ARCADIS Design & Consultancy for natural and built assets

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By Alameda County Environmental Health 2:58 pm, Apr 26, 2017

Mr. Keith Nowell
Alameda County LOP
1131 Harbor Bay Parkway
Alameda, California 94502

Arcadis U.S., Inc.
1728 3rd Avenue North
Suite 300
Birmingham
AL 35203
Tel 205 930 5700
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ENVIRONMENT

Subject:
Fourth Quarter 2016 and First Quarter 2017 Groundwater Monitoring Report
Former Atlantic Richfield Company Station #11132
3201 35th Avenue, Oakland, California 94619
Alameda County LOP Case #RO0000014
SFB-RWQCB Case #01-0227

Date:
April 24, 2017

Contact:
Megan Smoley

Phone:
626.590.1502

Email:
Megan.Smoley@arcadis.com

Our ref:
GP09BPNA.C112.N0000

Dear Mr. Nowell:

Arcadis U.S., Inc. (Arcadis) has prepared this semi-annual groundwater monitoring report (GMR) to document the results of groundwater monitoring and sampling at the former Atlantic Richfield Company (ARCO) Service Station #11132, located at 3201 35th Avenue in Oakland, California (the Site; Figure 1).

If you have any questions or comments regarding the contents of this report, please contact Megan Smoley at 626.590.1502 or by e-mail at Megan.Smoley@arcadis.com.

“I declare that 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.”

Sincerely,

Arcadis U.S., Inc.

Megan Smoley, P.G. No. 8614
Certified Project Manager

Copies:
Ms. Shelby Lathrop, Conoco Phillips, 76 Broadway, Sacramento, California 95818

WORK PERFORMED DURING THE FOURTH QUARTER 2016 AND FIRST QUARTER 2017

- Submitted *Third Quarter 2016 Groundwater Monitoring Report* on October 26, 2016.
- Conducted the final quarterly groundwater monitoring and sampling event at newly installed offsite wells MW-10R and MW-11 on December 14, 2016.
- Conducted semi-annual groundwater monitoring and sampling in first quarter 2017 on March 1, 2017.

WORK PROPOSED FOR THE SECOND AND THIRD QUARTER 2017

- Submit the *Fourth Quarter 2016 and First Quarter 2017 Groundwater Monitoring Report*, contained herein.
- Submit findings of foundation survey conducted south of 35th Avenue between Mangels Avenue and Suter Street to Alameda County Local Oversight Program (LOP).
- Submit a work plan for additional characterization after receipt of directive from Alameda County LOP.
- Conduct semiannual groundwater monitoring and sampling in the third quarter 2017.

SITE INFORMATION

Current Phase of Project:	Groundwater Monitoring and Sampling
Frequency of Monitoring and Sampling	Semi-Annual Gauging (1/3Q): MW-1 through MW-11, OW-1 and RW-1 Semi-Annual Sampling (1/3Q): MW-1, MW-2, MW-5, MW-8, MW-9, MW-10R, MW-11, OW-1 and RW-1 Annual Sampling (1Q): MW-4 and MW-7 Annual Sampling (3Q): MW-3 and MW-6
Have Liquid Phase Hydrocarbons (LPH) Been Measured Onsite, Historically?	Yes
Historical Range in Depth to Water (DTW; feet below top of casing [btoc]):	8.63 (MW-6 1Q/2017) to 32.20 (RW-1 2Q/1994)

CURRENT QUARTER MONITORING DATA

Wells Gauged:	MW-1 through MW-11, RW-1 and OW-1
Wells Sampled:	MW-1, MW-2, MW-4, MW-5, MW-7, MW-8, MW-9, MW-10R, MW-11 and RW-1. OW-1 contained LPH and was not sampled.
Monitoring and Sampling Date:	December 14, 2016 and March 1, 2017
LPH Measured This Quarter (thickness in feet):	1Q 2017: OW-1 (0.19)
LPH Recovered This Quarter:	None
Cumulative LPH Recovered to Date:	113.7 gallons

1Q 2017 DTW Range (feet btoc):	8.63 (MW-6) to 15.00 (MW-4)
1Q 2017 Groundwater Flow Direction and Gradient (feet/foot):	East-Northeast to Southeast (0.01 ft/ft)

GROUNDWATER MONITORING AND SAMPLING

During the first quarter 2017 sampling event, HydraSleeves were used to collect groundwater samples at the Site. Prior to groundwater sampling, depths to water were measured to within 0.01 feet below top of casing (btoc) in all wells using an oil/water interface probe. All monitoring and sampling activities were performed by Blaine Tech Services, Inc. (Blaine Tech).

Groundwater samples were submitted under chain-of-custody protocol to ESC Lab Sciences (ESC), a California state-certified laboratory. Samples were analyzed for total petroleum hydrocarbons gasoline range organics (GRO) by EPA Method 8015B, benzene, toluene, ethylbenzene, and total xylenes (collectively BTEX), methyl tert-butyl ether (MTBE), tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), ethanol, 1,2-dichloroethane (1,2-DCA), and ethylene dibromide (EDB) by EPA Method 8260B.

No issues were noted by ESC during sample analysis that would have an adverse effect on the quality of the data and no issues affecting the sampling protocol were noted.

RECOMMENDATIONS

Arcadis recommends continuation of groundwater monitoring and sampling on a semi-annual or annual basis at all site monitoring well locations in accordance with the approved schedule.

LIMITATIONS

The findings presented in this report are based upon observations of field personnel, points investigated, results of laboratory tests performed by ESC, and our understanding of the San Francisco Regional Water Quality Control Board (SF-RWQCB) requirements. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Arcadis and ARCO. It is possible that variations in soil or groundwater conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

Tables

Figures

Attachments

TABLES

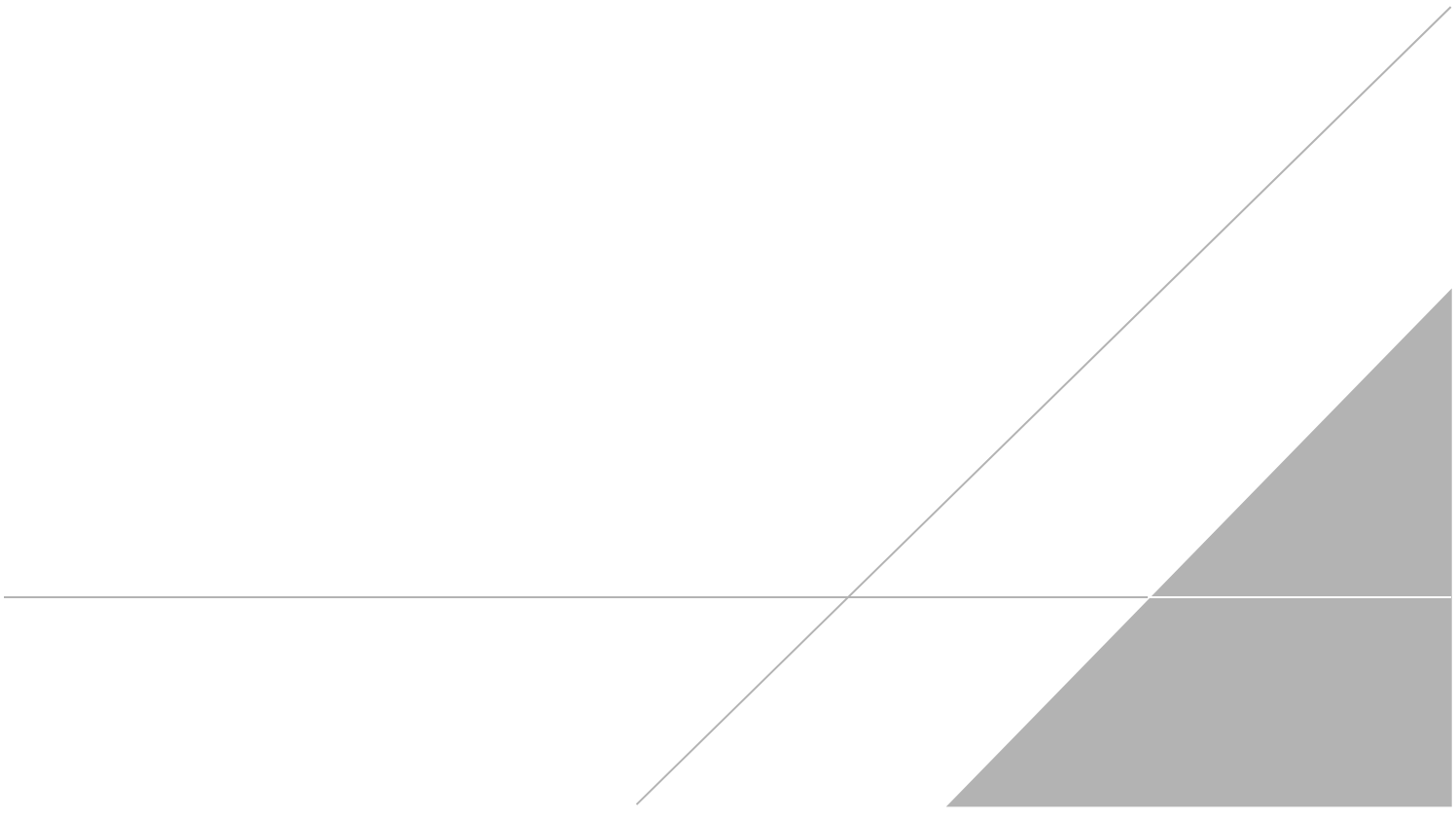

Table 1
Well Construction Details
CA-11132
3201 35th Avenue
Oakland, California

ARCADIS Design & Consultancy for natural and built assets

Well ID	Completion Date	Total Depth (feet bgs)	Well Depth (feet bgs)	Screen Interval (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Destruction Date
AS-1	09/08/10	47	45	42 - 45	8	2	--
MW-1	07/30/86	45	45	10 - 45	8	2	--
MW-2	07/31/86	35	35	10 - 35	8	2	--
MW-3	07/31/86	35	35	10 - 35	8	2	--
MW-4	01/29/90	41	40	10 - 40	8	2	--
MW-5	02/01/90	35	35	10 - 35	8	2	--
MW-6	02/01/90	35	35	15 - 35	8	2	--
MW-7	02/01/90	35	35	17 - 35	8	2	--
MW-8	01/25/91	41.5	40	20 - 40	8	2	--
MW-9	02/26/91	35	35	15 - 35	8	2	--
MW-10	02/27/91	36	35	20 - 35	8	2	02/03/16
MW-10R	02/03/16	27	26	11 - 26	8	2	--
MW-11	02/10/16	28	26	11 - 26	8	2	--
OW-1	09/08/10	40	42	20 - 40	8	2	--
RW-1	01/29/90	41.5	40	20 - 40	12	6	--
SVE-1	09/07/10	20	20	10 - 20	8	2	--
VM-1	09/07/10	20	20	10 - 20	8	2	--
VM-2	09/07/10	20	22	10 - 20	8	2	--

Notes:
AS = air sparge well
MW = monitoring Well
OW = observation well
RW = groundwater recovery well
SVE = soil vapor extraction well
VM = soil vapor monitoring well
bgs = below ground surface
-- = not applicable

Table 2
Current Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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	03/01/2017		169.75	12.77	--	156.98	6,770	6.31	1.12	89.20	8.1	7.51	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.40	
MW-2	03/01/2017		168.14	11.95	--	156.19	35,000	7,630	897	1,810	3,920	175	<500	<100	<100	<100	<100	<100	<10,000	3.13	
MW-3	03/01/2017		167.17	10.16	--	157.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/01/2017		170.36	15.00	--	155.36	<100	<1.00	<1.00	<1.00	<3.00	2.31	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.99	
MW-5	03/01/2017		165.14	8.89	--	156.25	426	32.8	1.01	22.6	8.62	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.65	
MW-6	03/01/2017		165.40	8.63	--	156.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/01/2017		168.08	12.75	--	155.33	<100	<1.00	<1.00	<1.00	<3.00	7.44	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.87	
MW-8	03/01/2017		165.74	9.40	--	156.34	21,500	138	57.2J	1,120	1,880	<100	<500	<100	<100	<100	<100	<100	<10,000	2.91	
MW-9	03/01/2017		166.20	9.44	--	156.76	9,210	1.92	<1.00	16.7	3.65	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	3.24	
MW-10R	12/14/2016		166.80	14.81	--	151.99	19,800	2,610	382	702	2,000	1.14	78.5	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.25	
MW-10R	03/01/2017		166.80	11.23	--	155.57	15,600	1,610	1,410	799	2,340	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<5,000	1.96	
MW-11	12/14/2016		165.64	13.09	--	152.55	260	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.77	
MW-11	03/01/2017		165.64	10.95	--	154.69	42.4J	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.91	
RW-1	03/01/2017		168.01	10.63	--	157.38	225	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.31	
OW-1	03/01/2017		--	12.04	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)

Notes:
TOC = Top of casing measured
DTW = Depth to water
LNAPL = Light non-aqueous phase liquid (LPH)
GW Elev = Groundwater elevation
GRO = Gasoline range organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
TBA = tert-butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME= tert-Amyl methyl ether
DO = Dissolved oxygen
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
Ft msl = Feet above mean sea level
J3 = The associated batch QC was outside the established quality control range for precision.
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
mg/L = Milligrams per liter
µg/L = Micrograms per liter
Values for DO and pH were obtained through field measurements
GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008; the analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through August 6, 2009 and EPA method 8260B (C6-C12) from March 4, 2010 to the present

