,A-TRIFLUOROTOLUENE

True Value: 0.04 ppm Limits: 90.4 - 116

DFM --DIBROMOFLUOROMETHANE

True Value: 0.04 ppm Limits: 79 - 121

TD8 --TOLUENE-D8

True Value: 0.04 ppm Limits: 90 - 115



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Diesel Range Organics California by Method 8015		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797049
Analysis Date:	6/23/2015 8:49:00 PM	Analyst:	546
Instrument ID:	SVGC21	Prep Date:	6/19/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
C12-C22 Hydrocarbons		< 0.100	< 0.0247	

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
C12-C22 Hydrocarbons	1	1.5	1.6792	112	50 - 150	

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
C12-C22 Hydrocarbons	1	1.5	1.6953	113	50 - 150	

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Rec	Control RPD	Qual
C12-C22 Hydrocarbons	1	1.5	1.6792	112	1.6953	113	50 - 150	0.96	20	



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Diesel Range Organics California by Method 8015		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - mg/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797049
Analysis Date:	6/23/2015 8:49:00 PM	Analyst:	546
Instrument ID:	SVGC21	Prep Date:	6/19/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Surrogate Summary

Laboratory	Sample ID	Instrument	File ID	o-Terphenyl	
				ppm	% Rec
	L772150-01	SVGC21	0623_30	0.0221	111
	L772150-02	SVGC21	0623_31	0.0222	111
	L772150-03	SVGC21	0623_32	0.0207	103
	L772150-04	SVGC21	0623_33	0.0228	114
	L772150-05	SVGC21	0623_34	0.0200	99.8
	L772150-06	SVGC21	0623_35	0.0224	112
	L772150-07	SVGC21	0623_36	0.0214	107
	L772150-08	SVGC21	0623_37	0.0224	112
	L772150-09	SVGC21	0623_38	0.0241	121
	L772150-10	SVGC21	0623_39	0.0211	105
	L772150-11	SVGC21	0623_40	0.0234	117
	BLANK WG797049	SVGC21	0623_27	0.0204	102
	LCS WG797049	SVGC21	0623_28	0.0230	115
	LCSD WG797049	SVGC21	0623_29	0.0230	115

o-Terphenyl --O-TERPHENYL

True Value: 0.02 ppm Limits: 50 - 150



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Method Blank

Analyte	CAS	RDL	MDL	Qualifier
1-Methylnaphthalene	90-12-0	< 0.250	< 0.00821	
2-Chloronaphthalene	91-58-7	< 0.250	< 0.00647	
2-Methylnaphthalene	91-57-6	< 0.250	< 0.00902	
Acenaphthene	83-32-9	< 0.0500	< 0.0100	
Acenaphthylene	208-96-8	< 0.0500	< 0.0120	
Anthracene	120-12-7	< 0.0500	< 0.0140	
Benzo(a)anthracene	56-55-3	< 0.0500	0.00860	
Benzo(a)pyrene	50-32-8	< 0.0500	< 0.0116	
Benzo(b)fluoranthene	205-99-2	< 0.0500	0.00317	
Benzo(g,h,i)perylene	191-24-2	< 0.0500	< 0.00227	
Benzo(k)fluoranthene	207-08-9	< 0.0500	< 0.0136	
Chrysene	218-01-9	< 0.0500	< 0.0108	
Dibenz(a,h)anthracene	53-70-3	< 0.0500	< 0.00396	
Fluoranthene	206-44-0	< 0.0500	< 0.0157	
Fluorene	86-73-7	< 0.0500	< 0.00850	
Indeno(1,2,3-cd)pyrene	193-39-5	< 0.0500	< 0.0148	
Naphthalene	91-20-3	< 0.250	< 0.0198	
Phenanthrene	85-01-8	< 0.0500	< 0.00820	
Pyrene	129-00-0	< 0.0500	< 0.0117	



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Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Laboratory Control Sample (LCS)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1-Methylnaphthalene	1	2	2.1824	109	68.3 - 144	
2-Chloronaphthalene	1	2	2.4060	120	69.7 - 140	
2-Methylnaphthalene	1	2	2.2134	111	67.6 - 143	
Acenaphthene	1	2	2.4360	122	67.7 - 153	
Acenaphthylene	1	2	2.2953	115	66.9 - 141	
Anthracene	1	2	2.3805	119	68.9 - 153	
Benzo(a)anthracene	1	2	2.2484	112	63.1 - 147	
Benzo(a)pyrene	1	2	2.2729	114	62.2 - 150	
Benzo(b)fluoranthene	1	2	2.1829	109	58.4 - 148	
Benzo(g,h,i)perylene	1	2	2.1909	110	57.4 - 152	
Benzo(k)fluoranthene	1	2	2.3049	115	60.5 - 154	
Chrysene	1	2	2.2934	115	64.8 - 155	
Dibenz(a,h)anthracene	1	2	2.1436	107	53.5 - 153	
Fluoranthene	1	2	2.2278	111	68.6 - 153	
Fluorene	1	2	2.2488	112	67.3 - 141	
Indeno(1,2,3-cd)pyrene	1	2	2.1696	108	57 - 155	
Naphthalene	1	2	2.2188	111	66.7 - 135	
Phenanthrene	1	2	2.1170	106	64.3 - 143	
Pyrene	1	2	2.3736	119	60.2 - 154	