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-1	03/07/1991		169.75	20.59	--	149.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/01/1991		169.75	16.51	0.15	153.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/03/1992		169.75	22.30	0.27	147.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/05/1992		169.75	23.98	0.24	145.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/13/1993		169.75	17.03	0.24	152.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/23/1993		169.75	18.10	0.42	151.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/12/1993		169.75	22.02	0.49	147.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/21/1993		169.75	25.12	1.09	143.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/21/1994		169.75	23.02	0.76	145.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/20/1994		169.75	24.54	1.8	143.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/01/1994		169.75	24.11	0.35	145.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/23/1994		169.75	18.19	--	151.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/26/1995		169.75	16.25	1.1	152.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/08/1995		169.75	22.92	--	146.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/22/1995		169.75	24.45	0.85	144.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	10/27/1995		169.75	25.41	--	143.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/25/1996		169.75	18.20	--	151.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/19/1996		169.75	19.06	1.22	149.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/23/1996		169.75	22.98	0.89	145.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/11/1996		169.75	23.99	0.89	144.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/21/1997		169.75	16.80	0.9	152.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/29/1997		169.75	21.90	0.85	147.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/30/1997	Dup	--	--	--	--	92,000	3,500	8,100	4,400	23,800	6,900	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	04/30/1997		--	--	--	--	100,000	3,600	8,000	4,000	21,300	7,700	--	--	--	--	--	--	--	5.2	--	
MW-1	08/21/1997	Dup	169.75	23.40	--	146.35	120,000	3,200	8,100	3,800	19,600	5,200	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	08/21/1997		169.75	23.40	--	146.35	140,000	3,000	8,500	3,900	22,100	5,700	--	--	--	--	--	--	--	5.3	--	
MW-1	11/05/1997	Dup	169.75	23.70	--	145.51	88,000	7,300	4,800	3,600	16,900	8,200	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	11/05/1997		169.75	23.70	--	145.51	68,000	6,200	4,400	3,300	14,300	8,000	--	--	--	--	--	--	--	4.7	--	
MW-1	02/03/1998		169.75	13.63	0.32	155.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/04/1998	Dup	--	--	--	--	160,000	2,300	8,400	5,000	29,400	<10,000	--	--	--	--	--	--	--	--	--	(Dup)
MW-1	02/04/1998		--	--	--	--	190,000	2,200	10,000	5,600	32,000	<10,000	--	--	--	--	--	--	--	5.3	--	
MW-1	05/28/1998		169.75	18.03	0.17	151.55	87,000	980	3,900	3,600	19,000	2,900	--	--	--	--	--	--	--	3.8	--	
MW-1	12/30/1998		169.75	19.50	0.08	150.17	70,000	530	3,200	2,900	16,000	3,600	--	--	--	--	--	--	--	--	--	
MW-1	02/02/1999		169.75	18.93	0.03	150.79	79,000	480	3,100	3,500	21,000	3,500	--	--	--	--	--	--	--	--	--	
MW-1	05/10/1999		169.75	18.28	0.03	151.44	110,000	160	1,900	3,700	24,000	3,000	--	--	--	--	--	--	--	--	--	
MW-1	08/24/1999		169.75	20.13	0.06	149.56	110,000	850	1,300	1,900	19,000	<50	--	--	--	--	--	--	--	--	--	
MW-1	11/03/1999		169.75	22.27	0.36	147.12	65,000	6,300	1,100	3,300	9,500	8,900	--	--	--	--	--	--	--	--	--	
MW-1	03/01/2000		169.75	14.79	0.23	154.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/21/2000		169.75	18.10	0.33	151.32	61,000	330	780	2,700	17,000	1,300	--	--	--	--	--	--	--	--	--	
MW-1	07/31/2000		169.75	21.60	0.53	147.62	1,500,000	340	2,100	24,000	120,000	2,700	--	--	--	--	--	--	--	--	--	
MW-1	11/20/2000		169.75	21.69	0.37	147.69	1,700,000	1,800	2,300	19,000	93,000	3,900	--	--	--	--	--	--	--	--	--	
MW-1	02/18/2001		169.75	16.70	0.13	152.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/26/2001		169.75	14.38	0.15	155.22	100,000	658	466	4,210	15,000	1,890	--	--	--	--	--	--	--	--	--	
MW-1	06/07/2001		169.75	20.78	--	148.97	70,000	705	440	3,870	12,200	2,720	--	--	--	--	--	--	--	--	--	
MW-1	09/05/2001		169.75	23.36	0.35	146.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/30/2001		169.75	20.85	0.41	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	12/06/2001		169.75	18.72	0.27	150.76	39,000	3,500	237	2,150	4,500	5,400	--	--	--	--	--	--	--	--	--	
MW-1	02/20/2002		169.75	17.43	0.15	152.17	52,000	465	271	1,600	11,400	106	--	--	--	--	--	--	--	--	--	
MW-1	06/20/2002		169.75	21.18	0.34	148.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/11/2002		169.75	22.86	0.4	146.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/12/2002		169.75	22.65	0.37	146.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/29/2003		169.75	18.15	0.3	151.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/22/2003		169.75	18.49	0.2	151.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/24/2003		169.75	21.44	0.35	147.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	07/28/2003		169.75	22.72	0.35	146.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/12/2003		169.75	22.64	0.23	146.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/12/2003		169.75	20.70	0.24	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/18/2003		169.75	21.70	0.25	148.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/23/2004		169.75	16.34	0.09	153.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/04/2004		169.75	21.28	0.16	148.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/04/2004		169.75	22.54	0.1	147.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	09/22/2004		169.75	22.76	0.2	147.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/10/2004		169.75	20.19	0.14	149.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	01/13/2005		169.75	14.58	0.03	155.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/15/2005		169.75	16.13	0.04	153.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/07/2005		169.75	13.31	0.01	156.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/16/2005		169.75	15.74	0.02	154.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/17/2005		169.75	21.15	0.08	148.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/18/2005		169.75	20.15	--	149.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/07/2006		169.75	15.19	0.01	154.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/19/2006		169.75	17.42	--	152.33	44,000	73	510	3,300	5,300	86	<400	<10	<10	<10	<10	<10	<6,000	--	--	
MW-1	08/23/2006		169.75	22.01	0.14	147.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-1	11/15/2006		169.75	21.98	0.18	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/14/2007		169.75	17.12	0.17	152.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/22/2007		169.75	19.49	0.01	150.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/15/2007		169.75	22.24	0.01	147.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/08/2007		169.75	21.84	0.01	147.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	02/20/2008		169.75	16.52	0.02	153.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/07/2008		169.75	20.91	0.02	148.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/20/2008		169.75	22.77	0.02	146.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/17/2008		169.75	22.05	--	147.70	27,000	780	30	1,800	1,400	590	350	<10	<10	<10	<10	27	<6,000	--	--	
MW-1	02/25/2009		169.75	15.28	0.02	154.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	04/08/2009		169.75	18.18	--	151.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	05/28/2009		169.75	19.62	0.01	150.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/16/2009		169.75	20.94	0.01	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/06/2009		169.75	22.31	0.01	147.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/04/2010		169.75	14.27	--	155.48	14,000	45	<10	610	390	<10	<80	<10	<10	<10	<10	<10	<2,000	0.54	--	(P)
MW-1	09/02/2010		169.75	22.32	--	147.43	8,200	10	<5.0	230	140	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	(NP)
MW-1	03/15/2011		169.75	14.99	--	154.76	4,500	<5.0	<5.0	56	30	16	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P,t)
MW-1	08/17/2011		169.75	20.41	--	149.34	1,200	<1.0	<1.0	24	15	8.3	<8.0	<1.0	<1.0	<1.0	<1.0	<1.0	<500	--	--	(P)
MW-1	02/06/2012		169.75	18.69	--	151.06	710	<1.0	<1.0	2.9	2.2	10	100	<1.0	<1.0	<1.0	<1.0(*)	<1.0	<500	--	--	(P)
MW-1	08/21/2012		169.75	21.77	--	147.98	5,000	230	7.3	230	68	77	<20	<2.5	<2.5	<2.5	<2.5	4.3	<1,300	--	--	
MW-1	02/04/2013		169.75	18.36	(Sheen)	151.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/01/2013		169.75	22.25	0.15	147.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-1	02/27/2014		169.75	19.82	0.07	149.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	08/27/2014		169.75	22.03	0.15	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/27/2015		169.75	19.54	--	150.21	7,900	17	<2.5	110	25	13	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2,500	3.23	--	(odor, t)
MW-1	08/27/2015		169.75	21.64	0.1	148.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-1	03/28/2016		169.75	14.78	--	154.97	8,110	6.67J	<50.0	59.6	<30.0	5.80J	43.5J	<10.0	<10.0J3	<10.0	<10.0	<10.0	<1,000	1.75	--	
MW-1	09/07/2016		169.75	20.98	--	148.77	9,940	143	5.44J	123	15.2	<5.00	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<500	0.22	--	
MW-1	03/01/2017		169.75	12.77	--	156.98	6,770	6.31	1.12	89.20	8.1	7.51	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.40	--	
MW-2	03/07/1991		168.14	19.18	--	148.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/01/1991		168.14	15.21	--	152.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	07/03/1992		168.14	20.93	--	147.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	10/05/1992		168.14	22.74	--	145.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/13/1993		168.14	15.55	--	152.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/23/1993		168.14	16.54	--	151.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	07/12/1993		168.14	20.46	--	147.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	10/21/1993		168.14	24.91	--	143.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/21/1994		168.14	21.20	--	146.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/20/1994		168.14	22.44	--	145.70	1,800	140	370	54	290	24	--	--	--	--	--	--	--	1.7	--	
MW-2	08/01/1994		168.14	22.24	--	145.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	12/23/1994		168.14	16.25	--	151.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/26/1995		168.14	14.55	--	153.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	06/08/1995		168.14	21.18	--	146.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	08/22/1995		168.14	22.76	--	145.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	10/27/1995		168.14	23.61	--	144.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/25/1996		168.14	15.95	--	152.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/19/1996		168.14	17.33	--	150.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	07/23/1996		168.14	21.25	--	146.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/11/1996		168.14	22.27	--	145.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	01/21/1997		168.14	15.19	--	152.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/29/1997		168.14	20.22	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	04/30/1997		--	--	--	--	130,000	4,600	15,000	6,000	37,000	<5,000	--	--	--	--	--	--	--	5	--	
MW-2	08/21/1997		168.14	21.74	--	146.40	110,000	6,000	16,000	4,700	28,000	<500	--	--	--	--	--	--	--	4.6	--	
MW-2	11/05/1997		168.14	21.61	--	146.53	120,000	7,800	18,000	4,900	28,100	<2,500	--	--	--	--	--	--	--	4.6	--	
MW-2	02/03/1998		168.14	11.51	--	156.63	75,000	590	1,500	1,800	12,800	<2,500	--	--	--	--	--	--	--	4.5	--	
MW-2	05/28/1998		168.14	16.51	--	151.63	79,000	3,900	3,100	3,100	18,000	900	--	--	--	--	--	--	--	4.3	--	
MW-2	12/30/1998		168.14	17.70	--	150.44	95,000	4,700	3,500	3,700	21,000	<250	--	--	--	--	--	--	--	--	--	
MW-2	02/02/1999		168.14	15.46	--	152.68	170,000	3,500	1,500	5,200	34,000	<500	--	--	--	--	--	--	--	--	--	
MW-2	05/10/1999		168.14	16.52	--	151.62	84,000	3,200	3,200	3,700	20,000	75	--	--	--	--	--	--	--	--	--	
MW-2	08/24/1999		168.14	20.73	--	147.41	130,000	9,100	9,200	4,700	27,000	<250	--	--	--	--	--	--	--	--	--	
MW-2	11/03/1999		168.14	20.93	--	147.21	120,000	10,000	21,000	4,700	30,200	2,200	--	--	--	--	--	--	--	--	--	
MW-2	03/01/2000		168.14	13.37	--	154.77	39,000	1,400	1,500	1,700	8,100	44	--	--	--	--	--	--	--	--	--	
MW-2	04/21/2000		168.14	16.59	--	151.55	68,000	3,300	2,500	3,100	20,000	260	--	--	--	--	--	--	--	--	--	
MW-2	07/31/2000		168.14	16.37	--	151.77	99,000	5,600	1,400	4,300	22,000	490	--	--	--	--	--	--	--	--	--	
MW-2	11/20/2000		168.14	19.71	--	148.43	37,000	5,100	1,500	1,300	4,800	2,800	--	--	--	--	--	--	--	--	--	
MW-2	02/18/2001		168.14	15.29	--	152.85	54,000	5,020	3,880	2,850	15,400	1,010	--	--	--	--	--	--	--	--	--	
MW-2	06/07/2001		168.14	19.43	--	148.71	110,000	7,240	4,380	4,160	22,100	567	--	--	--	--	--	--	--	--	--	
MW-2	09/05/2001		168.14	22.44	--	145.70	69,000	5,750	5,790	2,770	14,200	1,510	--	--	--	--	--	--	--	--	--	
MW-2	11/30/2001		168.14	19.58	--	148.56	120,000	7,270	6,540	4,590	23,000	794	--	--	--	--	--	--	--	--	--	
MW-2	02/20/2002		168.14	16.39	--	151.75	56,000	2,410	2,270	2,910	14,300	160	--	--	--	--	--	--	--	--	--	
MW-2	06/20/2002		168.14	19.77	--	148.37	86,000	7,310	6,490	3,080	14,600	659	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-2	09/11/2002		168.14	21.60	--	146.54	130,000	7,600	13,000	5,400	30,000	<5,000	--	--	--	--	--	--	--	--	--	
MW-2	11/12/2002		168.14	21.34	--	146.80	46,000	4,100	4,300	1,900	10,000	1,900	--	--	--	--	--	--	--	--	--	
MW-2	01/29/2003		168.14	16.80	--	151.34	77,000	4,700	2,600	2,800	13,000	820	<2,000	<50	<50	<50	<50	<50	<4,000	--	--	
MW-2	05/22/2003		168.14	17.15	--	150.99	52,000	6,400	2,600	1,800	7,400	1,000	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-2	07/28/2003		168.14	21.47	--	146.67	31,000	6,900	5,500	2,200	12,000	1,700	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	11/18/2003		168.14	20.50	--	147.64	23,000	3,300	800	500	2,000	500	<1,000	--	<25	<25	--	<25	<5,000	--	--	
MW-2	02/23/2004		168.14	14.77	--	153.37	84,000	14,000	6,200	3,100	14,000	790	<5,000	<120	<120	<120	<120	<120	<25,000	--	--	
MW-2	05/04/2004		168.14	20.09	--	148.05	120,000	15,000	17,000	4,900	24,000	780	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-2	08/04/2004		168.14	21.39	--	146.75	38,000	9,100	3,300	1,900	5,800	430	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-2	11/10/2004		168.14	18.98	--	149.16	22,000	4,400	2,000	940	3,600	310	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-2	02/15/2005		168.14	15.62	--	152.52	67,000	11,000	4,200	3,000	11,000	690	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	05/16/2005		168.14	14.71	--	153.43	94,000	11,000	7,600	4,100	17,000	560	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-2	08/17/2005		168.14	20.00	--	148.14	110,000	13,000	8,000	4,300	18,000	480	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	11/18/2005		168.14	20.89	--	147.25	37,000	11,000	2,400	1,500	4,600	340	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-2	02/07/2006		168.14	13.31	--	154.83	74,000	8,900	5,800	3,600	14,000	440	<4,000	160	<100	<100	<100	<100	<60,000	--	--	
MW-2	05/19/2006		168.14	16.30	--	151.84	78,000	11,000	3,700	4,500	14,000	430	<4,000	<100	<100	<100	<100	<100	<60,000	--	--	
MW-2	08/23/2006		168.14	20.83	--	147.31	100,000	12,000	9,100	5,800	25,000	480	<4,000	<100	<100	<100	<100	<100	<60,000	--	--	
MW-2	11/15/2006		168.14	20.80	--	147.34	46,000	8,800	3,600	2,300	8,500	400	<4,000	<100	<100	<100	<100	<100	<60,000	0.7	--	
MW-2	02/14/2007		168.14	15.96	(Sheen)	152.18	100,000	13,000	3,600	6,200	26,000	810	<4,000	<100	<100	<100	<100	<100	<60,000	1.43	--	
MW-2	05/22/2007		168.14	18.20	--	149.94	91,000	15,000	8,700	4,700	20,000	1,000	<10,000	<250	<250	<250	<250	<250	<150,000	0.08	--	
MW-2	08/15/2007		168.14	21.23	(Sheen)	146.91	14,000	7,300	130	280	600	260	2,400	<50	<50	<50	<50	<50	<30,000	4.24	--	
MW-2	11/08/2007		168.14	20.32	--	147.82	22,000	7,400	420	640	1,700	240	2,800	<50	<50	<50	<50	<50	<30,000	1.21	--	
MW-2	02/20/2008		168.14	15.20	0.06	152.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	05/07/2008		168.14	19.80	0.04	148.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	08/20/2008		168.14	21.70	0.01	146.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	11/17/2008		168.14	20.73	--	147.41	45,000	8,400	700	1,500	5,600	320	1,800	<10	<10	<10	<10	<10	<6,000	--	--	
MW-2	02/25/2009		168.14	14.15	--	153.99	18,000	5,200	<250	380	1,400	<250	<5,000	<250	<250	<250	<250	<250	<150,000	2.11	--	
MW-2	04/08/2009		168.14	17.00	--	151.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	05/28/2009		168.14	18.43	(Sheen)	149.71	37,000	5,300	1,600	1,400	5,600	510	<2,500	<120	<120	<120	<120	<120	<75,000	0.16	--	
MW-2	06/16/2009		168.14	19.80	0.01	148.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	08/06/2009		168.14	21.17	0.01	146.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	03/04/2010		168.14	13.03	--	155.11	18,000	9,500	270	510	1,400	350	2,600	<5.0	<5.0	<5.0	<5.0	12	<1,000	1.28	--	(P)
MW-2	09/02/2010		168.14	20.62	--	147.52	58,000	11,000	3,600	3,900	16,000	470	<80	<10	<10	<10	<10	14	<2,000	--	--	(NP, y)
MW-2	03/15/2011		168.14	13.70	--	154.44	63,000	12,000	2,900	4,100	15,000	500	<800	<100	<100	<100	<100	<100	<50,000	--	--	(P)
MW-2	08/17/2011		168.14	19.31	--	148.83	23,000	4,900	620	1,500	4,400	150	<800	<100	<100	<100	<100	<100	<50,000	--	--	(P)
MW-2	02/06/2012		168.14	17.49	--	150.65	26,000	6,400	200	1,700	3,400	360	<800	<100	<100	<100	<100(*)	<100	<50,000	--	--	(P)
MW-2	08/21/2012		168.14	20.66	--	147.48	20,000	4,900	440	1,400	2,400	220	<800	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	02/04/2013		168.14	17.24	--	150.90	25,000	4,000	1,700	1,600	5,300	130	<800	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	08/01/2013		168.14	21.10	--	147.04	43,000	9,100	630	2,800	9,700	220	<2,000	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	02/27/2014		168.14	18.65	--	149.49	31,000	9,600	180	2,700	6,100	310	<2,000	<100	<100	<100	<100	<100	<50,000	--	--	
MW-2	08/27/2014		168.14	20.78	--	147.36	35,000	9,900	230	3,100	5,500	240	<4,000	<100	<100	<100	<100	<100	<100,000	3.24	450	(odor)
MW-2	03/27/2015		168.14	18.32	--	149.82	29,000	13,000	210	1,400	1,300	140	<4,000	<100	<100	<100	<100	<100	<100,000	2.29	--	(odor)
MW-2	08/27/2015		168.14	20.40	--	147.74	22,400	8,550	80.3	1,110	444	41.1J	416J	<1.00	<1.00	<1.00	--	<1.00	<100	6.2	--	
MW-2	03/28/2016		168.14	13.55	--	154.59	36,500	7,360	609	1,350	3,140	118	463	<50.0	<50.0J3	<50.0	<50.0	<50.0	<5,000	1.64	--	
MW-2	09/07/2016		168.14	19.54	--	148.60	24,200	8,960	122J	626	668	90.8J	<500	<100	<100	<100	<100	<100	<10,000	0.38	--	
MW-2	03/01/2017		168.14	11.95	--	156.19	35,000	7,630	897	1,810	3,920	175	<500	<100	<100	<100	<100	<100	<10,000	3.13	--	
MW-3	07/09/1990		--	--	--	--	140	5.3	4.6	2	3.8	--	--	--	--	--	--	--	--	--	--	
MW-3	12/21/1990		--	--	--	--	0.19	100	6	0.9	27	--	--	--	--	--	--	--	--	--	--	
MW-3	03/07/1991		167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--	--	--	--	--	--	--	--	--	
MW-3	04/01/1991		167.17	13.69	--	153.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	06/27/1991		--	--	--	--	380	28	26	13	46	--	--	--	--	--	--	--	--	--	--	
MW-3	09/27/1991		--	--	--	--	0.07	7.9	--	0.4	1.1	--	--	--	--	--	--	--	--	--	--	
MW-3	12/18/1991		--	--	--	--	0.26	34	24	0.8	28	--	--	--	--	--	--	--	--	--	--	
MW-3	07/03/1992		167.17	19.59	--	147.58	71	9.4	0.9	5	13	--	--	--	--	--	--	--	--	--	--	
MW-3	10/05/1992	Dup	167.17	21.22	--	145.95	<50	2.2	<0.5	1.5	2.8	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	10/05/1992		167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	--	--	--	--	--	--	--	--	--	
MW-3	01/13/1993		167.17	13.63	--	153.54	830	50	34	42	89	--	--	--	--	--	--	--	--	--	--	
MW-3	04/23/1993	Dup	167.17	15.02	--	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	04/23/1993		167.17	15.02	--	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-3	07/12/1993		167.17	19.16	--	148.01	250	12	4.2	12	16	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	10/21/1993	Dup	167.17	21.81	--	145.36	65	7.4	1	6.9	4.2	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	10/21/1993		167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	01/21/1994		167.17	19.94	--	147.23	57	3	3.4	3.6	9	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	04/20/1994		167.17	20.24	--	146.93	600	26	23	33	88	28.7	--	--	--	--	--	--	--	1.8	--	
MW-3	08/01/1994	Dup	167.17	20.74	--	146.43	120	7.7	1.6	5.9	6.7	5.43	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	08/01/1994		167.17	20.74	--	146.43	99	6.2	1.1	4.5	5.2	<5.0	--	--	--	--	--	--	--	1.4	--	
MW-3	12/23/1994	Dup	167.17	14.70	--	152.47	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-3	12/23/1994		167.17	14.70	--	152.47	<50	<0.5	0.78	<0.5	<0.5	9.8	--	--	--	--	--	--	--	1.7	--	
MW-3	01/26/1995		167.17	12.89	--	154.28	190	16	0.5	35	24	--	--	--	--	--	--	--	--	6.6	--	
MW-3	06/08/1995		167.17	19.95	--	147.22	330	21	4	34	32	--	--	--	--	--	--	--	--	7	--	
MW-3	08/22/1995		167.17	21.41	--	145.76	150	14	<0.50	<0.50	1.6	<5.0	--	--	--	--	--	--	--	6.6	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-3	10/27/1995		167.17	22.43	--	144.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	10/30/1995		--	--	--	--	51	2.4	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.9	--	
MW-3	01/25/1996		167.17	14.03	--	153.14	<50	<0.50	<0.50	<0.50	<1.0	5.1	--	--	--	--	--	--	--	--	--	
MW-3	04/19/1996		167.17	15.26	--	151.91	460	55	4	33	63	<10	--	--	--	--	--	--	--	9.4	--	
MW-3	07/23/1996		167.17	19.19	--	147.98	<50	<0.5	<0.5	<0.5	<0.5	<10	--	--	--	--	--	--	--	9.2	--	
MW-3	11/11/1996		167.17	20.24	--	146.93	<250	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	8.4	--	
MW-3	01/21/1997		167.17	13.09	--	154.08	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	5.4	--	
MW-3	04/29/1997		167.17	18.14	--	149.03	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.3	--	
MW-3	08/21/1997		167.17	19.64	--	147.53	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.9	--	
MW-3	11/05/1997		167.17	19.95	--	147.22	<250	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	4.5	--	
MW-3	02/03/1998		167.17	10.57	--	156.60	<50	<0.50	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.7	--	
MW-3	05/28/1998		167.17	14.65	--	152.52	330	<2.5	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	4.2	--	
MW-3	12/30/1998		167.17	16.63	--	150.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/02/1999		167.17	13.12	--	154.05	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	--	--	
MW-3	05/10/1999		167.17	14.21	--	152.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/24/1999		167.17	14.36	--	152.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/03/1999		167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/01/2000		167.17	15.17	--	152.00	<50	<0.5	0.57	<0.5	0.62	<0.5	--	--	--	--	--	--	--	--	--	
MW-3	04/21/2000		167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	07/31/2000		167.17	15.29	--	151.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/20/2000		167.17	17.31	--	149.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/18/2001		167.17	12.85	--	154.32	160	1.95	1.31	10.2	9.09	1	--	--	--	--	--	--	--	--	--	
MW-3	06/07/2001		167.17	18.00	--	149.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	09/05/2001		167.17	20.32	--	146.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/30/2001		167.17	16.94	--	150.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/20/2002		167.17	14.84	--	152.33	86	<0.5	0.845	6.58	5.75	<0.5	--	--	--	--	--	--	--	--	--	
MW-3	06/20/2002		167.17	18.40	--	148.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	09/11/2002		167.17	20.06	--	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/12/2002		167.17	19.84	--	147.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	01/27/2003		167.17	14.83	--	152.34	850	20	9.7	24	45	0.76	--	--	--	--	--	--	--	--	--	
MW-3	01/29/2003		--	--	--	--	--	--	--	--	--	0.76	<20	<50	<50	<50	<50	<50	<40	--	--	
MW-3	05/22/2003		167.17	15.60	--	151.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	07/28/2003		167.17	20.12	--	147.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/18/2003		167.17	19.15	--	148.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/23/2004		167.17	13.53	--	153.64	160	<0.50	1.1	9.6	12	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-3	05/04/2004		167.17	18.61	--	148.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/04/2004		167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/10/2004		167.17	17.48	--	149.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/15/2005		167.17	14.31	--	152.86	500	7.8	1.8	9.2	9.6	1.7	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-3	05/16/2005		167.17	13.11	--	154.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/17/2005		167.17	18.53	--	148.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/18/2005		167.17	19.34	--	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/07/2006		167.17	11.64	--	155.53	65	<0.50	<0.50	1.4	2.3	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	--	--	
MW-3	05/19/2006		167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/23/2006		167.17	19.43	--	147.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/15/2006		167.17	19.22	--	147.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/14/2007		167.17	13.80	--	153.37	200	1.1	<0.50	5.9	3.2	3.8	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	0.68	--	
MW-3	05/22/2007		167.17	16.80	--	150.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/15/2007		167.17	19.87	--	147.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/08/2007		167.17	19.27	--	147.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/20/2008		167.17	13.58	--	153.59	240	1.1	<0.50	0.99	0.79	2.3	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<100	2.58	--	
MW-3	05/07/2008		167.17	18.32	--	148.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/20/2008		167.17	20.29	--	146.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	11/17/2008		167.17	19.35	--	147.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/25/2009		167.17	11.77	--	155.40	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<300	3.45	--	
MW-3	05/28/2009		167.17	17.02	--	150.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/06/2009		167.17	19.87	--	147.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/04/2010		167.17	10.79	--	156.38	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	3.16	--	(P)
MW-3	09/02/2010		167.17	19.32	--	147.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/15/2011		167.17	11.77	--	155.40	<50	<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	08/17/2011		167.17	17.98	--	149.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/06/2012		167.17	15.92	--	151.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/21/2012		167.17	19.42	--	147.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(slight odor)
MW-3	02/04/2013		167.17	15.75	--	151.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/01/2013		167.17	19.78	--	147.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	02/27/2014		167.17	16.95	--	150.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/27/2014		167.17	19.64	--	147.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/27/2015		167.17	17.16	--	150.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	08/27/2015		167.17	19.40	--	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/28/2016		167.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	09/07/2016		167.17	18.75	--	148.42	280	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.40	--	
MW-3	03/01/2017		167.17	10.16	--	157.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-4	12/21/1990		--	--	--	--	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--	--	
MW-4	03/07/1991		170.36	20.72	--	149.64	--	2.2	3.8	1.5	2.8	--	--	--	--	--	--	--	--	--	--	
MW-4	04/01/1991		170.36	17.49	--	152.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/27/1991		--	--	--	--	--	6.3	1.8	0.4	1	--	--	--	--	--	--	--	--	--	--	
MW-4	07/03/1992		170.36	22.16	--	148.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	10/05/1992		170.36	23.38	--	146.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	01/13/1993		170.36	17.58	--	152.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	04/23/1993		170.36	15.72	--	154.64	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-4	07/12/1993		170.36	21.74	--	148.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-4	10/21/1993		170.36	23.84	--	146.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-4	01/21/1994		170.36	22.42	--	147.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-4	04/20/1994		170.36	22.66	--	147.70	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	2.2	--	
MW-4	08/01/1994		170.36	23.01	--	147.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	1.9	--	
MW-4	12/23/1994		170.36	17.03	--	153.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	01/26/1995		170.36	17.42	--	152.94	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.5	--	
MW-4	06/08/1995		170.36	21.55	--	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/22/1995		170.36	23.47	--	146.89	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.4	--	
MW-4	10/27/1995		170.36	24.50	--	145.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	01/25/1996		170.36	18.74	--	151.62	<50	<0.50	<0.50	<0.50	<1.0	58	--	--	--	--	--	--	--	--	--	
MW-4	04/19/1996		170.36	18.63	--	151.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	07/23/1996		170.36	22.56	--	147.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/11/1996		170.36	23.63	--	146.73	<50	<1.0	<1.0	<1.0	<1.0	34	--	--	--	--	--	--	--	8.2	--	
MW-4	01/21/1997		170.36	16.59	--	153.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	04/29/1997		170.36	21.43	--	148.93	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.7	--	
MW-4	08/21/1997		170.36	22.91	--	147.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/05/1997		170.36	22.34	--	148.02	60	<0.5	<1.0	<1.0	<1.0	76	--	--	--	--	--	--	--	4.9	--	
MW-4	02/03/1998		170.36	12.26	--	158.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	05/28/1998		170.36	18.50	--	151.86	70	<0.5	<1.0	<1.0	<1.0	160	--	--	--	--	--	--	--	4.2	--	
MW-4	12/30/1998		170.36	19.69	--	150.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/02/1999		170.36	18.26	--	152.10	70	<1.0	<1.0	<1.0	<1.0	130	--	--	--	--	--	--	--	--	--	
MW-4	05/10/1999		170.36	17.86	--	152.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/24/1999		170.36	17.93	--	152.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/03/1999		170.36	22.78	--	147.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/01/2000		170.36	18.04	--	152.32	<50	<0.5	0.67	<0.5	0.7	110	--	--	--	--	--	--	--	--	--	
MW-4	04/21/2000		170.36	17.36	--	153.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	07/31/2000		170.36	17.83	--	152.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/20/2000		170.36	18.91	--	151.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/18/2001		170.36	17.72	--	152.64	88	<0.5	<0.5	<0.5	<0.5	97.3	--	--	--	--	--	--	--	--	--	
MW-4	06/07/2001		170.36	20.23	--	150.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	09/05/2001		170.36	22.76	--	147.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/30/2001		170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/20/2002		170.36	19.32	--	151.04	76	<0.5	<0.5	<0.5	<1.0	81	--	--	--	--	--	--	--	--	--	
MW-4	06/20/2002		170.36	20.71	--	149.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	09/11/2002		170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/12/2002		170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	01/29/2003		170.36	19.80	--	150.56	100	<0.5	<0.5	<0.5	<0.5	66	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<40	--	--	
MW-4	05/22/2003		170.36	19.35	--	151.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	07/28/2003		170.36	22.18	--	148.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/18/2003		170.36	21.65	--	148.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/23/2004		170.36	17.53	--	152.83	75	<0.50	<0.50	<0.50	<0.50	65	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-4	05/04/2004		170.36	20.62	--	149.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/04/2004		170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/10/2004		170.36	20.65	--	149.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/15/2005		170.36	18.91	--	151.45	<50	<0.50	<0.50	<0.50	<0.50	62	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-4	05/16/2005		170.36	17.34	--	153.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/17/2005		170.36	21.31	--	149.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/18/2005		170.36	21.67	--	148.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/07/2006		170.36	16.74	--	153.62	100	<0.50	<0.50	1	3	29	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	--	--	
MW-4	05/19/2006		170.36	18.22	--	152.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/23/2006		170.36	20.95	--	149.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/15/2006		170.36	22.21	--	148.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/14/2007		170.36	18.25	--	152.11	<50	<0.50	<0.50	<0.50	<0.50	61	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	0.95	--	
MW-4	05/22/2007		170.36	20.16	--	150.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/15/2007		170.36	22.34	--	148.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/08/2007		170.36	21.86	--	148.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/20/2008		170.36	17.74	--	152.62	<50	<0.50	<0.50	<0.50	<0.50	36	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<100	2.13	--	
MW-4	05/07/2008		170.36	21.38	--	148.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	08/20/2008		170.36	22.44	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/17/2008		170.36	22.20	--	148.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/25/2009		170.36	16.81	--	153.55	<50	<0.50	<0.50	<0.50	<0.50	26	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<300	2.8	--	
MW-4	05/28/2009		170.36	20.37	--	149.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-4	08/06/2009		170.36	22.46	--	147.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/04/2010		170.36	17.11	--	153.25	<50	<0.50	<0.50	<0.50	<1.0	34	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.63	--	(P)
MW-4	09/02/2010		170.36	20.63	--	149.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/15/2011		170.36	16.47	--	153.89	<50	<0.50	<0.50	<0.50	<1.0	26	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-4	08/17/2011		170.36	20.94	--	149.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/06/2012		170.36	19.65	--	150.71	<50	<0.50	<0.50	<0.50	<1.0	32	<4.0	<0.50	<0.50	<0.50	<0.50(*)	<0.50	<250	--	--	(P)
MW-4	08/21/2012		170.36	22.00	--	148.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/04/2013		170.36	19.43	--	150.93	<50	<0.50	<0.50	<0.50	<1.0	34	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-4	08/01/2013		170.36	22.43	--	147.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	02/27/2014		170.36	20.64	--	149.72	<50	<0.50	<0.50	<0.50	<1.0	24	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-4	08/27/2014		170.36	22.24	--	148.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/27/2015		170.36	20.23	--	150.13	<50	<0.50	<0.50	<0.50	<1.0	22	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	3.5	--	
MW-4	08/27/2015		170.36	21.87	--	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/28/2016		170.36	16.29	--	154.07	<100	<1.00	<5.00	<1.00	<3.00	15	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	2.27	--	
MW-4	09/07/2016		170.36	21.21	--	149.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/01/2017		170.36	15.00	--	155.36	<100	<1.00	<1.00	<1.00	<3.00	2.31	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.99	--	
MW-5	07/09/1990		--	--	--	--	280	200	210	46	290	--	--	--	--	--	--	--	--	--	--	
MW-5	12/21/1990		--	--	--	--	0.69	300	34	8.4	39	--	--	--	--	--	--	--	--	--	--	
MW-5	03/07/1991		165.14	16.60	--	148.54	--	17	0.9	0.7	1.6	--	--	--	--	--	--	--	--	--	--	
MW-5	04/01/1991		165.14	11.99	--	153.15	800	250	54	11	60	--	--	--	--	--	--	--	--	--	--	
MW-5	06/27/1991		--	--	--	--	330	120	10	12	8	--	--	--	--	--	--	--	--	--	--	
MW-5	09/27/1991		--	--	--	--	0.73	230	16	20	22	--	--	--	--	--	--	--	--	--	--	
MW-5	07/03/1992		165.14	18.65	--	146.49	150	36	<0.5	<0.5	1.1	--	--	--	--	--	--	--	--	--	--	
MW-5	10/05/1992		165.14	20.32	--	144.82	270	79	4	1.7	2.9	--	--	--	--	--	--	--	--	--	--	
MW-5	01/13/1993		165.14	13.03	--	152.11	180	59	6	1.8	7.6	--	--	--	--	--	--	--	--	--	--	
MW-5	04/23/1993		165.14	13.51	--	151.63	8,700	440	96	35	136	--	--	--	--	--	--	--	--	--	--	
MW-5	07/12/1993		165.14	18.06	--	147.08	250	57	2.9	2.1	6	<5.0	--	--	--	--	--	--	--	--	--	
MW-5	10/21/1993		165.14	20.41	--	144.73	210	82	1.5	<0.5	1.4	--	--	--	--	--	--	--	--	--	--	
MW-5	01/21/1994		165.14	18.86	--	146.28	110	36	1.2	<0.5	0.7	<5.0	--	--	--	--	--	--	--	--	--	
MW-5	04/20/1994		165.14	17.30	--	147.84	690	230	4.5	1.6	11	21.2	--	--	--	--	--	--	--	1.3	--	
MW-5	08/01/1994		165.14	17.53	--	147.61	170	44	1.6	0.9	2.7	<5.0	--	--	--	--	--	--	--	0.9	--	
MW-5	12/23/1994		165.14	11.63	--	153.51	630	180	1.9	0.66	1.9	7.81	--	--	--	--	--	--	--	1.4	--	
MW-5	01/26/1995		165.14	11.25	--	153.89	160	68	<0.5	<0.5	22	--	--	--	--	--	--	--	--	5.9	--	
MW-5	06/08/1995	Dup	165.14	16.80	--	148.34	1,700	560	51	55	170	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-5	06/08/1995		165.14	16.80	--	148.34	2,000	630	58	61	180	--	--	--	--	--	--	--	--	6.5	--	
MW-5	08/22/1995		165.14	19.02	--	146.12	3,700	1,100	18	27	59	<130	--	--	--	--	--	--	--	7.3	--	
MW-5	10/27/1995		165.14	20.94	--	144.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/30/1995		--	--	--	--	6,500	2,200	55	180	270	<250	--	--	--	--	--	--	--	7.5	--	
MW-5	01/25/1996	Dup	165.14	13.30	--	151.84	540	37	0.66	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	--	--	(Dup)
MW-5	01/25/1996		165.14	13.30	--	151.84	590	37	0.7	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	--	--	
MW-5	04/19/1996		165.14	13.63	--	151.51	1,500	470	38	49	210	<50	--	--	--	--	--	--	--	8.1	--	
MW-5	07/23/1996		165.14	17.61	--	147.53	140	4.6	<0.5	<0.5	<0.5	<10	--	--	--	--	--	--	--	8	--	
MW-5	11/11/1996		165.14	18.70	--	146.44	140	40	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.9	--	
MW-5	01/21/1997		165.14	11.63	--	153.51	730	300	<5.0	7.8	26	<50	--	--	--	--	--	--	--	5	--	
MW-5	04/29/1997		165.14	16.74	--	148.40	340	530	<5.0	<5.0	<5.0	<50	--	--	--	--	--	--	--	4.8	--	
MW-5	08/21/1997		165.14	18.26	--	146.88	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.9	--	
MW-5	11/05/1997		165.14	18.84	--	146.30	120	13	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.4	--	
MW-5	02/03/1998		165.14	9.49	--	155.65	<50	<0.50	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.3	--	
MW-5	05/28/1998		165.14	13.57	--	151.57	4,900	1,500	34	180	311	<10	--	--	--	--	--	--	--	4.1	--	
MW-5	12/30/1998		165.14	14.65	--	150.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	02/02/1999		165.14	12.56	--	152.58	100	<1.0	<1.0	<1.0	<1.0	9.1	--	--	--	--	--	--	--	--	--	
MW-5	05/10/1999		165.14	13.36	--	151.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	08/24/1999		165.14	13.50	--	151.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/03/1999		165.14	18.48	--	146.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/01/2000		165.14	9.59	--	155.55	<50	<0.5	0.58	<0.5	0.54	2.9	--	--	--	--	--	--	--	--	--	
MW-5	04/21/2000		165.14	13.52	--	151.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	07/31/2000		165.14	14.04	--	151.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/20/2000		165.14	15.89	--	149.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	02/18/2001		165.14	11.88	--	153.26	560	161	2.38	6.11	13	5.67	--	--	--	--	--	--	--	--	--	
MW-5	06/07/2001		165.14	15.30	--	149.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/05/2001		165.14	19.32	--	145.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/30/2001		165.14	17.44	--	147.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	02/20/2002		165.14	13.88	--	151.26	4,200	940	18.7	98.2	176	55.6	--	--	--	--	--	--	--	--	--	
MW-5	06/20/2002		165.14	16.20	--	148.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/11/2002		165.14	19.15	--	145.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/12/2002		165.14	19.01	--	146.13	390	55	0.89	3.4	3.5	210	--	--	--	--	--	--	--	--	--	
MW-5	01/29/2003		165.14	16.33	--	148.81	7,900	1,400	34	220	350	82	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<400	--	--	
MW-5	05/22/2003		165.14	14.35	--	150.79	9,900	2,300	91	400	690	<50	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-5	07/28/2003		165.14	18.90	--	146.24	3,200	690	14	81	100	120	<400	<10	<10	<10	<10	<10	<2,000	--	--	
MW-5	02/23/2004		165.14	12.21	--	152.93	7,500	1,500	100	190	350	100	<1,000	38	<25	<25	<25	<25	<5,000	--	--	
MW-5	05/04/2004		165.14	17.12	--	148.02	5,900	1,500	57	200	280	42	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-5	08/04/2004		165.14	19.05	--	146.09	<2,500	<25	<25	<25	<25	390	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-5	11/10/2004		165.14	16.95	--	148.19	870	80	<5.0	<5.0	<5.0	530	<200	<5.0	<5.0	<5.0	<5.0	5.5	<1,000	--	--	
MW-5	02/15/2005		165.14	12.75	--	152.39	1,600	330	8	37	67	260	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	05/16/2005		165.14	15.46	--	149.68	<500	<5.0	<5.0	<5.0	<5.0	370	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	08/17/2005		165.14	17.00	--	148.14	7,000	1,000	17	110	130	51	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	11/18/2005		165.14	18.33	--	146.81	1,900	91	<5.0	33	29	340	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-5	02/07/2006		165.14	10.27	--	154.87	2,100	590	9.6	86	110	200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-5	05/19/2006		165.14	13.08	--	152.06	3,200	720	9.7	150	170	44	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-5	08/23/2006		165.14	17.02	--	148.12	1,400	69	<5.0	20	24	230	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-5	11/15/2006		165.14	18.30	--	146.84	1,100	24	<2.5	10	8.6	490	<100	<2.5	<2.5	<2.5	<2.5	4.2	<1,500	0.85	--	
MW-5	02/14/2007		165.14	13.16	--	151.98	680	110	<2.5	16	11	420	<100	<2.5	<2.5	<2.5	<2.5	3.6	<1,500	2.54	--	
MW-5	05/22/2007		165.14	15.42	--	149.72	2,800	660	8.8	74	100	26	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	1.41	--	
MW-5	08/15/2007		165.14	18.80	--	146.34	2,800	50	<10	26	29	280	<400	<10	<10	<10	<10	<10	<6,000	3.81	--	
MW-5	11/08/2007		165.14	18.55	(Sheen)	146.59	3,800	77	<2.5	46	35	270	310	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	1.08	--	
MW-5	02/20/2008		165.14	12.21	--	152.93	2,500	530	<5.0	75	62	43	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	2.01	--	
MW-5	05/07/2008		165.14	16.91	--	148.23	6,700	1,800	29	270	360	30	<200	<10	<10	<10	<10	<10	<6,000	2.45	--	
MW-5	08/20/2008		165.14	19.45	--	145.69	300	22	<2.0	8.5	5.3	260	270	<2.0	<2.0	<2.0	<2.0	3	<1,200	5.57	--	
MW-5	02/25/2009		165.14	11.12	--	154.02	140	6.4	<0.50	2.4	3.1	68	110	<0.50	<0.50	<0.50	<0.50	0.62	<300	4.38	--	
MW-5	05/28/2009		165.14	15.70	--	149.44	3,800	790	9.5	140	110	11	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<600	0.04	--	
MW-5	08/06/2009		165.14	18.84	(Sheen)	146.30	78	<5.0	<5.0	<5.0	<5.0	190	340	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	0.06	--	
MW-5	03/04/2010		165.14	10.02	--	155.12	1,200	420	5.5	69	58	15	38	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.66	--	(P)
MW-5	09/02/2010		165.14	16.24	--	148.90	200	69	1.3	3.2	7.3	13	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	(NP,y)
MW-5	03/15/2011		165.14	11.36	--	153.78	1,700	410	7.9	88	80	5.9	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-5	08/17/2011		165.14	16.62	--	148.52	1,900	460	7.6	44	51	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P)
MW-5	02/06/2012		165.14	14.36	--	150.78	580	140	<5.0	9.2	<10	9.6	<40	<5.0	<5.0	<5.0	<5.0(*)	<5.0	<2,500	--	--	(P)
MW-5	08/21/2012		165.14	18.22	--	146.92	290	23	0.75	4.8	4.3	17	200	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	02/04/2013		165.14	13.99	--	151.15	1,400	230	2.7	55	34	3.1	13	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	08/01/2013		165.14	18.64	--	146.50	<50	<0.50	<0.50	<0.50	<1.0	27	250	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	02/27/2014		165.14	16.03	--	149.11	83	3.5	<0.50	<0.50	<1.0	12	77	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-5	08/27/2014		165.14	18.28	--	146.86	430	43	0.59	2.8	1.2	9.1	210	<0.50	<0.50	<0.50	<0.50	<0.50	<500	3.08	<1.0	(odor)
MW-5	03/27/2015		165.14	15.56	--	149.58	2,200	370	5.1	74	37	4.2	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	3.08	--	(odor)
MW-5	08/27/2015		165.14	17.96	--	147.18	7,370	803	8.60J	62.2	75.8	8.63J	126	<10.0	<10.0	<10.0	--	<10.0	<1,000	3.37	--	
MW-5	03/28/2016		165.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(INA)
MW-5	09/07/2016		165.14	17.10	--	148.04	1,830	325	9.39J	47.3	22.1J	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	0.29	--	
MW-5	03/01/2017		165.14	8.89	--	156.25	426	32.8	1.01	22.6	8.62	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.65	--	
MW-6	12/21/1990		--	--	--	--	0.17	2.6	7	4.9	26	--	--	--	--	--	--	--	--	--	--	
MW-6	04/01/1991		165.40	11.79	--	153.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/18/1991		--	--	--	--	--	1.3	22	--	2.7	--	--	--	--	--	--	--	--	--	--	
MW-6	07/03/1992		165.40	17.77	--	147.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	10/05/1992		165.40	19.46	--	145.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	01/13/1993		165.40	11.34	--	154.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	04/23/1993		165.40	12.92	--	152.48	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	07/12/1993		165.40	17.36	--	148.04	<50	<0.5	<0.5	<0.5	0.7	<5.0	--	--	--	--	--	--	--	--	--	
MW-6	10/21/1993		165.40	19.98	--	145.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-6	01/21/1994		165.40	18.10	--	147.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-6	04/20/1994		165.40	18.68	--	146.72	<50	<0.5	<0.5	<0.5	<0.5	17.4	--	--	--	--	--	--	--	2	--	
MW-6	08/01/1994		165.40	18.90	--	146.50	<50	<0.5	<0.5	<0.5	<0.5	8.66	--	--	--	--	--	--	--	1.5	--	
MW-6	12/23/1994		165.40	12.94	--	152.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	01/26/1995		165.40	10.46	--	154.94	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7.3	--	
MW-6	06/08/1995		165.40	16.84	--	148.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/22/1995		165.40	19.48	--	145.92	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.7	--	
MW-6	10/27/1995		165.40	20.39	--	145.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	01/25/1996		165.40	12.24	--	153.16	<50	<0.50	<0.50	<0.50	<1.0	9.9	--	--	--	--	--	--	--	--	--	
MW-6	04/19/1996		165.40	13.90	--	151.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	07/23/1996		165.40	17.83	--	147.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/11/1996		165.40	18.90	--	146.50	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.7	--	
MW-6	01/21/1997		165.40	11.97	--	153.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	04/29/1997		165.40	17.04	--	148.36	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.5	--	
MW-6	08/21/1997		165.40	18.58	--	146.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/05/1997		165.40	19.17	--	146.23	70	<0.5	<1.0	<1.0	<1.0	85	--	--	--	--	--	--	--	4.3	--	
MW-6	02/03/1998		165.40	9.87	--	155.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/28/1998		165.40	13.38	--	152.02	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	3.7	--	
MW-6	12/30/1998		165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/02/1999		165.40	18.29	--	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/10/1999		165.40	17.49	--	147.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/24/1999		165.40	17.61	--	147.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/03/1999		165.40	16.26	--	149.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/01/2000		165.40	17.43	--	147.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	04/21/2000		165.40	13.32	--	152.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	07/31/2000		165.40	13.46	--	151.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/20/2000		165.40	14.78	--	150.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-6	02/18/2001		165.40	11.33	--	154.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/07/2001		165.40	16.36	--	149.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/05/2001		165.40	18.61	--	146.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/30/2001		165.40	15.20	--	150.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/20/2002		165.40	12.74	--	152.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/20/2002		165.40	16.68	--	148.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/11/2002		165.40	18.38	--	147.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/12/2002		165.40	18.78	--	146.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	01/29/2003		165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/22/2003		165.40	14.36	--	151.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	07/28/2003		165.40	18.43	--	146.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/18/2003		165.40	17.48	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/23/2004		165.40	11.54	--	153.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/04/2004		165.40	16.58	--	148.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/04/2004		165.40	18.12	--	147.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/10/2004		165.40	15.75	--	149.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/15/2005		165.40	12.50	--	152.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/16/2005		165.40	11.51	--	153.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<100	--	--	
MW-6	08/17/2005		165.40	16.85	--	148.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/07/2006		165.40	9.93	--	155.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	--	--	
MW-6	08/23/2006		165.40	16.35	--	149.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/15/2006		165.40	17.42	--	147.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/14/2007		165.40	12.03	--	153.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<300	1.07	--	
MW-6	05/22/2007		165.40	15.11	--	150.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/15/2007		165.40	18.08	--	147.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	11/08/2007		165.40	17.79	--	147.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/20/2008		165.40	11.81	--	153.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<100	1.29	--	
MW-6	05/07/2008		165.40	16.75	--	148.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/25/2009		165.40	9.99	--	155.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<300	2.39	--	
MW-6	08/06/2009		165.40	18.33	--	147.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/04/2010		165.40	9.11	--	156.29	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	0.88	--	(P)
MW-6	09/02/2010		165.40	17.80	--	147.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/15/2011		165.40	10.08	--	155.32	<50	<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-6	08/17/2011		165.40	16.50	--	148.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/06/2012		165.40	14.44	--	150.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/21/2012		165.40	17.91	--	147.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/04/2013		165.40	14.13	--	151.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/01/2013		165.40	18.27	--	147.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	02/27/2014		165.40	15.33	--	150.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/27/2014		165.40	19.12	--	146.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/27/2015		165.40	15.58	--	149.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	08/27/2015		165.40	17.92	--	147.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/28/2016		165.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(NS)
MW-6	09/07/2016		165.40	17.12	--	148.28	<100	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.63	--	
MW-6	03/01/2017		165.40	8.63	--	156.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/07/1991		167.61	19.04	--	148.57	--	--	0.4	0.3	2.4	--	--	--	--	--	--	--	--	--	--	
MW-7	04/01/1991		167.61	15.18	--	152.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/27/1991		--	--	--	--	70	17	4	0.8	2.2	--	--	--	--	--	--	--	--	--	--	
MW-7	09/27/1991		--	--	--	--	--	0.4	--	--	0.4	--	--	--	--	--	--	--	--	--	--	
MW-7	12/18/1991		--	--	--	--	--	0.7	2.9	0.8	3.3	--	--	--	--	--	--	--	--	--	--	
MW-7	07/03/1992		167.61	20.28	--	147.33	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	10/05/1992		167.61	21.56	--	146.05	<50	<0.5	<0.5	<0.5	1.5	--	--	--	--	--	--	--	--	--	--	
MW-7	01/13/1993		167.61	15.41	--	152.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	04/23/1993		167.61	15.84	--	151.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	07/12/1993		167.61	19.84	--	147.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-7	10/21/1993		167.61	21.61	--	146.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	
MW-7	01/21/1994	Dup	167.61	20.49	--	147.12	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-7	01/21/1994		167.61	20.49	--	147.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	--	--	
MW-7	04/20/1994		167.61	20.54	--	147.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	1.5	--	
MW-7	08/01/1994		167.61	20.99	--	146.62	<50	0.7	<0.5	<0.5	<0.5	<5.0	--	--	--	--	--	--	--	1.9	--	
MW-7	12/23/1994		167.61	15.00	--	152.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	01/26/1995		167.61	14.69	--	152.92	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	7	--	
MW-7	06/08/1995		167.61	19.87	--	147.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/22/1995		167.61	21.49	--	146.12	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	6.4	--	
MW-7	10/27/1995		167.61	22.53	--	145.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	01/25/1996		167.61	17.21	--	150.40	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	--	--	--	--	--	--	
MW-7	04/19/1996		167.61	17.09	--	150.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	07/23/1996		167.61	21.02	--	146.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/11/1996		167.61	22.03	--	145.58	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	7.8	--	
MW-7	01/21/1997		167.61	15.06	--	152.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/29/1997		167.61	20.11	--	147.50	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.4	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-7	08/21/1997		167.61	21.59	--	146.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/05/1997		167.61	20.05	--	147.56	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.4	--	
MW-7	02/03/1998		167.61	9.97	--	157.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/28/1998		167.61	13.52	--	154.09	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	--	--	--	--	--	4.3	--	
MW-7	12/30/1998		167.61	18.33	--	149.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/02/1999		167.61	12.33	--	155.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/10/1999		167.61	13.52	--	154.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/24/1999		167.61	14.01	--	153.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/03/1999		167.61	19.91	--	147.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/01/2000		167.61	19.89	--	147.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/21/2000		167.61	17.94	--	149.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	07/31/2000		167.61	17.33	--	150.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/20/2000		167.61	18.41	--	149.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/18/2001		167.61	15.13	--	152.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/07/2001		167.61	18.75	--	148.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	09/05/2001		167.61	20.48	--	147.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/30/2001		167.61	20.11	--	147.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/20/2002		167.61	18.40	--	149.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/20/2002		167.61	18.62	--	148.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	09/11/2002		167.61	20.05	--	147.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/12/2002		167.61	21.13	--	146.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	01/29/2003		167.61	19.10	--	148.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/22/2003		167.61	18.83	--	148.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	07/28/2003		167.61	19.88	--	147.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/18/2003		167.61	20.50	--	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/23/2004		168.08	15.92	--	152.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/04/2004		168.08	18.86	--	149.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/04/2004		168.08	19.10	--	148.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/10/2004		168.08	20.25	--	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/15/2005		168.08	16.37	--	151.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/17/2005		168.08	19.74	--	148.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/18/2005		168.08	20.82	--	147.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/07/2006		168.08	14.26	--	153.82	<500	<5.0	<5.0	<5.0	<5.0	270	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-7	05/19/2006		168.08	16.51	--	151.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/23/2006		168.08	20.30	--	147.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/15/2006		168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/14/2007		168.08	16.57	--	151.51	520	<5.0	<5.0	<5.0	<5.0	740	<200	<5.0	<5.0	<5.0	<5.0	9.6	<3,000	3.08	--	
MW-7	05/22/2007		168.08	18.40	--	149.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/15/2007		168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/08/2007		168.08	20.41	--	147.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/20/2008		168.08	15.90	--	152.18	<50	<0.50	<0.50	<0.50	<0.50	700	13	0.6	<0.50	<0.50	<0.50	12	<100	4.34	--	
MW-7	05/07/2008		168.08	19.41	--	148.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/20/2008		168.08	21.34	--	146.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	11/17/2008		168.08	20.54	--	147.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/25/2009		168.08	14.89	--	153.19	130	<20	<20	<20	<20	540	<400	<20	<20	<20	<20	<20	<12,000	4.28	--	
MW-7	05/28/2009		168.08	18.57	--	149.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	08/06/2009		168.08	20.83	--	147.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/04/2010		168.08	14.02	--	154.06	430	<0.50	<0.50	<0.50	<1.0	920	4	0.74	<0.50	<0.50	<0.50	17	<100	3.3	--	(P)
MW-7	09/02/2010		168.08	20.43	--	147.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/15/2011		168.08	14.86	--	153.22	<1,000	<0.50	<0.50	<0.50	<1.0	990	130	0.81	<0.50	<0.50	<0.50	17	<250	--	--	(P)
MW-7	08/17/2011		168.08	19.01	--	149.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/06/2012		168.08	18.20	--	149.88	<50	<0.50	<0.50	<0.50	<1.0	22	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	(P)
MW-7	08/21/2012		168.08	20.29	--	147.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/04/2013		168.08	17.60	--	150.48	<500	<0.50	<0.50	<0.50	<1.0	290	<4.0	<0.50	<0.50	<0.50	<0.50	6.4	<250	--	--	
MW-7	08/01/2013		168.08	20.68	--	147.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	02/27/2014		168.08	18.86	--	149.22	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
MW-7	08/27/2014		168.08	19.68	--	148.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/27/2015		168.08	18.09	--	149.99	<50	<0.50	<0.50	<0.50	<1.0	240	<20	<0.50	<0.50	<0.50	<0.50	3.3	<500	3.42	--	
MW-7	08/27/2015		168.08	19.59	--	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/28/2016		168.08	13.92	--	154.16	222	<1.00	<5.00	<1.00	<3.00	458	<5.00	<1.00	<1.00J3	<1.00	<1.00	7	<100	2.51	--	
MW-7	09/07/2016		168.08	18.90	--	149.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/01/2017		168.08	12.75	--	155.33	<100	<1.00	<1.00	<1.00	<3.00	7.44	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.87	--	
MW-8	03/07/1991		165.74	16.72	--	149.02	2.7	780	450	64	310	--	--	--	--	--	--	--	--	--	--	
MW-8	04/01/1991		165.74	12.54	--	153.20	15,000	3,600	2,600	410	1,900	--	--	--	--	--	--	--	--	--	--	
MW-8	06/27/1991		--	--	--	--	12,000	3,400	1,100	240	750	--	--	--	--	--	--	--	--	--	--	
MW-8	09/27/1991		--	--	--	--	41	5,700	5,200	1,100	4,300	--	--	--	--	--	--	--	--	--	--	
MW-8	12/18/1991		--	--	--	--	3.2	990	150	120	250	--	--	--	--	--	--	--	--	--	--	
MW-8	07/03/1992		165.74	18.78	--	146.96	72,000	19,000	32,000	3,000	15,000	--	--	--	--	--	--	--	--	--	--	
MW-8	10/05/1992		165.74	20.48	--	145.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/13/1993		165.74	12.87	--	152.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	04/23/1993		165.74	13.90	--	151.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-8	07/12/1993		165.74	18.30	--	147.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	10/21/1993		165.74	21.91	--	142.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/21/1994		165.74	19.12	--	146.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	04/20/1994		165.74	19.28	--	146.46	26,000	1,700	4,100	960	4,000	632	--	--	--	--	--	--	--	1.1	--	
MW-8	12/23/1994		165.74	13.81	--	151.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	06/08/1995		165.74	17.82	--	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	08/22/1995		165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	10/27/1995		165.74	20.47	--	145.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/25/1996		165.74	13.35	--	152.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	04/19/1996		165.74	14.40	--	151.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	07/23/1996		165.74	18.35	--	147.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/11/1996		165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	01/21/1997		165.74	12.29	--	153.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	08/21/1997		165.74	19.61	--	146.13	240,000	1,100	9,300	4,100	31,100	<1,000	--	--	--	--	--	--	--	5.2	--	
MW-8	11/05/1997		165.74	19.45	--	146.29	57,000	790	2,700	2,300	15,200	<1,000	--	--	--	--	--	--	--	5	--	
MW-8	02/03/1998		165.74	9.33	--	156.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	02/04/1998		--	--	--	--	94,000	570	1,500	2,100	15,200	<2,500	--	--	--	--	--	--	--	5.5	--	
MW-8	12/30/1998		165.74	15.48	--	150.26	120,000	460	2,300	2,200	15,000	150	--	--	--	--	--	--	--	--	--	
MW-8	02/02/1999		165.74	18.29	--	147.45	82,000	450	2,200	3,700	26,000	<500	--	--	--	--	--	--	--	--	--	
MW-8	05/10/1999		165.74	15.62	--	150.12	28,000	740	1,800	1,100	5,800	<25	--	--	--	--	--	--	--	--	--	
MW-8	08/24/1999		165.74	18.41	--	147.33	75,000	530	1,400	3,300	21,000	150	--	--	--	--	--	--	--	--	--	
MW-8	11/03/1999		165.74	18.71	--	147.03	70,000	600	1,300	3,600	20,500	750	--	--	--	--	--	--	--	--	--	
MW-8	03/01/2000		165.74	19.37	--	146.37	27,000	1,600	1,200	2,600	6,600	120	--	--	--	--	--	--	--	--	--	
MW-8	11/20/2000		165.74	17.42	--	148.32	1,300,000	1,400	1,700	20,000	16,000	5,700	--	--	--	--	--	--	--	--	--	
MW-8	09/05/2001		165.74	21.45	0.04	144.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/30/2001		165.74	18.31	--	147.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	02/20/2002		165.74	14.02	--	151.72	20,000	163	114	403	3,810	80.4	--	--	--	--	--	--	--	--	--	
MW-8	06/20/2002		165.74	17.56	--	148.18	28,000	466	141	962	5,850	2,520	--	--	--	--	--	--	--	--	--	
MW-8	09/11/2002		165.74	19.45	--	146.29	190,000	1,500	670	4,500	23,000	1,200	--	--	--	--	--	--	--	--	--	
MW-8	11/12/2002		165.74	19.15	--	146.59	420	6.4	2.9	16	110	31	--	--	--	--	--	--	--	--	--	
MW-8	01/29/2003		165.74	15.02	--	150.72	200,000	810	<500	2,000	11,000	<500	<2,000	<50	<50	<50	<50	<50	<4,000	--	--	
MW-8	05/22/2003		165.74	15.07	--	150.67	--	--	--	--	--	--	<1,000	--	<25	<25	--	<25	<5,000	--	--	
MW-8	06/24/2003		165.74	17.95	--	147.79	43,000	860	300	2,100	9,600	46	--	--	--	--	--	--	--	--	--	
MW-8	07/28/2003		165.74	19.45	--	146.29	62,000	690	230	1,800	15,000	2,100	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-8	08/12/2003		165.74	19.40	0.01	146.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	09/12/2003		165.74	19.34	--	146.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/18/2003		165.74	18.80	0.01	146.94	8,800	500	37	530	930	1,700	<400	--	<10	<10	--	20	<2,000	--	--	
MW-8	02/23/2004		165.74	12.82	0.01	152.92	32,000	840	360	1,000	7,100	110	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	05/04/2004		165.74	18.87	0.01	146.87	42,000	570	230	1,700	8,400	2,000	<1,000	<25	<25	<25	<25	33	<5,000	--	--	