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Laboratory Control Sample Duplicate (LCSD)

Analyte	Dil	True Value	Found	% Rec	Control Limits	Qual
1-Methylnaphthalene	1	2	2.2419	112	68.3 - 144	
2-Chloronaphthalene	1	2	2.4425	122	69.7 - 140	
2-Methylnaphthalene	1	2	2.2276	111	67.6 - 143	
Acenaphthene	1	2	2.5344	127	67.7 - 153	
Acenaphthylene	1	2	2.3529	118	66.9 - 141	
Anthracene	1	2	2.4892	124	68.9 - 153	
Benzo(a)anthracene	1	2	2.2111	111	63.1 - 147	
Benzo(a)pyrene	1	2	2.3964	120	62.2 - 150	
Benzo(b)fluoranthene	1	2	2.2098	110	58.4 - 148	
Benzo(g,h,i)perylene	1	2	2.275	114	57.4 - 152	
Benzo(k)fluoranthene	1	2	2.4686	123	60.5 - 154	
Chrysene	1	2	2.5237	126	64.8 - 155	
Dibenz(a,h)anthracene	1	2	2.2023	110	53.5 - 153	
Fluoranthene	1	2	2.1184	106	68.6 - 153	
Fluorene	1	2	2.2908	115	67.3 - 141	
Indeno(1,2,3-cd)pyrene	1	2	2.2821	114	57 - 155	
Naphthalene	1	2	2.2664	113	66.7 - 135	
Phenanthrene	1	2	2.1228	106	64.3 - 143	
Pyrene	1	2	2.3255	116	60.2 - 154	

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Laboratory Control Sample / Laboratory Control Sample Duplicate

Analyte	Dil	Spike	LCS	% Rec	LCSD	% Rec	Control		% Rec		Control RPD	
							Limits	Qual	Qual	% RPD	Limits	Qual
1-Methylnaphthalene	1	2	2.1824	109	2.2419	112	68.3 - 144			2.69	20	
2-Chloronaphthalene	1	2	2.4060	120	2.4425	122	69.7 - 140			1.51	20	
2-Methylnaphthalene	1	2	2.2134	111	2.2276	111	67.6 - 143			0.64	20	
Acenaphthene	1	2	2.4360	122	2.5344	127	67.7 - 153			3.96	20	
Acenaphthylene	1	2	2.2953	115	2.3529	118	66.9 - 141			2.48	20	
Anthracene	1	2	2.3805	119	2.4892	124	68.9 - 153			4.47	20	
Benzo(a)anthracene	1	2	2.2484	112	2.2111	111	63.1 - 147			1.68	20	
Benzo(a)pyrene	1	2	2.2729	114	2.3964	120	62.2 - 150			5.29	20	
Benzo(b)fluoranthene	1	2	2.1829	109	2.2098	110	58.4 - 148			1.22	20	
Benzo(g,h,i)perylene	1	2	2.1909	110	2.275	114	57.4 - 152			3.77	20	
Benzo(k)fluoranthene	1	2	2.3049	115	2.4686	123	60.5 - 154			6.86	20	
Chrysene	1	2	2.2934	115	2.5237	126	64.8 - 155			9.56	20	
Dibenz(a,h)anthracene	1	2	2.1436	107	2.2023	110	53.5 - 153			2.71	20	
Fluoranthene	1	2	2.2278	111	2.1184	106	68.6 - 153			5.04	20	
Fluorene	1	2	2.2488	112	2.2908	115	67.3 - 141			1.85	20	
Indeno(1,2,3-cd)pyrene	1	2	2.1696	108	2.2821	114	57 - 155			5.06	20	
Naphthalene	1	2	2.2188	111	2.2664	113	66.7 - 135			2.12	20	
Phenanthrene	1	2	2.1170	106	2.1228	106	64.3 - 143			0.27	20	
Pyrene	1	2	2.3736	119	2.3255	116	60.2 - 154			2.04	20	