MW-8	08/04/2004		165.74	19.37	0.05	146.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	09/22/2004		165.74	19.60	--	146.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/10/2004		165.74	16.58	--	149.16	11,000	790	61	1,000	830	74	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-8	02/15/2005		165.74	12.85	--	152.89	38,000	1,300	390	2,300	7,900	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	05/16/2005		165.74	12.22	--	153.52	31,000	1,000	360	2,500	7,500	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	08/17/2005		165.74	17.80	--	147.94	60,000	540	240	2,500	8,600	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	11/18/2005		165.74	21.02	--	144.72	33,000	340	120	1,400	4,900	140	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-8	02/07/2006		165.74	10.73	--	155.01	5,700	94	27	260	820	7.5	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	--	--	
MW-8	05/19/2006		165.74	13.89	--	151.85	40,000	1,100	320	2,900	6,000	<25	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-8	08/23/2006		165.74	18.85	--	146.89	21,000	520	150	1,800	6,300	82	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-8	11/15/2006		165.74	18.75	--	146.99	3,300	81	<25	130	430	110	<1,000	<25	<25	<25	<25	<25	<15,000	0.81	--	
MW-8	02/14/2007		165.74	13.45	(Sheen)	152.29	9,300	320	<25	360	710	82	<1,000	<25	<25	<25	<25	<25	<15,000	1.89	--	
MW-8	05/22/2007		165.74	15.92	(Sheen)	149.82	17,000	370	51	760	1,600	11	<400	<10	<10	<10	<10	<10	<6,000	1.05	--	
MW-8	08/15/2007		165.74	19.11	(Sheen)	146.63	17,000	170	44	1,000	2,700	28	<400	<10	<10	<10	<10	<10	<6,000	3.93	--	
MW-8	11/08/2007		165.74	18.46	(Sheen)	147.28	24,000	150	43	1,100	3,200	27	<1,000	<25	<25	<25	<25	<25	<15,000	1.29	--	
MW-8	08/20/2008		165.74	19.66	0.01	146.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	02/25/2009		165.74	11.50	(Sheen)	154.24	3,400	160	11	88	65	35	<200	<10	<10	<10	<10	<10	<6,000	2.18	--	
MW-8	04/08/2009		165.74	14.55	--	151.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	05/28/2009		165.74	16.12	(Sheen)	149.62	8,300	410	54	660	800	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	0.06	--	
MW-8	06/16/2009		165.74	17.63	--	148.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	03/04/2010		165.74	10.33	--	155.41	11,000	520	110	830	1,600	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	0.82	--	(P)
MW-8	09/02/2010		165.74	18.52	--	147.22	6,900	180	24	280	480	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	(P)
MW-8	03/15/2011		165.74	11.03	--	154.71	14,000	470	150	1,400	3,000	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	--	--	(P)
MW-8	08/17/2011		165.74	17.14	--	148.60	4,100	180	24	280	340	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P)
MW-8	02/06/2012		165.74	15.07	--	150.67	5,100	140	18	210	220	<5.0	<40	<5.0	<5.0	<5.0	<5.0(*)	<5.0	2,900	--	--	(P)
MW-8	08/21/2012		165.74	18.88	--	146.86	3,600	220	25	170	170	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	02/04/2013		165.74	14.88	--	150.86	2,300	71	13	150	230	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	08/01/2013		165.74	18.96	--	146.78	5,300	140	20	220	190	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	02/27/2014		165.74	16.30	--	149.44	4,900	200	26	200	110	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	
MW-8	08/27/2014		165.74	18.66	--	147.08	6,400	170	29	290	240	<5.0	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	2.49	80	
MW-8	03/27/2015		165.74	16.10	--	149.64	6,300	140	25	380	310	<5.0	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	1.48	--	(odor)
MW-8	08/27/2015		165.74	18.39	--	147.35	5,800	94.2	14.7	112	62.9	<1.00	<5.00	<1.00	<1.00	<1.00	--	<1.00	<100	8.61	--	
MW-8	03/28/2016		165.74	10.72	--	155.02	14,100	167	53.8	835	1,330	<50.0	3.70J	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.5	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-8	09/07/2016		165.74	17.63	--	148.11	8,220	49.8	12.3J	245	180	<5.00	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<500	0.32	--	
MW-8	03/01/2017		165.74	9.40	--	156.34	21,500	138	57.2J	1,120	1,880	<100	<500	<100	<100	<100	<100	<100	<10,000	2.91	--	
MW-9	03/07/1991		166.20	16.79	--	149.41	7.1	220	4	2.4	2,400	--	--	--	--	--	--	--	--	--	--	
MW-9	04/01/1991		166.20	12.89	--	153.31	14,000	2,000	2,600	360	1,600	<10	<80	<10	<10	<10	<10	<10	<2,000	--	--	
MW-9	06/27/1991		--	--	--	--	3,600	520	400	85	310	--	--	--	--	--	--	--	--	--	--	
MW-9	09/27/1991		--	--	--	--	3.2	720	150	50	180	--	--	--	--	--	--	--	--	--	--	
MW-9	12/18/1991		--	--	--	--	--	2.5	1.1	0.3	5.8	--	--	--	--	--	--	--	--	--	--	
MW-9	07/03/1992		166.20	18.89	--	147.31	5,700	17,000	840	230	800	--	--	--	--	--	--	--	--	--	--	
MW-9	10/05/1992		166.20	20.52	--	145.68	1,400	440	17	14	100	--	--	--	--	--	--	--	--	--	--	
MW-9	01/13/1993	Dup	166.20	12.92	--	153.28	11,000	1,200	1,600	330	1,300	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-9	01/13/1993		166.20	12.92	--	153.28	11,000	1,200	1,700	340	1,400	--	--	--	--	--	--	--	--	--	--	
MW-9	04/23/1993		166.20	14.08	--	152.12	24,000	2,800	4,500	730	3,400	350	2,600	<5.0	<5.0	<5.0	<5.0	12	<1,000	--	--	
MW-9	07/12/1993	Dup	166.20	18.44	--	147.76	10,000	1,200	900	310	1,200	--	--	--	--	--	--	--	--	--	--	(Dup)
MW-9	07/12/1993		166.20	18.44	--	147.76	13,000	1,400	1,100	360	1,400	20.8	--	--	--	--	--	--	--	--	--	
MW-9	10/21/1993		166.20	21.81	--	143.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/21/1994		166.20	19.28	--	146.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	04/20/1994	Dup	166.20	19.72	--	146.48	45,000	2,700	6,800	1,200	8,200	740	160	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	--	(Dup)
MW-9	04/20/1994		166.20	19.72	--	146.48	43,000	2,800	6,800	1,300	7,900	768	--	--	--	--	--	--	--	1.7	--	
MW-9	08/01/1994		166.20	20.18	--	146.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	12/23/1994		166.20	14.22	--	151.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/26/1995		166.20	11.85	--	154.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	06/08/1995		166.20	18.33	--	147.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	08/22/1995		166.20	19.95	--	146.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	10/27/1995		166.20	20.88	--	145.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/25/1996		166.20	13.84	--	152.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	07/23/1996		166.20	18.84	--	147.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/11/1996		166.20	19.91	--	146.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	01/21/1997		166.20	12.93	--	153.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	04/29/1997		166.20	18.03	0.1	148.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	04/30/1997		--	--	--	--	78,000	1,900	3,600	3,100	20,600	<5,000	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<100	5.5	--	
MW-9	08/21/1997		166.20	19.56	--	146.64	110,000	2,100	3,400	2,300	18,800	<500	--	--	--	--	--	--	--	5.1	--	
MW-9	11/05/1997		166.20	20.59	0.01	145.60	59,000	1,400	1,700	2,200	17,000	<500	--	--	--	--	--	--	--	4.5	--	
MW-9	02/03/1998		166.20	10.56	--	155.64	55,000	490	1,200	1,400	10,200	<1,000	--	--	--	--	--	--	--	4.9	--	
MW-9	05/28/1998	Dup	166.20	14.21	--	151.99	53,000	290	830	1,400	10,500	<500	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	(Dup)
MW-9	05/28/1998		166.20	14.21	--	151.99	430	250	1,200	1,500	11,400	<250	4	0.74	<0.50	<0.50	<0.50	17	<100	3.8	--	
MW-9	12/30/1998		166.20	15.61	--	150.59	83,000	860	1,300	2,400	21,000	180	--	--	--	--	--	--	--	--	--	
MW-9	02/02/1999		166.20	12.33	--	153.87	75,000	530	960	1,900	17,000	<50	--	--	--	--	--	--	--	--	--	
MW-9	05/10/1999		166.20	15.67	--	150.53	22,000	600	1,500	1,100	4,400	72	--	--	--	--	--	--	--	--	--	
MW-9	08/24/1999		166.20	19.10	--	147.10	85,000	850	1,300	1,700	20,000	<250	--	--	--	--	--	--	--	--	--	
MW-9	11/03/1999		166.20	19.58	--	146.62	72,000	700	780	1,900	19,000	<5.0	--	--	--	--	--	--	--	--	--	
MW-9	03/01/2000		166.20	13.19	--	153.01	34,000	78	490	1,100	8,200	63	--	--	--	--	--	--	--	--	--	
MW-9	04/21/2000		166.20	14.29	--	151.91	55,000	260	920	1,500	16,000	<5.0	--	--	--	--	--	--	--	--	--	
MW-9	07/31/2000		166.20	15.01	--	151.19	1,200,000	1,500	6,300	15,000	120,000	1,600	--	--	--	--	--	--	--	--	--	
MW-9	11/20/2000		166.20	18.23	--	147.97	320,000	3,500	19,000	5,000	40,000	3,900	--	--	--	--	--	--	--	--	--	
MW-9	02/18/2001		166.20	13.14	--	153.06	32,000	290	417	1,180	10,400	121	--	--	--	--	--	--	--	--	--	
MW-9	06/07/2001		166.20	17.41	--	148.79	96,000	421	704	2,330	17,300	223	--	--	--	--	--	--	--	--	--	
MW-9	09/05/2001		166.20	20.56	--	145.64	39,000	445	323	1,240	8,940	310	--	--	--	--	--	--	--	--	--	
MW-9	11/30/2001		166.20	17.42	--	148.78	60,000	310	586	1,890	14,200	285	--	--	--	--	--	--	--	--	--	
MW-9	02/20/2002		166.20	13.87	--	152.33	14,000	64	122	897	2,650	293	--	--	--	--	--	--	--	--	--	
MW-9	06/20/2002		166.20	18.22	--	147.98	29,000	307	168	1,100	5,670	208	--	--	--	--	--	--	--	--	--	
MW-9	09/11/2002		166.20	20.27	--	145.93	230,000	1,400	680	3,600	23,000	<2,500	--	--	--	--	--	--	--	--	--	
MW-9	11/12/2002		166.20	19.40	--	146.80	840	5.8	3.6	28	160	21	--	--	--	--	--	--	--	--	--	
MW-9	01/29/2003		166.20	14.30	0.1	151.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	05/22/2003		166.20	15.16	--	151.04	23,000	420	<50	1,000	2,900	<50	38	<0.50	<50	<50	<0.50	<50	<100	--	--	
MW-9	07/28/2003		166.20	19.55	0.01	146.65	1,500,000	<500	<500	9,800	79,000	<500	<20,000	<500	<500	<500	<500	<500	<100,000	--	--	
MW-9	08/12/2003		166.20	19.60	0.01	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	09/12/2003		166.20	19.60	0.01	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/18/2003		166.20	18.98	0.01	147.22	19,000	250	18	690	2,400	45	<400	--	<10	<10	--	<10	<2,000	--	--	
MW-9	02/23/2004		166.20	13.91	0.01	152.29	91,000	<250	440	2,200	13,000	<250	<10,000	<250	<250	<250	<250	<250	<50,000	--	--	
MW-9	05/04/2004		166.20	18.11	0.01	148.09	39,000	230	44	1,100	4,200	<25	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-9	08/04/2004		166.20	18.90	0.03	147.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	09/22/2004		166.20	19.69	--	146.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/10/2004		166.20	16.95	--	149.25	31,000	300	<50	1,100	3,800	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-9	02/15/2005		166.20	12.95	--	153.25	19,000	200	<50	720	2,000	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-9	05/16/2005		166.20	12.53	--	153.67	17,000	99	15	770	2,500	<10	4.4	<10	<10	<10	<10	<10	<2,000	--	--	
MW-9	08/17/2005		166.20	18.03	--	148.17	28,000	160	26	1,000	2,700	<12	<500	<12	<12	<12	<12	<12	<2,500	--	--	
MW-9	11/18/2005		166.20	19.04	--	147.16	12,000	98	<5.0	410	510	19	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<1,000	--	--	
MW-9	02/07/2006		166.20	10.95	(Sheen)	155.25	18,000	110	8.7	770	1,500	<5.0	<4.0	<5.0	<5.0	<5.0	<5.0	5.4	<3,000	--	--	
MW-9	08/23/2006		166.20	18.91	--	147.29	28,000	84	<50	1,600	6,200	<50	<2,000	<50	<50	<50	<50	<50	<30,000	--	--	
MW-9	11/15/2006		166.20	18.60	--	147.60	8,200	44	<25	190	370	26	<1,000	<25	<25	<25	<25	<25	<15,000	0.92	--	
MW-9	02/14/2007		166.20	13.30	--	152.90	20,000	64	<25	720	2,000	<25	<1,000	<25	<25	<25	<25	<25	<15,000	0.87	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-9	05/22/2007		166.20	16.14	(Sheen)	150.06	16,000	80	<25	460	1,200	<25	<1,000	<25	<25	<25	<25	<25	<15,000	0.81	--	
MW-9	08/15/2007		166.20	19.31	(Sheen)	146.89	5,900	27	<2.5	59	170	27	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	2.57	--	
MW-9	11/08/2007		166.20	18.70	--	147.50	6,100	29	<5.0	98	250	52	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	1.24	--	
MW-9	02/20/2008		166.20	12.79	0.03	153.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	05/07/2008		166.20	17.68	0.03	148.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	08/20/2008		166.20	19.75	0.01	146.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	11/17/2008		166.20	18.73	--	147.47	10,000	24	<2.5	160	140	33	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	--	--	
MW-9	02/25/2009		166.20	11.23	(Sheen)	154.97	14,000	60	<10	550	140	<10	<200	<10	<10	<10	<10	<10	<6,000	2.27	--	
MW-9	04/08/2009		166.20	14.21	--	151.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	05/28/2009		166.20	16.33	(Sheen)	149.87	8,000	49	<2.5	790	140	<2.5	<200	<2.5	<2.5	<2.5	<2.5	<2.5	<6,000	0.07	--	
MW-9	06/16/2009		166.20	17.82	0.01	148.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	08/06/2009		166.20	19.25	(Sheen)	146.95	6,800	19	<2.0	120	250	18	<40	<2.0	<2.0	<2.0	<2.0	<2.0	<1,200	0	--	
MW-9	03/04/2010		166.20	10.32	--	155.88	6,000	29	<2.5	<2.5	100	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<500	0.62	--	(P)
MW-9	09/02/2010		166.20	18.72	--	147.48	5,700	31	<2.5	160	120	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	--	(NP)
MW-9	03/15/2011		166.20	11.08	--	155.12	6,500	17	<2.5	150	73	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	--	--	(P)
MW-9	08/17/2011		166.20	17.35	--	148.85	5,200	9.5	<2.5	71	54	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	02/06/2012		166.20	15.52	--	150.68	4,200	14	<2.5	49	22	<2.5	<20	<2.5	<2.5	<2.5	<2.5(*)	<2.5	<1,300	--	--	(P)
MW-9	08/21/2012		166.20	18.79	--	147.41	4,200	22	<2.5	42	21	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	02/04/2013		166.20	14.16	--	152.04	4,100	4.8	<2.5	34	13	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	08/01/2013		166.20	19.16	--	147.04	5,500	4.8	<2.5	36	21	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	02/27/2014		166.20	16.27	--	149.93	6,300	9.1	<2.5	36	11	<2.5	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	
MW-9	08/27/2014		166.20	18.94	--	147.26	5,400	8.5	<2.5	41	6.3	<2.5	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2,500	0.2	17	(odor)
MW-9	03/27/2015		166.20	16.42	--	149.78	6,500	7.8	<2.5	38	5.6	<2.5	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2,500	1.96	--	
MW-9	08/27/2015		166.20	18.69	--	147.51	10,000	10.7	<5.00	21.7	2.86J	<1.00	<5.00	<1.00	<1.00	<1.00	--	<1.00	<100	2.59	--	
MW-9	03/28/2016		166.20	10.96	--	155.24	7,630	4.41	<5.00	26.8	6.32	<1.00	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	3.96	--	
MW-9	09/07/2016		166.20	17.89	--	148.31	7,730	7.22	<5.00	17.4	2.7J	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.24	--	
MW-9	03/01/2017		166.20	9.44	--	156.76	9,210	1.92	<1.00	16.7	3.65	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	3.24	--	
MW-10	03/07/1991		167.01	18.09	--	148.92	1.6	120	190	32	230	--	--	--	--	--	--	--	--	--	--	
MW-10	04/01/1991		167.01	13.92	--	153.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	06/27/1991		--	--	--	--	12,000	7,300	500	150	300	--	--	--	--	--	--	--	--	--	--	
MW-10	09/27/1991		--	--	--	--	57	12,000	7,200	1,400	4,600	--	--	--	--	--	--	--	--	--	--	
MW-10	12/18/1991		--	--	--	--	5.3	2,500	120	36	79	--	--	--	--	--	--	--	--	--	--	
MW-10	07/03/1992		167.01	19.92	--	147.09	8,600	5,100	1,300	180	690	--	--	--	--	--	--	--	--	--	--	
MW-10	10/05/1992		167.01	21.92	--	145.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/13/1993		167.01	14.43	--	152.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/23/1993		167.01	15.26	--	151.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	07/12/1993		167.01	19.78	--	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	10/21/1993		167.01	22.90	--	144.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/21/1994		167.01	20.25	--	146.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/20/1994		167.01	20.74	--	146.27	100,000	12,000	24,000	2,400	14,000	1,577	--	--	--	--	--	--	--	1	--	
MW-10	08/01/1994		167.01	22.00	--	145.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	12/23/1994		167.01	16.08	--	150.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/26/1995		167.01	13.68	--	153.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	06/08/1995		167.01	19.08	--	147.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/22/1995		167.01	20.73	--	146.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	10/27/1995		167.01	21.69	--	145.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/25/1996		167.01	15.05	--	151.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/19/1996		167.01	16.26	--	150.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	07/23/1996		167.01	20.18	--	146.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/11/1996		167.01	21.20	--	145.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/21/1997		167.01	13.66	--	153.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/29/1997		167.01	18.71	--	148.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	04/30/1997		--	--	--	--	170,000	9,700	38,000	4,700	30,500	<5,000	--	--	--	--	--	--	--	5.6	--	
MW-10	08/21/1997		167.01	20.19	--	146.82	170,000	9,500	35,000	4,300	27,100	<5,000	--	--	--	--	--	--	--	5.3	--	
MW-10	11/05/1997		167.01	20.52	--	146.49	80,000	3,800	12,000	2,700	15,700	<500	--	--	--	--	--	--	--	4.4	--	
MW-10	02/03/1998		167.01	10.62	--	156.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	02/04/1998		--	--	--	--	72,000	500	1,300	1,700	12,000	<1,000	--	--	--	--	--	--	--	5.1	--	
MW-10	05/28/1998		167.01	15.46	--	151.55	220,000	3,200	24,000	5,200	43,000	<1,000	--	--	--	--	--	--	--	4.8	--	
MW-10	12/30/1998		167.01	16.65	--	150.36	110,000	3,500	14,000	5,800	50,000	<50	--	--	--	--	--	--	--	--	--	
MW-10	02/02/1999		167.01	14.58	--	152.43	74,000	1,000	2,800	1,000	26,000	860	--	--	--	--	--	--	--	--	--	
MW-10	05/10/1999		167.01	15.72	--	151.29	81,000	2,800	2,800	3,000	17,000	220	--	--	--	--	--	--	--	--	--	
MW-10	08/24/1999		167.01	19.85	--	147.16	54,000	3,500	3,800	1,500	9,100	<250	--	--	--	--	--	--	--	--	--	
MW-10	11/03/1999		167.01	20.00	--	147.01	30,000	3,000	3,500	1,200	5,000	31	--	--	--	--	--	--	--	--	--	
MW-10	03/01/2000		167.01	14.62	--	152.39	62,000	320	1,200	1,100	26,000	4,400	--	--	--	--	--	--	--	--	--	
MW-10	04/21/2000		167.01	15.46	--	151.55	88,000	2,700	7,400	3,700	35,000	2,400	--	--	--	--	--	--	--	--	--	
MW-10	11/20/2000		167.01	18.74	--	148.27	78,000	3,800	5,500	2,800	13,000	450	--	--	--	--	--	--	--	--	--	
MW-10	02/18/2001		167.01	14.10	--	152.91	39,000	1,050	1,160	1,550	14,700	4,180	--	--	--	--	--	--	--	--	--	
MW-10	06/07/2001		167.01	18.78	--	148.23	76,000	2,460	2,840	3,330	20,700	635	--	--	--	--	--	--	--	--	--	
MW-10	09/05/2001		167.01	21.40	0.01	145.60	25,000	2,510	2,070	1,090	4,540	189	--	--	--	--	--	--	--	--	--	
MW-10	11/30/2001		167.01	18.50	--	148.51	100,000	2,480	5,720	3,890	22,800	325	--	--	--	--	--	--	--	--	--	
MW-10	02/20/2002		167.01	14.39	--	152.62	49,000	2,170	3,070	1,960	12,300	1,090	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
MW-10	06/20/2002		167.01	18.80	--	148.21	44,000	2,040	3,050	1,690	8,430	224	--	--	--	--	--	--	--	--	--	
MW-10	09/11/2002		167.01	20.52	--	146.49	28,000	1,200	2,700	1,400	6,800	<250	--	--	--	--	--	--	--	--	--	
MW-10	11/12/2002		167.01	20.37	0.07	146.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	01/29/2003		167.01	16.33	0.03	150.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/22/2003		167.01	16.32	--	150.69	13,000	2,100	850	630	1,600	300	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-10	06/24/2003		167.01	18.73	0.04	148.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	07/28/2003		167.01	20.39	0.04	146.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/12/2003		167.01	20.43	0.01	146.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	09/12/2003		167.01	20.41	--	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/18/2003		167.01	19.55	0.01	147.46	9,900	2,200	530	320	860	<50	<2,000	--	<50	<50	--	<50	<10,000	--	--	
MW-10	02/23/2004		167.01	15.45	0.01	151.56	46,000	1,900	2,000	1,800	9,000	180	<4,000	<100	<100	<100	<100	<100	<20,000	--	--	
MW-10	05/04/2004		167.01	18.81	0.01	148.20	35,000	3,100	3,600	1,400	5,600	<25	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-10	08/04/2004		167.01	18.90	--	148.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	09/22/2004		167.01	20.60	--	146.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/10/2004		167.01	17.95	--	149.06	9,800	470	91	450	1,700	230	<1,000	<25	<25	<25	<25	<25	<5,000	--	--	
MW-10	01/13/2005		167.01	12.21	--	154.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	02/15/2005		167.01	14.19	--	152.82	30,000	510	330	1,800	7,200	77	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-10	05/16/2005		167.01	13.85	--	153.16	37,000	540	730	2,100	9,200	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-10	08/17/2005		167.01	19.01	--	148.00	15,000	1,100	420	1,200	4,100	<50	<2,000	<50	<50	<50	<50	<50	<10,000	--	--	
MW-10	11/18/2005		167.01	19.95	--	147.06	12,000	1,200	240	550	1,300	16	<500	<12	<12	<12	<12	<12	<2,500	--	--	
MW-10	02/07/2006		167.01	12.28	(Sheen)	154.73	22,000	340	580	1,300	4,500	73	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-10	05/19/2006		167.01	15.12	--	151.89	40,000	690	430	2,600	4,900	<25	<1,000	<25	<25	<25	<25	<25	<15,000	--	--	
MW-10	08/23/2006		167.01	20.00	--	147.01	13,000	1,500	540	1,200	3,000	<10	<400	<10	<10	<10	<10	<10	<6,000	--	--	
MW-10	11/15/2006		167.01	19.84	--	147.17	3,800	700	22	67	160	54	<400	<10	<10	<10	<10	<10	<6,000	0.65	--	
MW-10	02/14/2007		167.01	14.94	(Sheen)	152.07	37,000	350	120	2,400	8,100	120	<400	<10	<10	<10	<25	<10	<6,000	2.12	--	
MW-10	05/22/2007		167.01	17.17	(Sheen)	149.84	13,000	810	130	750	2,200	15	<400	<10	<10	<10	<10	<10	<6,000	0.06	--	
MW-10	08/15/2007		167.01	20.30	(Sheen)	146.71	4,400	550	38	160	310	<10	<400	<10	<10	<10	<10	<10	<6,000	3.09	--	
MW-10	11/08/2007		167.01	19.58	(Sheen)	147.43	13,000	970	130	480	1,600	6	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<3,000	1.47	--	
MW-10	02/20/2008		167.01	14.27	0.05	152.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/07/2008		167.01	18.61	--	148.40	16,000	970	150	770	2,000	<20	<400	<20	<20	<20	<20	<20	<12,000	2.18	--	
MW-10	08/20/2008		167.01	20.71	0.01	146.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	11/17/2008		167.01	19.71	--	147.30	10,000	960	57	270	720	23	<400	<20	<20	<20	<20	<20	<12,000	--	--	
MW-10	02/25/2009		167.01	13.10	--	153.91	2,900	53	14	69	160	170	280	<10	<10	<10	<10	<10	<6,000	4.06	--	
MW-10	04/08/2009		167.01	15.91	--	151.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/28/2009		167.01	17.37	(Sheen)	149.64	15,000	640	280	790	2,500	65	110	<2.5	<2.5	<2.5	<2.5	<2.5	<1,500	0.03	--	
MW-10	06/16/2009		167.01	18.79	0.01	148.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/06/2009		167.01	20.19	(Sheen)	146.82	23,000	850	490	1,200	4,100	<25	<500	<25	<25	<25	<25	<25	<15,000	0.06	--	
MW-10	03/04/2010		167.01	12.32	--	154.69	12,000	71	72	740	1,800	<2.5	160	<2.5	<2.5	<2.5	<2.5	<2.5	<500	0.56	--	(P)
MW-10	09/02/2010		167.01	19.63	--	147.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(b,j)
MW-10	03/15/2011		167.01	13.20	--	153.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(b,j)
MW-10	08/17/2011		167.01	18.27	--	148.74	4,000	780	39	250	290	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	--	--	(P)
MW-10	02/06/2012		167.01	16.32	--	150.69	6,300	1,100	39	340	470	<5.0	<40	<5.0	<5.0	<5.0	<5.0(*)	<5.0	<2,500	--	--	(P)
MW-10	08/21/2012		167.01	19.66	0.02	147.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-10	02/04/2013		167.01	15.75	(Sheen)	151.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/01/2013		167.01	20.03	0.01	146.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-10	02/27/2014		167.01	17.65	0.01	149.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	08/27/2014		167.01	19.69	0.01	147.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	03/27/2015		167.01	17.19	0.01	149.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(b,j)
MW-10	08/27/2015		167.01	19.26	0.02	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
MW-10R	03/28/2016		166.80	12.50	--	154.30	38,000	3,830	2,810	1,130	5,310	1.3	40.5	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.82	--	
MW-10R	06/19/2016		166.80	17.51	--	149.29	24,800	447	68.8	1,090	1,950	<1.00	18.9	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.32	--	
MW-10R	09/07/2016		166.80	18.43	--	148.37	32,300	2,520	693	3,010	8,140	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<5,000	0.24	--	
MW-10R	12/14/2016		166.80	14.81	--	151.99	19,800	2,610	382	702	2,000	1.14	78.5	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.25	--	
MW-10R	03/01/2017		166.80	11.23	--	155.57	15,600	1,610	1,410	799	2,340	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<5,000	1.96	--	
MW-11	03/28/2016		165.64	11.32	--	154.32	<100	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.12	--	
MW-11	06/19/2016		165.64	15.71	--	149.93	197	<1.00	<5.00	<1.00	<3.00(J3)	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.35	--	
MW-11	09/07/2016		165.64	17.91	--	147.73	244	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.20	--	
MW-11	12/14/2016		165.64	13.09	--	152.55	260	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.77	--	
MW-11	03/01/2017		165.64	10.95	--	154.69	42.4J	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	1.91	--	
RW-1	03/07/1991		168.01	17.62	--	150.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/01/1991		168.01	14.40	--	153.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	07/03/1992		168.01	20.66	--	147.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	10/05/1992		168.01	23.34	--	144.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/13/1993		168.01	16.59	--	151.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/23/1993		168.01	16.17	--	151.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	07/12/1993		168.01	20.18	--	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	10/21/1993		168.01	25.70	--	142.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/21/1994		168.01	21.24	--	146.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/20/1994		168.01	32.20	--	135.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
RW-1	08/01/1994		168.01	21.70	--	146.31	29,000	580	950	300	7,800	1,200	--	--	--	--	--	--	--	1.1	--	
RW-1	12/23/1994		168.01	16.02	--	151.99	1,300	25	8.6	1.4	69	616	--	--	--	--	--	--	--	1.8	--	
RW-1	01/26/1995	Dup	168.01	13.78	--	154.23	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	01/26/1995		168.01	13.78	--	154.23	<50	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	--	--	
RW-1	06/08/1995		168.01	20.05	--	147.96	1,300	130	<1.0	<1.0	36	--	--	--	--	--	--	--	--	--	--	
RW-1	08/22/1995	Dup	168.01	21.74	--	146.27	3,300	230	13	4.9	280	<25	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	08/22/1995		168.01	21.74	--	146.27	2,800	210	9.3	4.3	250	<25	--	--	--	--	--	--	--	6.6	--	
RW-1	10/27/1995		168.01	32.00	--	136.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	10/30/1995	Dup	--	--	--	--	240	1.6	<1.0	<1.0	<2.0	630	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	10/30/1995		--	--	--	--	230	1.4	<1.0	<1.0	<2.0	650	--	--	--	--	--	--	--	6.9	--	
RW-1	01/25/1996		168.01	15.41	--	152.60	15,000	3,400	930	330	2,500	5,300	--	--	--	--	--	--	--	--	--	
RW-1	04/19/1996	Dup	168.01	16.83	--	151.18	33,000	5,600	3,200	1,700	8,800	15,000	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	04/19/1996		168.01	16.83	--	151.18	35,000	5,500	3,300	1,700	9,400	14,000	--	--	--	--	--	--	--	7.6	--	
RW-1	07/23/1996	Dup	168.01	20.76	--	147.25	47,000	3,700	2,500	930	5,300	35,000	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	07/23/1996		168.01	20.76	--	147.25	46,000	3,600	2,300	900	5,100	36,000	--	--	--	--	--	--	--	7.4	--	
RW-1	11/11/1996	Dup	168.01	21.73	--	146.28	31,000	2,900	1,000	860	4,600	22,000	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	11/11/1996		168.01	21.73	--	146.28	34,000	3,000	1,200	880	4,600	22,000	--	--	--	--	--	--	--	8.3	--	
RW-1	01/21/1997	Dup	168.01	14.20	--	153.81	270	42	17	2.7	36	1,500	--	--	--	--	--	--	--	--	--	(Dup)
RW-1	01/21/1997		168.01	14.20	--	153.81	260	40	16	2.7	34	1,500	--	--	--	--	--	--	--	6.1	--	
RW-1	04/29/1997		168.01	19.15	--	148.86	32,000	3,100	590	1,300	6,000	46,000	--	--	--	--	--	--	--	5.3	--	
RW-1	08/21/1997		168.01	20.67	--	147.34	7,600	730	58	370	1,780	9,500	--	--	--	--	--	--	--	4.7	--	
RW-1	11/05/1997		168.01	21.01	--	147.00	39,000	2,300	86	1,300	3,840	56,000	--	--	--	--	--	--	--	4.5	--	
RW-1	02/03/1998		168.01	10.68	--	157.33	3,400	31	11	29	161	3,200	--	--	--	--	--	--	--	5.1	--	
RW-1	05/28/1998		168.01	15.55	--	152.46	2,000	90	15	60	305	2,700	--	--	--	--	--	--	--	4.3	--	
RW-1	12/30/1998		168.01	17.35	--	150.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/02/1999		168.01	14.58	--	153.43	82,000	2,300	120	2,000	3,200	78,000	--	--	--	--	--	--	--	--	--	
RW-1	05/10/1999		168.01	16.00	--	152.01	15,000	620	88	340	660	61,000	--	--	--	--	--	--	--	--	--	
RW-1	08/24/1999		168.01	20.00	--	148.01	52,000	1,400	170	2,200	2,900	37,000	--	--	--	--	--	--	--	--	--	
RW-1	11/03/1999		168.01	20.39	--	147.62	17,000	2,500	86	1,500	970	54,000	--	--	--	--	--	--	--	--	--	
RW-1	03/01/2000		168.01	12.97	--	155.04	17,000	580	78	790	1,100	13,000	--	--	--	--	--	--	--	--	--	
RW-1	04/21/2000		168.01	16.02	--	151.99	31,000	2,100	100	1,400	1,100	39,000	--	--	--	--	--	--	--	--	--	
RW-1	07/31/2000		168.01	21.89	--	146.12	47,000	1,300	170	2,700	2,300	30,000	--	--	--	--	--	--	--	--	--	
RW-1	11/20/2000		168.01	19.15	--	148.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/18/2001		168.01	15.35	--	152.66	14,000	589	89	600	712	13,000	--	--	--	--	--	--	--	--	--	
RW-1	06/07/2001		168.01	19.09	--	148.92	28,000	1,140	68.2	504	530	19,100	--	--	--	--	--	--	--	--	--	
RW-1	09/05/2001		168.01	22.06	0.02	145.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/30/2001		168.01	19.53	--	148.48	20,000	405	39.4	545	740	8,260	--	--	--	--	--	--	--	--	--	
RW-1	02/20/2002		168.01	15.99	--	152.02	13,000	469	29	434	655	7,240	--	--	--	--	--	--	--	--	--	
RW-1	06/20/2002		168.01	19.31	--	148.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	09/11/2002		168.01	21.07	0.03	146.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/12/2002		168.01	20.92	0.02	147.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/29/2003		168.01	16.31	0.04	151.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/22/2003		168.01	16.68	--	151.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	06/24/2003		168.01	19.76	0.07	148.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	07/28/2003		168.01	21.04	0.04	146.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/12/2003		168.01	21.41	0.01	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	09/12/2003		168.01	21.10	0.07	146.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/18/2003		168.01	20.10	0.01	147.91	12,000	770	<50	320	250	6,100	11,000	--	<50	<50	--	160	<10,000	--	--	
RW-1	02/23/2004		168.01	14.35	0.01	153.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/04/2004		168.01	19.58	0.02	148.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/04/2004		168.01	22.05	0.05	146.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	09/22/2004		168.01	21.28	0.06	146.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/10/2004		168.01	18.56	0.02	149.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	01/13/2005		168.01	12.51	0.01	155.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/15/2005		168.01	15.24	0.03	152.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	03/07/2005		168.01	11.90	0.02	156.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/16/2005		168.01	14.39	0.02	153.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/17/2005		168.01	19.91	0.03	148.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/18/2005		168.01	20.36	0.07	147.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/07/2006		168.01	12.87	0.01	155.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/19/2006		168.01	15.87	0.04	152.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/23/2006		168.01	20.50	0.07	147.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/15/2006		168.01	20.52	0.07	147.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/14/2007		168.01	15.44	0.04	152.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	05/22/2007		168.01	17.78	(Sheen)	150.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/15/2007		168.01	20.80	0.02	147.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/08/2007		168.01	20.32	0.01	147.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	02/20/2008		168.01	14.55	0.02	153.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/20/2008		168.01	21.34	0.02	146.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	11/17/2008		168.01	20.41	--	147.60	13,000	120	<20	590	320	120	<400	<20	<20	<20	<20	<20	<12,000	--	--	
RW-1	02/25/2009		168.01	13.40	0.02	154.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	04/08/2009		168.01	16.45	--	151.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland CA

ARCADIS Design & Consultancy for natural and built assets

Well ID	Date	Type	TOC (ft msl)	DTW (ft)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (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)	NAPH (µg/L)	Notes
RW-1	05/28/2009		168.01	17.88	0.01	150.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	06/16/2009		168.01	19.30	0.01	148.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/06/2009		168.01	20.72	0.01	147.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	03/04/2010		168.01	12.33	--	155.68	8,000	20	<2.5	230	140	110	45	<2.5	<2.5	<2.5	<2.5	5.7	<500	1.24	--	(P)
RW-1	09/02/2010		168.01	20.14	--	147.87	4,700	18	<2.5	78	46	<2.5	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<500	--	--	(NP)
RW-1	03/15/2011		168.01	13.03	--	154.98	7,000	3.7	<2.5	44	31	6.7	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	--	--	(P)
RW-1	08/17/2011		168.01	18.60	--	149.41	2,800	7.5	<2.5	12	10	8.8	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<1,300	--	--	(P)
RW-1	02/06/2012		168.01	16.81	--	151.20	1,300	3.1	<2.5	5.2	5.1	2.9	<20	<2.5	<2.5	<2.5	<2.5(*)	<2.5	<1,300	--	--	(P)
RW-1	08/21/2012		168.01	20.06	--	147.95	1,200	10	0.58	10	5.2	15	<4.0	<0.50	<0.50	<0.50	<0.50	1	<250	--	--	(P)
RW-1	02/04/2013		168.01	16.36	(Sheen)	151.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	08/01/2013		168.01	20.50	0.01	147.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
RW-1	02/27/2014		168.01	17.66	--	150.35	800	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	--	--	
RW-1	08/27/2014		168.01	20.35	(Sheen)	147.66	2,800	5.9	1.7	12	5.2	6.7	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	0.22	6.8	(odor)
RW-1	03/27/2015		168.01	17.57	--	150.44	970	0.98	<0.50	0.91	1.5	0.74	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<500	2.35	--	(odor)
RW-1	08/27/2015		168.01	19.90	--	148.11	2,550	4.57	1.14J	4.54	3.66	<1.00	6.22	<1.00	<1.00	<1.00	--	<1.00	<100	8.36	--	(odor)
RW-1	03/28/2016		168.01	12.68	--	155.33	199	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00J3	<1.00	<1.00	<1.00	<100	1.01	--	
RW-1	09/07/2016		168.01	19.36	--	148.65	1,120	2.86	0.919J	2.28	2.66J	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	0.18	--	
RW-1	03/01/2017		168.01	10.63	--	157.38	225	<1.00	<1.00	<1.00	<3.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.31	--	
OW-1	09/07/2016		--	19.74	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)
OW-1	03/01/2017		--	12.04	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LPH)