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Internal Standard Response and Retention Time Summary

File ID: 0622B_02
Analyzed: 06/23/15 041300

	NAP		ACE		PHEN		CHR	
	Response	RT	Response	RT	Response	RT	Response	RT
12 Hr. Std	34690	5.47	21728	7.39	37134	8.93	37152	11.64
Upper Limit	69400	5.97	43500	7.89	74300	9.43	74300	12.14
Lower Limit	17300	4.97	10900	6.89	18600	8.43	18600	11.14
Sample ID	Response	RT	Response	RT	Response	RT	Response	RT
L772150-01	32036	5.47	19728	7.39	37083	8.93	33827	11.64
L772150-02	28886	5.48	19636	7.39	37149	8.93	34518	11.63
L772150-03	32029	5.48	18169	7.39	33155	8.93	32661	11.64
L772150-04	30824	5.47	20188	7.39	37763	8.93	34139	11.64
L772150-05	29267	5.47	19616	7.39	36256	8.93	33739	11.63
L772150-06	34463	5.47	20101	7.39	33069	8.93	33857	11.64
L772150-07	30312	5.48	18899	7.39	32874	8.93	32387	11.64
L772150-08	29289	5.47	18324	7.39	37409	8.93	33612	11.64
L772150-09	30845	5.48	19192	7.39	34989	8.93	31220	11.64
L772150-10	32748	5.47	18866	7.39	32077	8.93	32417	11.64
L772150-11	33454	5.47	20579	7.39	31161	8.93	31288	11.64
LCSD WG797452	36778	5.47	21629	7.39	40136	8.93	39056	11.64
LCS WG797452	36384	5.46	21374	7.39	37982	8.93	37823	11.65
BLANK WG797452	36335	5.47	22118	7.39	34922	8.93	36753	11.64

Legend:

NAP -- Naphthalene-d8
ACE -- Acenaphthene-d10
PHEN -- Phenanthrene-d10
CHR -- Chrysene-d12
PER -- Perylene-d12

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Internal Standard Response and Retention Time Summary

File ID: 0622B_02
Analyzed: 06/23/15 041300

	NAP		PER	
	Response	RT	Response	RT
12 Hr. Std	34690	5.47	35775	13.06
Upper Limit	69400	5.97	71500	13.56
Lower Limit	17300	4.97	17900	12.56
Sample ID	Response	RT	Response	RT
L772150-01	32036	5.47	32923	13.05
L772150-02	28886	5.48	35204	13.05
L772150-03	32029	5.48	32246	13.05
L772150-04	30824	5.47	33436	13.05
L772150-05	29267	5.47	32435	13.05
L772150-06	34463	5.47	31884	13.05
L772150-07	30312	5.48	33113	13.05
L772150-08	29289	5.47	35144	13.06
L772150-09	30845	5.48	32834	13.05
L772150-10	32748	5.47	31570	13.05
L772150-11	33454	5.47	30349	13.05
LCSD WG797452	36778	5.47	37237	13.06
LCS WG797452	36384	5.46	36110	13.07
BLANK WG797452	36335	5.47	35358	13.06

Legend:

NAP -- Naphthalene-d8
ACE -- Acenaphthene-d10
PHEN -- Phenanthrene-d10
CHR -- Chrysene-d12
PER -- Perylene-d12



12065 Lebanon Rd
 Mt. Juliet, TN 37122
 (615) 758-5858
 (800) 767-5859
 Fax (615) 758-5859
 Tax I.D 62-0814289
 Est. 1970

YOUR LAB OF CHOICE

Quality Control Summary

SDG: L772150

ARCADIS US - San Francisco, CA

Test:	Polynuclear Aromatic Hydrocarbons by Method 8270C-SIM		
Project No:	GP09BPNA.C044.C0000	Matrix:	Water - ug/L
Project:	CA-11126 - GP09BPNA.C044.C0000	EPA ID:	TN00003
Collection Date:	6/18/2015	Analytic Batch:	WG797452
Analysis Date:	6/23/2015 7:03:00 AM	Analyst:	282
Instrument ID:	BNAMS16	Prep Date:	6/22/2015
Sample Numbers:	L772150-01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11		