Notes:
TOC = Top of casing measured
DTW = Depth to water
LNAPL = Light non-aqueous phase liquid (LPH)
GW Elev = Groundwater elevation
GRO = Gasoline range organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
TBA = tert-butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME= tert-Amyl methyl ether
DO = Dissolved oxygen
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
Ft msl = Feet above mean sea level
DUP = Duplicate sample
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
mg/L = Milligrams per liter
µg/L = Micrograms per liter
NP = Well not purged prior to sampling
P = Well purged prior to sampling
b = GWE adjusted assuming a specific gravity of 0.75 for free product
j = Well not sampled due to presence of LPH and nature of the product
J = The associated batch QC was outside the established quality control range for precision.
t = Sheen in well
y = Sample dilution was done with headspace in the sample vial; the samples were originally analyzed from VOAs without headspace
* = LCS or LCS D exceeds the control limits
Beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list; TPHg was changed to GRO; the resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported
Beginning in the Second Quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12
Values for DO and pH were obtained through field measurements
GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008; the analysis for GRO was changed to EPA method 8015B (C6-C12)
for samples collected from the time period February 5, 2008 through August 6, 2009 and EPA method 8260B (C6-C12) from March 4, 2010 to the present
The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants; Broadbent & Associates, Inc. has not verified the accuracy of this information

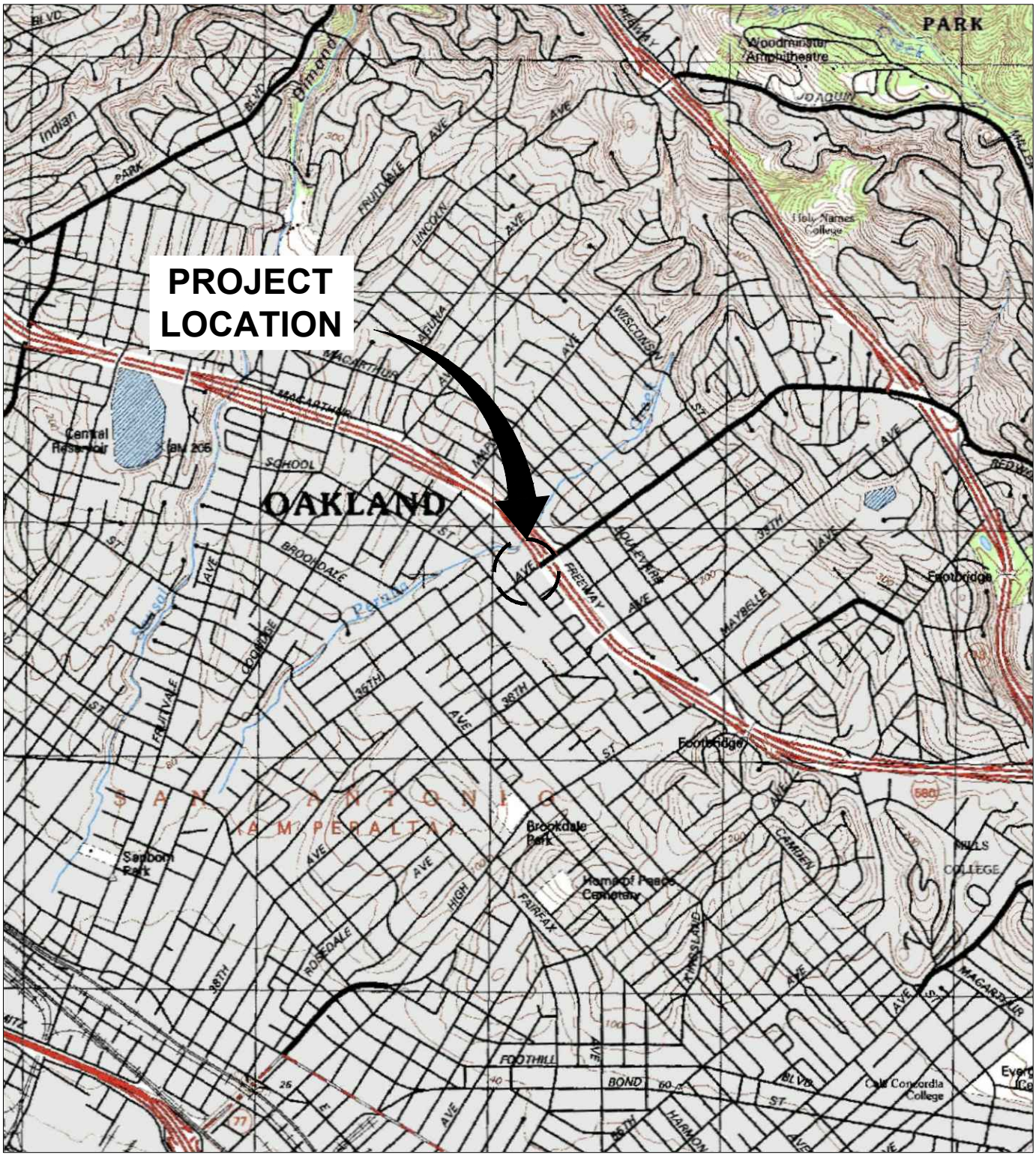
Table 4
Historical Groundwater Flow Direction and Gradient
CA-11132
3201 35th Avenue
Oakland, California

ARCADIS Design & Consultancy for natural and built assets

Date Measured	Approximate Gradient Direction	Approximate Gradient Magnitude (ft/ft)
5/19/2006	South	0.003 to 0.005
8/23/2006	Southwest	0.01
11/15/2006	South	0.004
2/14/2007	Southeast	0.01
5/22/2007	South	0.005
8/15/2007	South-Southwest	0.008
11/8/2007	Southwest	0.006
2/20/2008	Southeast	0.008
5/7/2008	South-Southwest	0.003
8/20/2008	South-Southwest	0.007
11/17/2008	South-Southwest	0.005
2/25/2009	Southeast	0.01
5/28/2009	South	0.004
8/6/2009	South-Southwest	0.005
3/4/2010	East-Southeast	0.02
9/2/2010	Southwest	0.01
3/15/2011	Southeast	0.01
8/17/2011	Southwest	0.003
2/6/2012	Southeast	0.005
8/21/2012	Southwest	0.007
2/4/2013	Southwest	0.01
8/1/2013	Southwest	0.007
2/27/2014	South-Southwest	0.007
8/27/2014	West-Northwest	0.01
3/27/2015	West	0.004
8/27/2015	West-Northwest	0.01
3/28/2016	South	0.007
9/7/2016	Southwest	0.005
3/1/2017	East-Northeast to Southeast	0.01

Notes:
ft/ft = feet per foot
The data within this table collected prior to April 2006 were provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

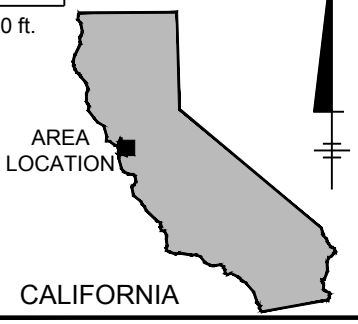
FIGURES



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND EAST, CALIFORNIA, 1997.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.



FORMER BP STATION No. 11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:--- PIC:--- PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\ENVCAD\Emeryville\ACTIGP09BPNAC112\C0000\DWG\GP09BPNAC112-N01.dwg LAYOUT: 1 SAVED: 2/19/2016 1:55 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/19/2016 1:58 PM BY: REYES, ALEC
XREFS: IMAGES: PROJECTNAME: ---
USGS TOPO 11132.jpg

LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- SOIL BORING
- CPT/UVOST LOCATION
- SOIL GAS BORING
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS

NOTES:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER
https://www.acgov.org/government/geospatial.htm

0 50 100

SCALE IN FEET

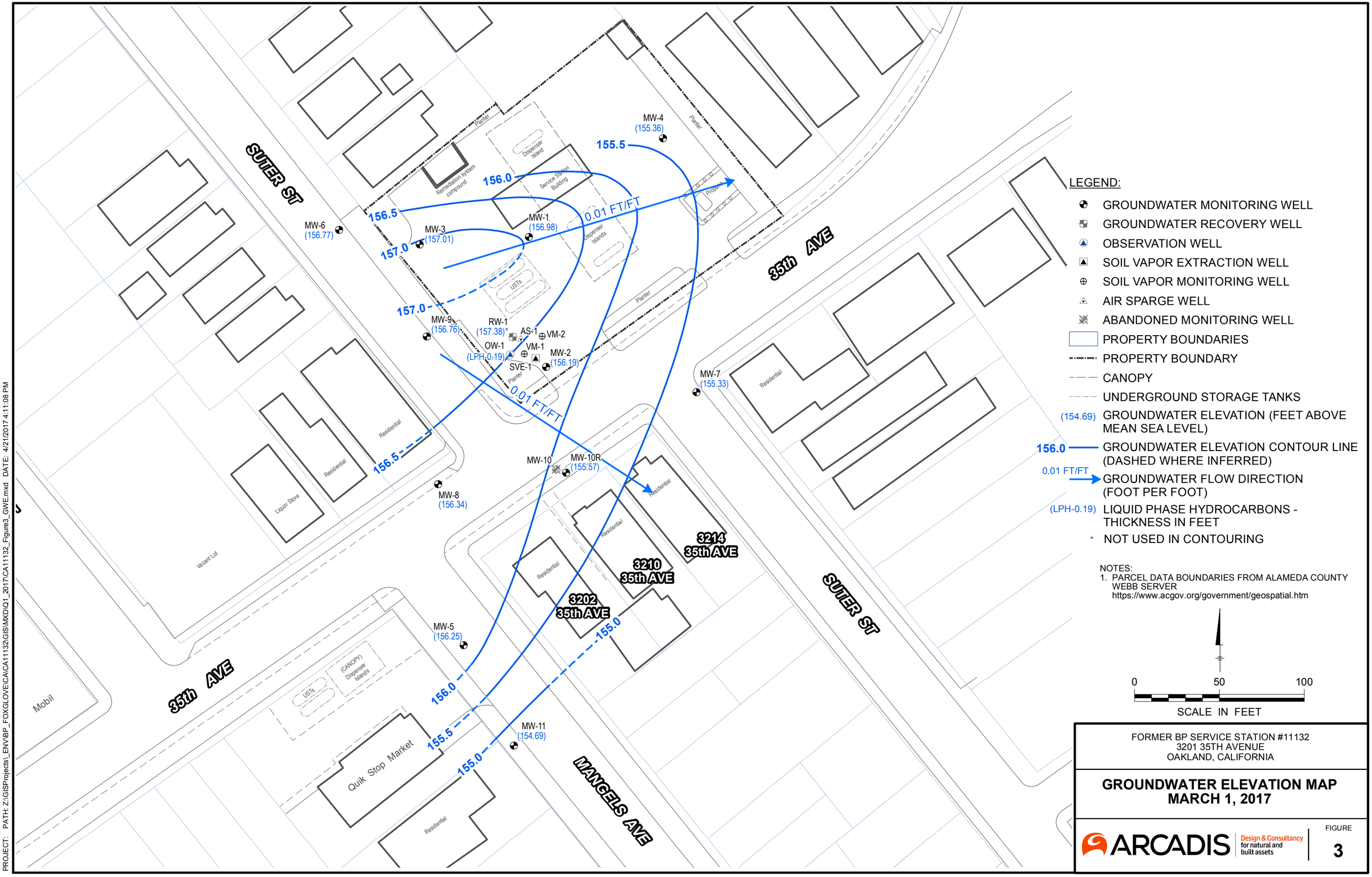
FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: kgpeters LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISPROJECTS_ENV\BP_FOXGLOVE\CA\CA11132\GIS\MXD\CA11132_figure2_SitePlan_2016STPL.mxd DATE: 9/10/2016 4:43:32 AM



LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS
- (154.69) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- 156.0 GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- 0.01 FT/FT GROUNDWATER FLOW DIRECTION (FOOT PER FOOT)
- (LPH-0.19) LIQUID PHASE HYDROCARBONS - THICKNESS IN FEET
- * NOT USED IN CONTOURING

NOTES:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER https://www.acgov.org/government/geospatial.htm

0 50 100

SCALE IN FEET

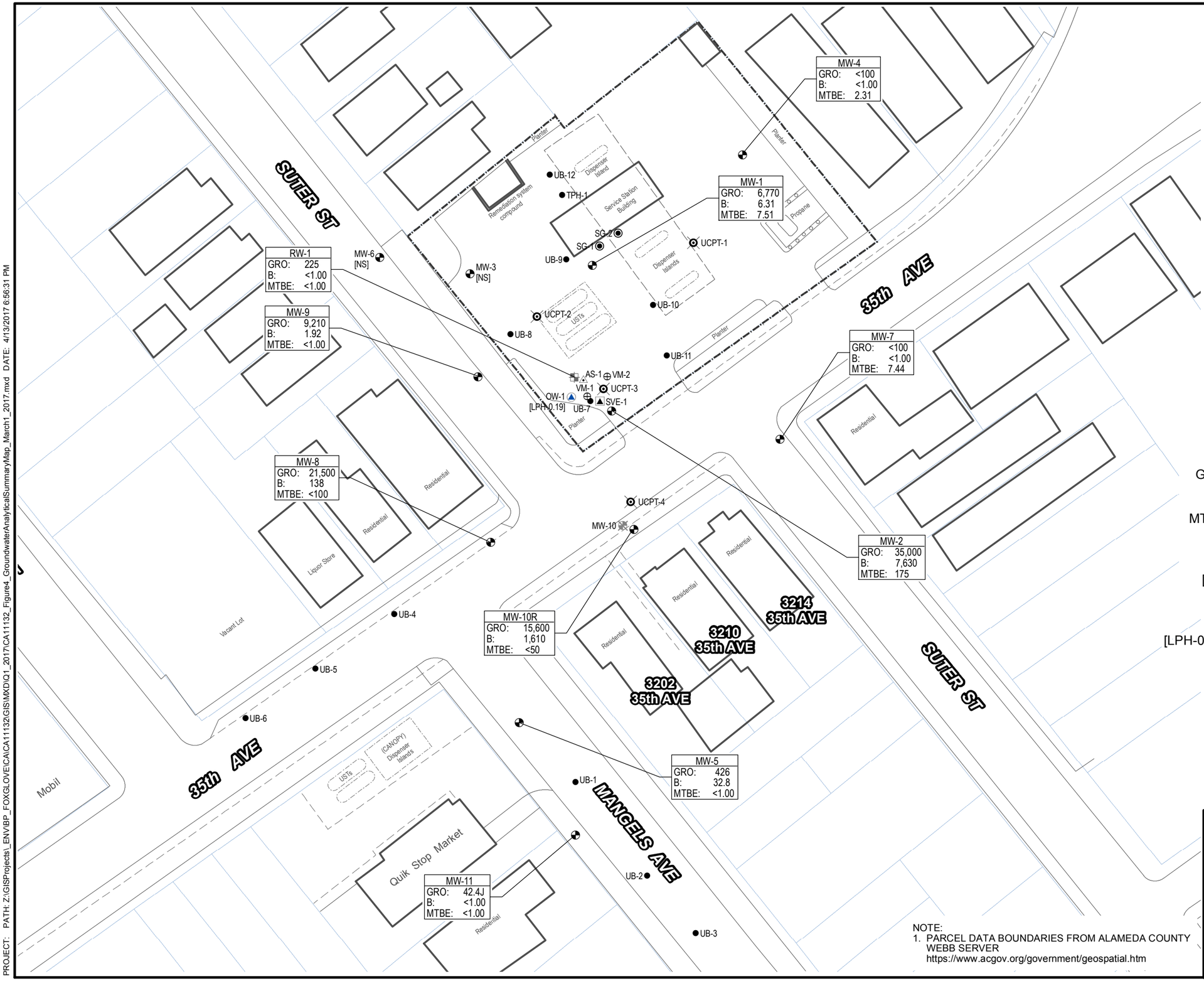
FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION MAP MARCH 1, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: MAI00749 LD: PIC: PM: TM:
PROJECT: PATH: Z:\GIS\Projects\1_ENV\BP_FOX\GLOVE\CA\CA11132\GIS\MXD\Q1_2017\CA11132_Figure3_GWE.mxd DATE: 4/21/2017 4:11:08 PM



LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- OBSERVATION WELL
- SOIL VAPOR EXTRACTION WELL
- SOIL VAPOR MONITORING WELL
- SOIL BORING
- CPT/UVOST LOCATION
- SOIL GAS BORING
- AIR SPARGE WELL
- ABANDONED MONITORING WELL
- PROPERTY BOUNDARIES
- PROPERTY BOUNDARY
- CANOPY
- UNDERGROUND STORAGE TANKS

MW-1	
GRO:	6,770
B:	6.31
MTBE:	7.51

SAMPLE LOCATION ID
CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
ANALYTE

GRO	GASOLINE RANGE ORGANICS
B	BENZENE
MTBE	METHYL TERT-BUTYL ETHER
J	CONCENTRATION BETWEEN REPORTING AND DETECTION LIMITS
[NS]	NOT SAMPLED
<	NOT DETECTED AT OR ABOVE STATED LABORATORY REPORTING LIMIT
[LPH-0.19]	LIQUID PHASE HYDROCARBONS - THICKNESS IN FEET

0 50 100
SCALE IN FEET

NOTE:
1. PARCEL DATA BOUNDARIES FROM ALAMEDA COUNTY WEBB SERVER https://www.acgov.org/government/geospatial.htm

FORMER BP SERVICE STATION #11132
3201 35TH AVENUE
OAKLAND, CALIFORNIA

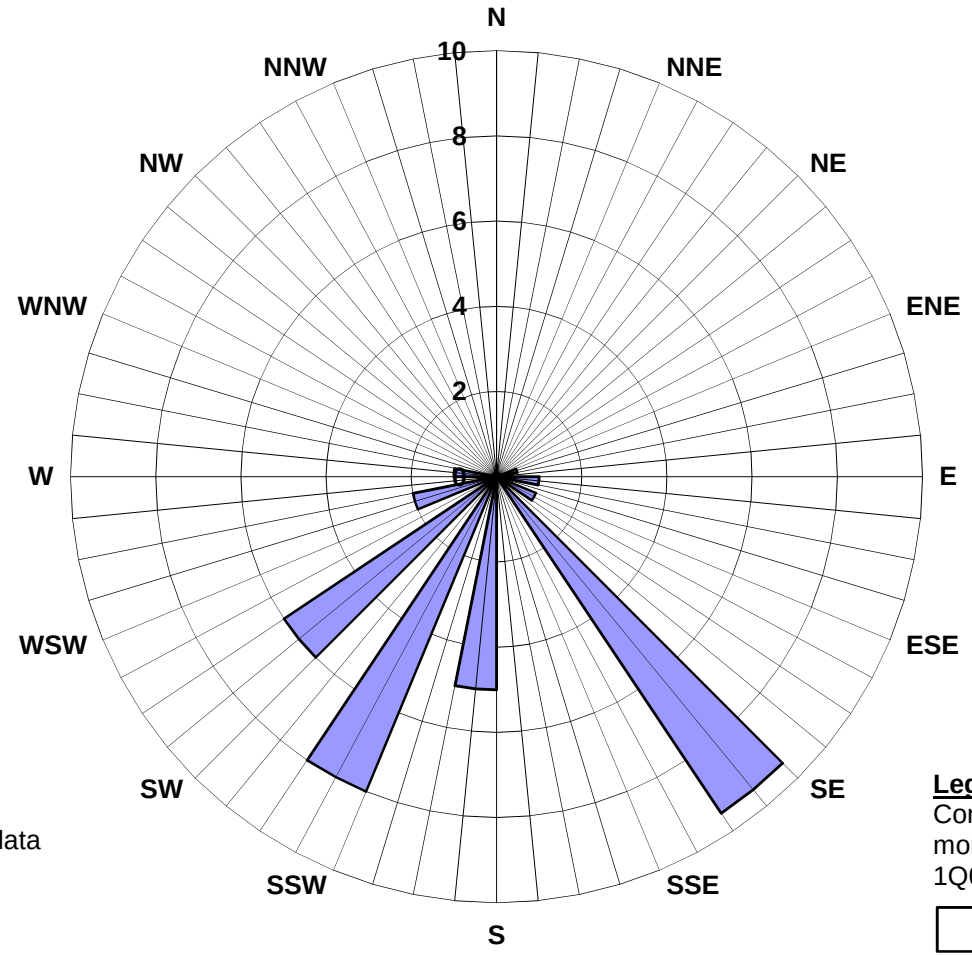
GROUNDWATER ANALYTICAL SUMMARY MAP MARCH 1, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: MAI00749 LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENVBP_FOXGLOVE\CA\CA11132\GIS\MXD\Q1_2017\CA11132_Figure4_GroundwaterAnalyticalSummaryMap_March1_2017.mxd DATE: 4/13/2017 6:56:31 PM

Figure 5
Groundwater Flow Direction Rose Diagram
CA BP 11132
3201 35th Ave
Oakland, California 94619



Note
Groundwater gradient and flow data beginning 1Q05 through 3Q11 monitoring events provided by Broadbent & Associates, Inc.

Legend
Concentric circles represent 34 monitoring events beginning 1Q05 through 1Q17.

Groundwater Flow Direction

4/20/2017
BP 11132 - Rose Diagram.xlsx

ATTACHMENT 1

Groundwater Sampling Data Package

WELL GAUGING DATA

Project # 161214-NM2 Date 12/14/16 Client ARCADIS

Site 3201 35th Ave Oakland

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	clean → dirty Notes
MW-11	1203	2	/	—	—	—	13.09	22.69	↓	1
MW-10R	1206	2	/	—	—	—	14.81	22.91	↓	2
* Caps opened 15 minutes prior to gauging										

WELLHEAD INSPECTION CHECKLIST

Client ARCADIS Date 12/14/16

Site Address 3201 35th Ave, Oakland

Job Number 161214-NM2 Technician NM

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-11	✓							
MW-10R	✓							

NOTES:

BP WELL MONITORING DATA SHEET

Project #: 612l4-NM2	Station #: 11132
Sampler: NM	Date: 12/14/16
Well I.D.: MW-10R	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 22.91	Depth to Water: 14.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Other: ___
Waterra
Peristaltic
Extraction Pump
Model #: Pump Depth: ___

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
(Other) hydrosleeve

Instruments Used:
(Myron L Ultrameter) HACH Turbidimeter
Durham Geoslope Indicator YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe Other: ___

___ (Gals.) X ___ = ___ Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
* new Sleeve deployed after sampling						
1236	67.80	6.87	1603	>1000		odor

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

Sampling Date: 12/14/16 Sampling Time: 1237 Depth to Water:

Sample I.D.: MW-10R Laboratory: Calscience Other ESC

Analyzed for: GRO BTEX OXYS ETHANOL (Other) see COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.25 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-231.2 mV

BP WELL MONITORING DATA SHEET

Project #: 161214-NM2	Station #: 11132
Sampler: NM	Date: 12/14/16
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 22.69	Depth to Water: 13.09
Depth to Free Product: ___	Thickness of Free Product (feet): ___
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Other: _____
Waterra
Peristaltic
Extraction Pump
Model #: Pump Depth: _____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
(Other: hydrosleeve)

Instruments Used:
(Myron L Ultrameter)
Durham Geoslope Indicator
(GeoTech Interface Probe)
MMC Interface Probe
HACH Turbidimeter
YSI 556 Flow-Thru Cell
(YSI 550 DO Meter)
Other: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume ~~Specified Volumes~~ ~~Calculated Volume~~

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
*New sleeve re-deployed after sampling						
1213	67.82	7.08	873	>1000	X	

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

Sampling Date: 12/14/16 Sampling Time: 1214 Depth to Water:

Sample I.D.: MW-11 Laboratory: Calscience Other ESC

Analyzed for: GRO BTEX OXYS ETHANOL (Other:) See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.77 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	-180.6 mV

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME				PROJECT NUMBER 161214-NM2			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myron L	6210806	12/14/16 0630	PH Cond ORP	4.00, 7.00, 10.00 3800 240 mv	✓	17.0	NM

ARCADIS Design & Consultancy for natural and built assets

Chain of Custody Record

ARCADIS Project Name: CA 11132

Req Due Date (mm/dd/yy): Standard TAT

Rush TAT: Yes ___ No x

Lab Work Order Number:

Lab Name: ESC Labs	Facility Address: 3201 35th Ave.	Consultant/Contractor: Blaine Tech Services, Inc.
Lab Address: 12065 Lebanon Rd., Mt. Juliet , TN 37122	City, State, ZIP Code: Oakland, CA	Blaine Tech Project No: ARCADIS/BP- 11132
Lab PM: Jarred Willis	Lead Regulatory Agency: Alameda County EHS / SF RWQCB	Consultant/Contractor Address: 1680 Rogers Ave., San Jose, CA 95112
Lab Phone: 615.758.5858	California Global ID No.: T0600100213	Consultant/Contractor PM: Michael Ninokata
Lab Shipping Accnt:	ARCADIS Project No: GP09BPNA.C112	Phone: 408.573.0555 x202
Lab Bottle Order No:	ARCADIS PM/ Phone: Megan Smoley	Email EDD To: megan.smoley@arcadis.com
Other Info:	Email: megan.smoley@arcadis.com	Invoice To: ARCADIS X Contractor ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO 8015M)	BTEX, (5) Oxygenates (8260)	1,2-DCA, EDB, Ethanol (8260)
	MW-10R	12/14/16	1237		X		5				X		X	X	X
	MW-11	12/14/16	1214		X		5				X		X	X	X
	TB-11132-12142016	12/14/16	0800		X		1				X				

Report Type & QC Level: Standard x; Full Data Package ___

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

on hold

Sampler's Name: Nicklaus Menge					
Sampler's Company: BTS	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Shipment Method: Ship Date:	[illegible] / BTS	12/14/16	1502	[illegible] Sample custodian	12/14/16	1502
Shipment Tracking No:						

Special Instructions: (5) Oxygenates = MTBE, TBA, DIPE, ETBE, TAME

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

WELL GAUGING DATA

Project # 170301-CR1 Date 3/1/17 Client Arcadis

Site #11132 3201 35th Ave. Oakland, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	~~0900~~ 0905	2					~~12.96~~ 12.77	31.30		
MW-2	0900	2					11.95	28.54		
MW-3	0918	2					10.16	33.14		
MW-4	0933	2					15.00	34.91		
MW-5	1245	2					8.89	31.96		
MW-6	1150	2					8.63	34.50		
MW-7	0854	2					12.75	34.65		
MW-8	0836	2					9.40	33.20		
MW-9	0830	2					9.44	26.02		
MW-10R	0850	2					11.23	22.91		
MW-11	0845	2					10.95	22.74		
RW-1	0940	6					10.63	38.70		
OW-1	0907	2		11.85	0.19		12.04		↓	
* All caps opened 15 minutes prior to gauging										

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 31.30	Depth to Water: ~~31.38~~ 12.77
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Other: _____
Waterra
Peristaltic
Extraction Pump

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) (HACH Turbidimeter)
Durham Geoslope Indicator
YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe
Other: _____

Model #: Pump Depth: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F) ~~°C~~	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1312	~~14.6~~	7.07	600	131	grab	cloudy/odor
	66.56					

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

Sampling Date: 3/1/17 Sampling Time: 1312 Depth to Water: 12.77

Sample I.D.: MW-1 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: see COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~1.48~~ mg/L	Post-purge:	1.40 mg/L
O.R.P. (if req'd):	Pre-purge:	~~114~~ CR mV	Post-purge:	-114 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 28.54	Depth to Water: 11.95
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Other: ~~Waterra~~
Waterra
Peristaltic
Extraction Pump
Model #: Pump Depth: ___

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) ~~HACH Turbidimeter~~
Durham Geoslope Indicator
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe
YSI 556 Flow-Thru Cell
Other: ___

___ (Gals.) X ___ = ___ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	~~°F~~ °C Temp (~~°F~~)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1357	~~19.7~~ 19.58	6.93	1502	23	grab	odor
	66.56					

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

Sampling Date: 3/1/17 Sampling Time: 1357 Depth to Water: 11.95

Sample I.D.: MW-2 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~3.13~~ 3.08 mg/L	Post-purge:	3.13 mg/L
O.R.P. (if req'd):	Pre-purge:	~~-81~~ -80 mV	Post-purge:	-81 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: ~~17~~ 1132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 15.00	Depth to Water: 15.00
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other: _____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: hydrosleeve

Instruments Used:
(Myron L Ultrameter) (HACH Turbidimeter)
Durham Geoslope Indicator YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe Other: ~~PQ meter~~

Model #: Pump Depth: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	~~°F~~ °C Temp (~~°F~~)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1012	~~20.5~~	6.77	795	104	grab	cloudy
	68.0					

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

Sampling Date: 3/1/17 Sampling Time: 1012 Depth to Water: 15.00

Sample I.D.: MW-4 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~1.99~~ mg/L	Post-purge:	1.99 mg/L
O.R.P. (if req'd):	Pre-purge:	~~118~~ mV	Post-purge:	118 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 31.96	Depth to Water: 8.89
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer | Waterra
Disposable Bailer | Peristaltic
Positive Air Displacement | Extraction Pump
Electric Submersible
Other: _____
Model #: Pump Depth: _____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrasleeve

Instruments Used:
(Myron L Ultrameter) | (HACH Turbidimeter)
Durham Geoslope Indicator | YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) | (YSI 550 DO Meter)
MMC Interface Probe | Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	°F (C) Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1255	~~17.7~~ CR	7.58	326	>1000	grab	greenish brown
	63.9					

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

Sampling Date: 3/1/17 Sampling Time: 1255 Depth to Water: 8.89

Sample I.D.: MW-5 Laboratory: Calscience Other FSC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~265~~ CR mg/L	Post-purge:	265 mg/L
O.R.P. (if req'd):	Pre-purge:	~~-43~~ CR mV	Post-purge:	-43 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 34.65	Depth to Water: 12.75
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer / Waterra
Disposable Bailer / Peristaltic
Positive Air Displacement / Extraction Pump
Electric Submersible
Other: ___
Model #: Pump Depth: ___

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) (HACH Turbidimeter)
Durham Geoslope Indicator / YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe / Other: ___

___ (Gals.) X ___ = ___ Gals.
1 Case Volume / Specified Volumes / Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (~~°F~~ °C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1110	~~20.1~~	7.13	273	174	grab	cloudy
	68.2					

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

Sampling Date: 3/1/17 Sampling Time: 1110 Depth to Water: 12.75

Sample I.D.: MW-7 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~1.87~~ mg/L	Post-purge:	1.87	mg/L
O.R.P. (if req'd):	Pre-purge:	~~52~~ CR mV	Post-purge:	52	mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132.
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 33.20	Depth to Water: 9.40
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Other: _____
Waterra
Peristaltic
Extraction Pump

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) HACH Turbidimeter
Durham Geoslope Indicator YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe Other: _____

Model #: Pump Depth: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (~~°F~~ °C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1230	~~19.7~~ SR	7.01	1153	328	grab	cloudy
	67.5					

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

Sampling Date: 3/1/17 Sampling Time: 1230 Depth to Water: 9.40

Sample I.D.: MW-8 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~2.91~~ SR mg/L	Post-purge:	2.91 mg/L
O.R.P. (if req'd):	Pre-purge:	~~-41~~ CR mV	Post-purge:	-41 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 1132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 26.02	Depth to Water: 9.44
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
Bailer / Waterra
Disposable Bailer / Peristaltic
Positive Air Displacement / Extraction Pump
Electric Submersible
Other: ____
Model #: Pump Depth: ____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) (HACH Turbidimeter)
Durham Geoslope Indicator / YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe / Other: ____

____(Gals.) X ____ = ____ Gals.
1 Case Volume / Specified Volumes / Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1130	~~17.8~~	7.13	722	>1000	grab	cloudy
	64.0					

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

Sampling Date: 3/1/17 Sampling Time: 1130 Depth to Water: 9.44

Sample I.D.: MW-9 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: see COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~3.24~~ mg/L	Post-purge:	3.24 mg/L
O.R.P. (if req'd):	Pre-purge:	~~-97~~ mV	Post-purge:	-97. mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-10R	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 22.91	Depth to Water: 11.23
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other: ____
Model #: ____ Pump Depth: ____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) HACH Turbidimeter
Durham Geoslope Indicator
YSI 556 Flow-Thru Cell
GeoTech Interface Probe
YSI 550 DO Meter
MMC Interface Probe
Other: ____

____(Gals.) X ____ = ____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1332	~~16.7~~ 62.1	7.10	1588	71000	grab	greenish brown

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

Sampling Date: 3/1/17 Sampling Time: 1332 Depth to Water: 11.23

Sample I.D.: MW-10R Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: see COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~1.96~~ mg/L	Post-purge:	1.96 mg/L
O.R.P. (if req'd):	Pre-purge:	~~-118~~ mV	Post-purge:	-118 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 20.74	Depth to Water: 10.95
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
Bailer | Waterra
Disposable Bailer | Peristaltic
Positive Air Displacement | Extraction Pump
Electric Submersible
Other: _____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrosleeve

Instruments Used:
(Myron L Ultrameter) (HACH Turbidimeter)
Durham Geoslope Indicator | YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe | Other: _____

Model #: Pump Depth: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (~~°F~~ °C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1035	~~19.4~~	7.28	842	>1000	grab	light brown
	66.9					

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

Sampling Date: 3/1/17 Sampling Time: 1035 Depth to Water: 10.95

Sample I.D.: MW-11 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: See COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~1.94~~ mg/L	Post-purge:	1.91 mg/L
O.R.P. (if req'd):	Pre-purge:	~~+58~~ mV	Post-purge:	115 mV

BP WELL MONITORING DATA SHEET

Project #: 170301-CR1	Station #: 11132
Sampler: Colin Rowland	Date: 3/1/17
Well I.D.: RW-1	Well Diameter: ~~2~~ 3 4 (6) 8 ____
Total Well Depth: 38.70	Depth to Water: 10.63
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
Bailer
Disposable Bailer
Positive Air Displacement
Electric Submersible
Other: _____

Waterra
Peristaltic
Extraction Pump

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: Hydrasleeve

Instruments Used:
(Myron L Ultrameter) (HACH Turbidimeter)
Durham Geoslope Indicator — YSI 556 Flow-Thru Cell
(GeoTech Interface Probe) (YSI 550 DO Meter)
MMC Interface Probe — Other: _____

Model #: Pump Depth: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume — Specified Volumes — Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F) ~~°C~~	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations/ DTW
1055	~~20.36~~ 68.5	7.03	119	116	grab	cloudy

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

Sampling Date: 3/1/17 Sampling Time: 1055 Depth to Water: 10.63

Sample I.D.: RW-1 Laboratory: Calscience Other ESC Lab Sciences

Analyzed for: GRO BTEX OXYS ETHANOL Other: see COC

Duplicate I.D.: Analyzed for: GRO BTEX OXYS ETHANOL Other:

D.O. (if req'd):	Pre-purge:	~~2.39~~ 2.42 mg/L	Post-purge:	2.31	mg/L
O.R.P. (if req'd):	Pre-purge:	~~+129~~ +98 mV	Post-purge:	-129	mV

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 3201 35th Ave Oakland CA				PROJECT NUMBER 170301-CR1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myron L Ultrameter II	6249609	3/1/17 0630	pH 7, 10, 4	7.00, 9.98, 4.00	yes	14.8	CR
			Cond 3900us	3901	yes	14.7	CR

WELLHEAD INSPECTION CHECKLIST

Client Arcadis Date 3/1/17

Site Address Site #11132 3201 35th Ave. Oakland, CA

Job Number 170301-CR1 Technician Colin Rowland

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1	X							
MW-2	X							
MW-3	X							
MW-4						X		
MW-5	X							
MW-6	X							
MW-7	X							
MW-8	X							
MW-9						X		
MW-10R	X							
MW-11	X							
RW-1	X							
OW-1	X							

NOTES: MW-4: 2/2 tabs stripped

MW-9: 1/2 bolts missing, 2/2 tabs stripped

ARCADIS Design & Consultancy for natural and built assets

Chain of Custody Record

ARCADIS Project Name: CA 11132

Req Due Date (mm/dd/yy): Standard TAT

Rush TAT: Yes ___ No x

Lab Work Order Number:

Lab Name: ESC Labs	Facility Address: 3201 35th Ave.	Consultant/Contractor: Blaine Tech Services, Inc.
Lab Address: 12065 Lebanon Rd., Mt. Juliet , TN 37122	City, State, ZIP Code: Oakland, CA	Blaine Tech Project No: ARCADIS/BP- 11132
Lab PM: Jarred Willis	Lead Regulatory Agency: Alameda County EHS / SF RWQCB	Consultant/Contractor Address: 1680 Rogers Ave., San Jose, CA 95112
Lab Phone: 615.758.5858	California Global ID No.: T0600100213	Consultant/Contractor PM: Michael Ninokata
Lab Shipping Accnt:	ARCADIS Project No: GP09BPNA.C112	Phone: 408.573.0555 x202
Lab Bottle Order No:	ARCADIS PM/ Phone: Megan Smoley	Email EDD To: megan.smoley@arcadis.com
Other Info:	Email: megan.smoley@arcadis.com	Invoice To: ARCADIS X Contractor ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO 8015M)	BTEX, (5) Oxygenates (8260)	1,2-DCA, EDB, Ethanol (8260)
	MW-1	3/1/17	1312		X		5				X		X	X	X
	MW-2		1357		X		5				X		X	X	X
	MW-4		1012		X		5				X		X	X	X
	MW-5		1255		X		5				X		X	X	X
	MW-7		1110		X		5				X		X	X	X
	MW-8		1230		X		5				X		X	X	X
	MW-9		1130		X		5				X		X	X	X
	MW-10R		1332		X		5				X		X	X	X
	MW-11		1035		X		5				X		X	X	X
	RW-1		1055		X		5				X		X	X	X

Report Type & QC Level: Standard x; Full Data Package ___

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Colin Rowland	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation
Sampler's Company: Blaine Tech Services, Inc	Colin Rowland (BTS)	3/1/17	1600	Colin Rowland (Sample custodian)
Shipment Method: Ship Date:				
Shipment Tracking No:				

Date	Time
3/1/17	1601

Special Instructions: (5) Oxygenates = MTBE, TBA, DIPE, ETBE, TAME

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

ARCADIS Design & Consultancy for natural and built assets

Chain of Custody Record

ARCADIS Project Name: CA 11132

Req Due Date (mm/dd/yy): Standard TAT Rush TAT: Yes ___ No x

Lab Work Order Number:

Lab Name: ESC Labs	Facility Address: 3201 35th Ave.	Consultant/Contractor: Blaine Tech Services, Inc.
Lab Address: 12065 Lebanon Rd., Mt. Juliet , TN 37122	City, State, ZIP Code: Oakland, CA	Blaine Tech Project No: ARCADIS/BP- 11132
Lab PM: Jarred Willis	Lead Regulatory Agency: Alameda County EHS / SF RWQCB	Consultant/Contractor Address: 1680 Rogers Ave., San Jose, CA 95112
Lab Phone: 615.758.5858	California Global ID No.: T0600100213	Consultant/Contractor PM: Michael Ninokata
Lab Shipping Accnt:	ARCADIS Project No: GP09BPNA.C112	Phone: 408.573.0555 x202
Lab Bottle Order No:	ARCADIS PM/ Phone: Megan Smoley	Email EDD To: megan.smoley@arcadis.com
Other Info:	Email: megan.smoley@arcadis.com	Invoice To: ARCADIS X Contractor ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO 8015M)	BTEX, (5) Oxygenates (8260)	1,2-DCA, EDB, Ethanol (8260)	Report Type & QC Level
	TB-11132-03012017	3/1/17	0800		X		2				X		X	X	X	On hold

Standard x

Full Data Package ___

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Colin Rowland	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Blaine Tech Services, Inc.						
Shipment Method: Ship Date:						
Shipment Tracking No:						

Special Instructions: (5) Oxygenates = MTBE, TBA, DIPE, ETBE, TAME

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

ATTACHMENT 2

Certified Laboratory Analytical Report and Chain of Custody Documentation

ANALYTICAL REPORT

December 21, 2016

ARCADIS US - San Francisco, CA

Sample Delivery Group:	L878867
Samples Received:	12/15/2016
Project Number:	GP09BPNA.C112
Description:	CA-11132 - GP09BPNA.C112
Site:	3201 35TH AVENUE
Report To:	Megan Smoley 865 Cotting Lane, Suite C Vacaville, CA 95688

Entire Report Reviewed By:

Brian Ford

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

MW-10R L878867-01 GW

Collected by: NM
Collected date/time: 12/14/16 12:37
Received date/time: 12/15/16 09:00

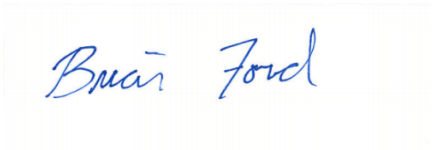
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG935863	5	12/19/16 19:01	12/19/16 19:01	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG936892	1	12/20/16 02:36	12/20/16 02:36	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG936892	50	12/21/16 06:15	12/21/16 06:15	ACG

MW-11 L878867-02 GW

Collected by: NM
Collected date/time: 12/14/16 12:14
Received date/time: 12/15/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG935863	1	12/19/16 19:23	12/19/16 19:23	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG936892	1	12/20/16 00:21	12/20/16 00:21	DWR

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHG C5 - C12	19800		152	500	5	12/19/2016 19:01	WG935863
(S) a,a,a-Trifluorotoluene(FID)	*86.7*			*62.0-128*		*12/19/2016 19:01*	WG935863