Surrogate Summary

Laboratory Sample ID	Instrument	File ID	FBP		NBZ		TPH	
			ppm	% Rec	ppm	% Rec	ppm	% Rec
L772150-01	BNAMS16	0622B_08	0.00228	114	0.00195	97.7	0.00211	105
L772150-02	BNAMS16	0622B_09	0.00214	107	0.00192	96.0	0.00213	107
L772150-03	BNAMS16	0622B_10	0.00227	114	0.00170	84.8	0.00207	104
L772150-04	BNAMS16	0622B_11	0.00216	108	0.00218	109	0.00215	107
L772150-05	BNAMS16	0622B_12	0.00207	103	0.00213	107	0.00197	98.4
L772150-06	BNAMS16	0622B_13	0.00226	113	0.00200	100	0.00196	98.2
L772150-07	BNAMS16	0622B_14	0.00233	116	0.00220	110	0.00212	106
L772150-08	BNAMS16	0622B_15	0.00222	111	0.00166	83.0	0.00182	91.2
L772150-09	BNAMS16	0622B_16	0.00229	114	0.00227	114	0.00223	111
L772150-10	BNAMS16	0622B_17	0.00238	119	0.00214	107	0.00197	98.4
L772150-11	BNAMS16	0622B_18	0.00227	114	0.00197	98.4	0.00205	103
LCS WG797452	BNAMS16	0622B_05	0.00224	112	0.00199	99.3	0.00203	101
LCSD WG797452	BNAMS16	0622B_06	0.00233	117	0.00213	106	0.00199	99.7
BLANK WG797452	BNAMS16	0622B_07	0.00233	117	0.00210	105	0.00205	103

FBP --2-FLUOROBIPHENYL

True Value: 0.002 ppm Limits: 55.5 - 150

NBZ --NITROBENZENE-D5

True Value: 0.002 ppm Limits: 33.8 - 179

TPH --P-TERPHENYL-D14

True Value: 0.002 ppm Limits: 46.20 - 163

ARCADIS US - San Francisco, CA
 630 Plaza Drive, Suite 100
 Highlands Ranch, CO 80129

Billing Information:
 Attn: Accounts Payable
 630 Plaza Drive, Suite 600
 Highlands Ranch, CO 80129

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



YOUR LAB OF CHOICE

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



Report to:
Catie Gallagher

Email To: **Catherine.Gallagher@arcadis-us.com**

Project Description: **CA-11126 -**

City/State Collected: **emeryville, CA**

Phone: **303-231-9115**
 Fax: **720-344-0486**

Client Project #

Lab Project #
ARCADISBP-CA11126

Collected by (print):
James Ranus

Site/Facility ID #
1700 POWELL ST, EMERYVILLE,

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
 ___ Same Day200%
 ___ Next Day100%
 ___ Two Day50%
 ___ Three Day25%

Date Results Needed
 Email? ___ No **X** Yes
 FAX? ___ No ___ Yes

Immediately Packed on Ice N ___ Y **X**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-11	GRAB	GW		6/18/15	0835	11
TRIP BLANK		GW		6/18/15	1700	1
		GW				11

BTEXMN + oxygenates 40mlAmb-HCl	BTEXMN + oxygenates 40mlAmb-HCl-Bik	BTEXMN, TBA, TAME 40mlAmb-HCl	DROCA 8015 w/ SGT 40mlAmb-HCl-BT	GRO 8015 40mlAmb HCl	Napthalene 8260 40mlAmb-HCl	PAHs 8270C-SIM 40mlAmb-NoPres-WT
			X	X	X	X
	X					
		X	X	X		X

L # **L772150**
 Table #
 Acctnum: **ARCADISBP**
 Template: **T103285**
 Prelogin: **P514029**
 TSR: **358 - Jarred Willis**
 PB: **670-156**
 Shipped Via: **FedEX Ground**
 Rem./Contaminant Sample # (lab only)
 11
 12

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

Remarks: pH _____ Temp _____
 Flow _____ Other _____

Relinquished by: (Signature) 	Date: 6/18/15	Time: 1700	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 24 °C Bottles Received: 122
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) 	Date: 6-19-15 Time: 0900

Hold #
 Condition: (lab use only)
 COC Seal Intact: Y N NA
 pH Checked: **5.1** of **51**

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

<u>Submittal Type:</u>	GEO_REPORT
<u>Report Title:</u>	First Quarter and Second Quarter 2015 - Semi-Annual Groundwater Monitoring Report 080715
<u>Report Type:</u>	Monitoring Report - Semi-Annually
<u>Report Date:</u>	8/7/2015
<u>Facility Global ID:</u>	T0600100208
<u>Facility Name:</u>	BP #11126
<u>File Name:</u>	CA 11126 150807 BP - 1Q2Q15 SAGWMMR.pdf
<u>Organization Name:</u>	ARCADIS
<u>Username:</u>	ARCADISBP
<u>IP Address:</u>	72.37.248.28
<u>Submittal Date/Time:</u>	8/7/2015 1:56:00 PM
<u>Confirmation Number:</u>	9743601202

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