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	2610		16.6	50.0	50	12/21/2016 06:15	WG936892
Toluene	382		39.0	250	50	12/21/2016 06:15	WG936892
Ethylbenzene	702		19.2	50.0	50	12/21/2016 06:15	WG936892
Total Xylenes	2000		53.0	150	50	12/21/2016 06:15	WG936892
1,2-Dichloroethane	U		0.361	1.00	1	12/20/2016 02:36	WG936892
1,2-Dibromoethane	U		0.381	1.00	1	12/20/2016 02:36	WG936892
Di-isopropyl ether	U		0.320	1.00	1	12/20/2016 02:36	WG936892
Ethanol	U		42.0	100	1	12/20/2016 02:36	WG936892
Ethyl tert-butyl ether	U		0.270	1.00	1	12/20/2016 02:36	WG936892
Methyl tert-butyl ether	1.14		0.367	1.00	1	12/20/2016 02:36	WG936892
tert-Butyl alcohol	78.5		2.40	5.00	1	12/20/2016 02:36	WG936892
tert-Amyl Methyl Ether	U		0.260	1.00	1	12/20/2016 02:36	WG936892
(S) Toluene-d8	*99.2*			*90.0-115*		*12/20/2016 02:36*	WG936892
(S) Toluene-d8	*102*			*90.0-115*		*12/21/2016 06:15*	WG936892
(S) Dibromofluoromethane	*96.9*			*79.0-121*		*12/21/2016 06:15*	WG936892
(S) Dibromofluoromethane	*146*	J1		*79.0-121*		*12/20/2016 02:36*	WG936892
(S) a,a,a-Trifluorotoluene	*106*			*90.4-116*		*12/20/2016 02:36*	WG936892
(S) a,a,a-Trifluorotoluene	*101*			*90.4-116*		*12/21/2016 06:15*	WG936892
(S) 4-Bromofluorobenzene	*98.7*			*80.1-120*		*12/21/2016 06:15*	WG936892
(S) 4-Bromofluorobenzene	*98.5*			*80.1-120*		*12/20/2016 02:36*	WG936892

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	260		30.4	100	1	12/19/2016 19:23	WG935863
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*62.0-128*		*12/19/2016 19:23*	WG935863

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	12/20/2016 00:21	WG936892
Toluene	U		0.780	5.00	1	12/20/2016 00:21	WG936892
Ethylbenzene	U		0.384	1.00	1	12/20/2016 00:21	WG936892
Total Xylenes	U		1.06	3.00	1	12/20/2016 00:21	WG936892
1,2-Dichloroethane	U		0.361	1.00	1	12/20/2016 00:21	WG936892
1,2-Dibromoethane	U		0.381	1.00	1	12/20/2016 00:21	WG936892
Di-isopropyl ether	U		0.320	1.00	1	12/20/2016 00:21	WG936892
Ethanol	U		42.0	100	1	12/20/2016 00:21	WG936892
Ethyl tert-butyl ether	U		0.270	1.00	1	12/20/2016 00:21	WG936892
Methyl tert-butyl ether	U		0.367	1.00	1	12/20/2016 00:21	WG936892
tert-Butyl alcohol	U		2.40	5.00	1	12/20/2016 00:21	WG936892
tert-Amyl Methyl Ether	U		0.260	1.00	1	12/20/2016 00:21	WG936892
(S) Toluene-d8	*106*			*90.0-115*		*12/20/2016 00:21*	WG936892
(S) Dibromofluoromethane	*107*			*79.0-121*		*12/20/2016 00:21*	WG936892
(S) a,a,a-Trifluorotoluene	*100*			*90.4-116*		*12/20/2016 00:21*	WG936892
(S) 4-Bromofluorobenzene	*96.8*			*80.1-120*		*12/20/2016 00:21*	WG936892

Method Blank (MB)

(MB) R3185674-2 12/17/16 18:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPHG C5 - C12	U		30.4	100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*62.0-128*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3185674-1 12/17/16 17:49 • (LCSD) R3185674-3 12/17/16 19:24

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPHG C5 - C12	5500	6030	6420	110	117	64.0-125			6.30	20
(S) a,a,a-Trifluorotoluene(FID)				*99.7*	*100*	*62.0-128*				

L878807-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L878807-01 12/17/16 22:03 • (MS) R3185674-4 12/17/16 20:36 • (MSD) R3185674-5 12/17/16 21:05

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPHG C5 - C12	5500	U	3140	3740	57.1	67.9	1	45.1-139			17.3	20
(S) a,a,a-Trifluorotoluene(FID)					*97.4*	*96.9*		*62.0-128*				

Method Blank (MB)

(MB) R3186006-3 12/19/16 23:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichloroethane	U		0.361	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Ethanol	U		42.0	100
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.780	5.00
Xylenes, Total	U		1.06	3.00
tert-Amyl Methyl Ether	U		0.260	1.00
Ethyl tert-butyl ether	U		0.270	1.00
tert-Butyl alcohol	U		2.40	5.00
(S) Toluene-d8	*109*			*90.0-115*
(S) Dibromofluoromethane	*108*			*79.0-121*
(S) a,a,a-Trifluorotoluene	*104*			*90.4-116*
(S) 4-Bromofluorobenzene	*98.4*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3186006-1 12/19/16 21:10 • (LCSD) R3186006-2 12/19/16 21:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.0	25.0	91.9	100	73.0-122			8.54	20
1,2-Dibromoethane	25.0	23.3	25.7	93.2	103	79.8-122			9.88	20
1,2-Dichloroethane	25.0	23.8	26.1	95.2	104	65.3-126			9.15	20
Di-isopropyl ether	25.0	19.8	21.4	79.2	85.6	65.1-135			7.85	20
Ethylbenzene	25.0	23.1	25.2	92.2	101	80.9-121			8.69	20
Methyl tert-butyl ether	25.0	22.0	24.0	88.1	95.9	70.1-125			8.52	20
Toluene	25.0	23.8	26.1	95.2	104	77.9-116			9.05	20
Xylenes, Total	75.0	71.3	76.6	95.1	102	79.2-122			7.17	20
(S) Toluene-d8				*105*	*104*	*90.0-115*				
(S) Dibromofluoromethane				*101*	*102*	*79.0-121*				
(S) a,a,a-Trifluorotoluene				*100*	*100*	*90.4-116*				
(S) 4-Bromofluorobenzene				*100*	*97.4*	*80.1-120*				

L878841-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L878841-02 12/20/16 01:57 • (MS) R3186006-4 12/19/16 23:23 • (MSD) R3186006-5 12/19/16 23:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	5770	5510	5480	0.000	0.000	20	58.6-133	E V	E V	0.630	20
1,2-Dibromoethane	25.0	ND	388	486	77.5	97.2	20	73.8-131		J3	22.5	20
1,2-Dichloroethane	25.0	ND	352	430	70.3	86.1	20	60.7-132		J3	20.2	20
Di-isopropyl ether	25.0	40.9	312	381	54.3	67.9	20	59.9-140	J6		19.7	20
Ethylbenzene	25.0	2200	2330	2490	27.0	57.8	20	62.7-136	V	V	6.40	20
Methyl tert-butyl ether	25.0	2900	3040	3070	28.7	34.7	20	61.4-136	V	V	0.970	20
Toluene	25.0	12900	12000	11800	0.000	0.000	20	67.8-124	E V	E V	1.74	20
Xylenes, Total	75.0	10800	10900	11200	0.619	26.5	20	65.6-133	V	V	3.51	20
(S) Toluene-d8					*106*	*106*		*90.0-115*				
(S) Dibromofluoromethane					*89.1*	*87.0*		*79.0-121*				
(S) a,a,a-Trifluorotoluene					*100*	*101*		*90.4-116*				
(S) 4-Bromofluorobenzene					*99.1*	*101*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

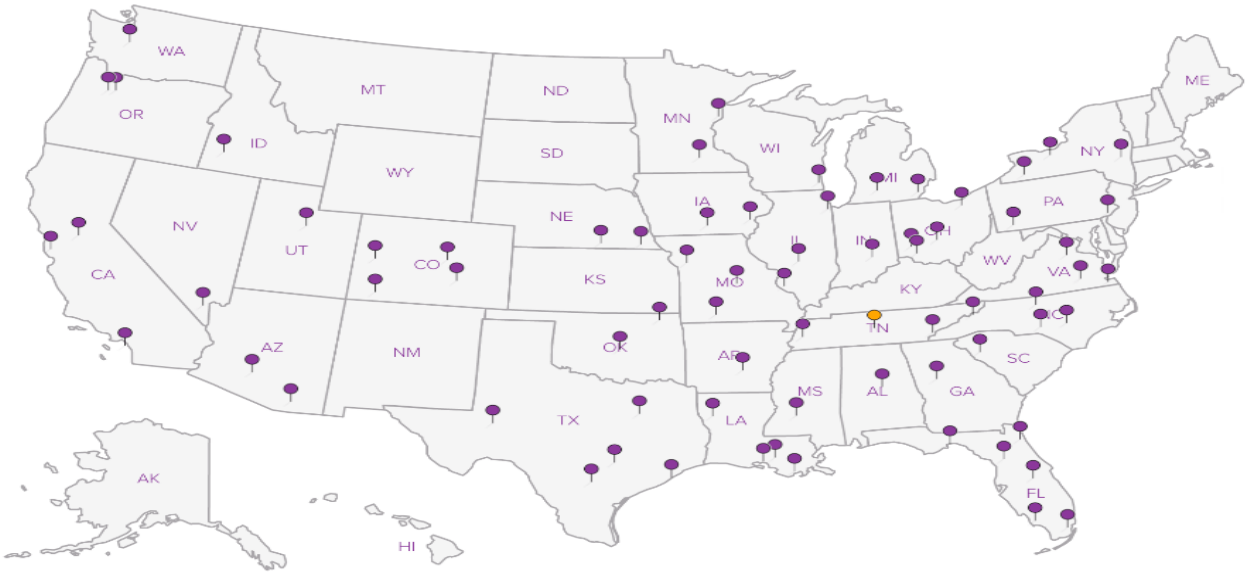
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



C193

ARCADIS

Chain of Custody Record

Page 1 of 1

ARCADIS Project Name: CA 11132

Req Due Date (mm/dd/yy): Standard TAT   Rush TAT: Yes ___ No x

Lab Work Order Number:

Lab Name:	ESC Labs
Lab Address:	12065 Lebanon Rd., Mt. Juliet , TN 37122
Lab PM:	Jarred Willis
Lab Phone:	615.758.5858
Lab Shipping Accnt:	
Lab Bottle Order No:	
Other Info:	

Facility Address:	3201 35th Ave.
City, State, ZIP Code:	Oakland, CA
Lead Regulatory Agency:	Alameda County EHS / SF RWQCB
California Global ID No.:	T0600100213
ARCADIS Project No:	GP09BPNA.C112
ARCADIS PM/ Phone:	Megan Smoley
Email:	megan.smoley@arcadis.com

Consultant/Contractor:	Blaine Tech Services, Inc.
Blaine Tech Project No:	ARCADIS/BP- 11132
Consultant/Contractor Address:	1680 Rogers Ave., San Jose, CA 95112
Consultant/Contractor PM:	Michael Ninokata
Phone:	408.573.0555 x202
Email EDD To:	megan.smoley@arcadis.com
Invoice To:	ARCADIS X Contractor ___

Report Type & QC Level: Standard x; Full Data Package ___

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor		Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		GRO 8015M)	BTEX, (5) Oxygenates (8260)	1,2-DCA, EDB, Ethanol (8260)							Comments
	MW-10R	12/14/16	1237		X			5				X			X	X	X							878867-01
	MW-11	12/14/16	1214		X			5				X			X	X	X							02
	TB-11132-12142016	12/14/16	0800		X			1				X												on hold

Comments note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Nicklaus Menge

Sampler's Company: BTS

Shipment Method: FedEx   Ship Date: 12/14/16

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature] / BTS	12/14/16	1502	[signature] sample custodian	12/14/16	1502
[signature]	12/14/16	1700			
[signature]	12/15/16	09	[signature]	12/15/16	0900

Special Instructions: (5) Oxygenates = MTBE, TBA, DIPE, ETBE, TAME

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.4 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

ARCADIS COC Rev. 06282012

JDH

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Form

Client:	ARCADISBP	SDG#	378367
Cooler Received/Opened On: 12/15/16		Temperature Upon Receipt:	2.4 °c
Received By: Dakota Busby			
Signature: Daby			

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			✓
Were custody papers properly filled out?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			✓
If applicable, was an observable VOA headspace present?		✓	
Non Conformance Generated. (If yes see attached NCF)			

ANALYTICAL REPORT

March 10, 2017

ARCADIS US - San Francisco, CA

Sample Delivery Group:	L893775
Samples Received:	03/03/2017
Project Number:	GP09BPNA.C112
Description:	CA-11132 - GP09BPNA.C112
Site:	3201 35TH AVENUE
Report To:	Megan Smoley 865 Cotting Lane, Suite C Vacaville, CA 95688

Entire Report Reviewed By:

Brian Ford

Technical Service Representative

TABLE OF CONTENTS

MW-1 L893775-01 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 13:12
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	1	03/10/17 06:19	03/10/17 06:19	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 22:27	03/09/17 22:27	LRL

MW-2 L893775-02 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 13:57
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	25	03/05/17 02:02	03/05/17 02:02	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	100	03/09/17 08:32	03/09/17 08:32	LRL

MW-4 L893775-03 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 10:12
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	1	03/05/17 02:26	03/05/17 02:26	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 05:50	03/09/17 05:50	LRL

MW-5 L893775-04 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 12:55
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	1	03/05/17 02:50	03/05/17 02:50	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 06:13	03/09/17 06:13	LRL

MW-7 L893775-05 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 11:10
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	1	03/05/17 03:14	03/05/17 03:14	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 06:36	03/09/17 06:36	LRL

MW-8 L893775-06 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 12:30
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	10	03/05/17 03:38	03/05/17 03:38	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	100	03/09/17 08:54	03/09/17 08:54	LRL

MW-9 L893775-07 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 11:30
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	10	03/05/17 04:02	03/05/17 04:02	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 22:40	03/09/17 22:40	LRL

MW-10R L893775-08 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 13:32
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	10	03/10/17 07:04	03/10/17 07:04	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	50	03/09/17 09:40	03/09/17 09:40	LRL

MW-11 L893775-09 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 10:35
Received date/time: 03/03/17 09:00

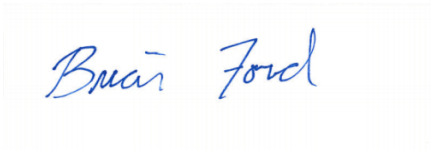
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	1	03/05/17 04:50	03/05/17 04:50	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 06:59	03/09/17 06:59	LRL

RW-1 L893775-10 GW

Collected by: Colin Rowland
Collected date/time: 03/01/17 10:55
Received date/time: 03/03/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG957821	1	03/05/17 05:15	03/05/17 05:15	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957837	1	03/09/17 07:22	03/09/17 07:22	LRL

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHG C5 - C12	6770		30.4	100	1	03/10/2017 06:19	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*112*			*77.0-122*		*03/10/2017 06:19*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	6.31		0.331	1.00	1	03/09/2017 22:27	WG957837
Toluene	1.12		0.412	1.00	1	03/09/2017 22:27	WG957837
Ethylbenzene	89.2		0.384	1.00	1	03/09/2017 22:27	WG957837
Total Xylenes	8.10		1.06	3.00	1	03/09/2017 22:27	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 22:27	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 22:27	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 22:27	WG957837
Ethanol	U		42.0	100	1	03/09/2017 22:27	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 22:27	WG957837
Methyl tert-butyl ether	7.51		0.367	1.00	1	03/09/2017 22:27	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 22:27	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 22:27	WG957837
(S) Toluene-d8	*101*			*80.0-120*		*03/09/2017 22:27*	WG957837
(S) Dibromofluoromethane	*89.3*			*76.0-123*		*03/09/2017 22:27*	WG957837
(S) a,a,a-Trifluorotoluene	*105*			*80.0-120*		*03/09/2017 22:27*	WG957837
(S) 4-Bromofluorobenzene	*95.5*			*80.0-120*		*03/09/2017 22:27*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	35000		760	2500	25	03/05/2017 02:02	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-122*		*03/05/2017 02:02*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	7630		33.1	100	100	03/09/2017 08:32	WG957837
Toluene	897		41.2	100	100	03/09/2017 08:32	WG957837
Ethylbenzene	1810		38.4	100	100	03/09/2017 08:32	WG957837
Total Xylenes	3920		106	300	100	03/09/2017 08:32	WG957837
1,2-Dichloroethane	U		36.1	100	100	03/09/2017 08:32	WG957837
1,2-Dibromoethane	U		38.1	100	100	03/09/2017 08:32	WG957837
Di-isopropyl ether	U		32.0	100	100	03/09/2017 08:32	WG957837
Ethanol	U		4200	10000	100	03/09/2017 08:32	WG957837
Ethyl tert-butyl ether	U		27.0	100	100	03/09/2017 08:32	WG957837
Methyl tert-butyl ether	175		36.7	100	100	03/09/2017 08:32	WG957837
tert-Butyl alcohol	U		240	500	100	03/09/2017 08:32	WG957837
tert-Amyl Methyl Ether	U		26.0	100	100	03/09/2017 08:32	WG957837
(S) Toluene-d8	*102*			*80.0-120*		*03/09/2017 08:32*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 08:32*	WG957837
(S) a,a,a-Trifluorotoluene	*104*			*80.0-120*		*03/09/2017 08:32*	WG957837
(S) 4-Bromofluorobenzene	*105*			*80.0-120*		*03/09/2017 08:32*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	U		30.4	100	1	03/05/2017 02:26	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-122*		*03/05/2017 02:26*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/09/2017 05:50	WG957837
Toluene	U		0.412	1.00	1	03/09/2017 05:50	WG957837
Ethylbenzene	U		0.384	1.00	1	03/09/2017 05:50	WG957837
Total Xylenes	U		1.06	3.00	1	03/09/2017 05:50	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 05:50	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 05:50	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 05:50	WG957837
Ethanol	U		42.0	100	1	03/09/2017 05:50	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 05:50	WG957837
Methyl tert-butyl ether	2.31		0.367	1.00	1	03/09/2017 05:50	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 05:50	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 05:50	WG957837
(S) Toluene-d8	*100*			*80.0-120*		*03/09/2017 05:50*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 05:50*	WG957837
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*		*03/09/2017 05:50*	WG957837
(S) 4-Bromofluorobenzene	*106*			*80.0-120*		*03/09/2017 05:50*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	426		30.4	100	1	03/05/2017 02:50	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-122*		*03/05/2017 02:50*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	32.8		0.331	1.00	1	03/09/2017 06:13	WG957837
Toluene	1.01		0.412	1.00	1	03/09/2017 06:13	WG957837
Ethylbenzene	22.6		0.384	1.00	1	03/09/2017 06:13	WG957837
Total Xylenes	8.62		1.06	3.00	1	03/09/2017 06:13	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 06:13	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 06:13	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 06:13	WG957837
Ethanol	U		42.0	100	1	03/09/2017 06:13	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 06:13	WG957837
Methyl tert-butyl ether	U		0.367	1.00	1	03/09/2017 06:13	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 06:13	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 06:13	WG957837
(S) Toluene-d8	*101*			*80.0-120*		*03/09/2017 06:13*	WG957837
(S) Dibromofluoromethane	*102*			*76.0-123*		*03/09/2017 06:13*	WG957837
(S) a,a,a-Trifluorotoluene	*104*			*80.0-120*		*03/09/2017 06:13*	WG957837
(S) 4-Bromofluorobenzene	*107*			*80.0-120*		*03/09/2017 06:13*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	U		30.4	100	1	03/05/2017 03:14	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-122*		*03/05/2017 03:14*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/09/2017 06:36	WG957837
Toluene	U		0.412	1.00	1	03/09/2017 06:36	WG957837
Ethylbenzene	U		0.384	1.00	1	03/09/2017 06:36	WG957837
Total Xylenes	U		1.06	3.00	1	03/09/2017 06:36	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 06:36	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 06:36	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 06:36	WG957837
Ethanol	U		42.0	100	1	03/09/2017 06:36	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 06:36	WG957837
Methyl tert-butyl ether	7.44		0.367	1.00	1	03/09/2017 06:36	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 06:36	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 06:36	WG957837
(S) Toluene-d8	*100*			*80.0-120*		*03/09/2017 06:36*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 06:36*	WG957837
(S) a,a,a-Trifluorotoluene	*104*			*80.0-120*		*03/09/2017 06:36*	WG957837
(S) 4-Bromofluorobenzene	*107*			*80.0-120*		*03/09/2017 06:36*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	21500		304	1000	10	03/05/2017 03:38	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-122*		*03/05/2017 03:38*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	138		33.1	100	100	03/09/2017 08:54	WG957837
Toluene	57.2	J	41.2	100	100	03/09/2017 08:54	WG957837
Ethylbenzene	1120		38.4	100	100	03/09/2017 08:54	WG957837
Total Xylenes	1880		106	300	100	03/09/2017 08:54	WG957837
1,2-Dichloroethane	U		36.1	100	100	03/09/2017 08:54	WG957837
1,2-Dibromoethane	U		38.1	100	100	03/09/2017 08:54	WG957837
Di-isopropyl ether	U		32.0	100	100	03/09/2017 08:54	WG957837
Ethanol	U		4200	10000	100	03/09/2017 08:54	WG957837
Ethyl tert-butyl ether	U		27.0	100	100	03/09/2017 08:54	WG957837
Methyl tert-butyl ether	U		36.7	100	100	03/09/2017 08:54	WG957837
tert-Butyl alcohol	U		240	500	100	03/09/2017 08:54	WG957837
tert-Amyl Methyl Ether	U		26.0	100	100	03/09/2017 08:54	WG957837
(S) Toluene-d8	*101*			*80.0-120*		*03/09/2017 08:54*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 08:54*	WG957837
(S) a,a,a-Trifluorotoluene	*104*			*80.0-120*		*03/09/2017 08:54*	WG957837
(S) 4-Bromofluorobenzene	*106*			*80.0-120*		*03/09/2017 08:54*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	9210		304	1000	10	03/05/2017 04:02	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-122*		*03/05/2017 04:02*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	1.92		0.331	1.00	1	03/09/2017 22:40	WG957837
Toluene	U		0.412	1.00	1	03/09/2017 22:40	WG957837
Ethylbenzene	16.7		0.384	1.00	1	03/09/2017 22:40	WG957837
Total Xylenes	3.65		1.06	3.00	1	03/09/2017 22:40	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 22:40	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 22:40	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 22:40	WG957837
Ethanol	U		42.0	100	1	03/09/2017 22:40	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 22:40	WG957837
Methyl tert-butyl ether	U		0.367	1.00	1	03/09/2017 22:40	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 22:40	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 22:40	WG957837
(S) Toluene-d8	*101*			*80.0-120*		*03/09/2017 22:40*	WG957837
(S) Dibromofluoromethane	*89.3*			*76.0-123*		*03/09/2017 22:40*	WG957837
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*		*03/09/2017 22:40*	WG957837
(S) 4-Bromofluorobenzene	*94.0*			*80.0-120*		*03/09/2017 22:40*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHG C5 - C12	15600		304	1000	10	03/10/2017 07:04	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*89.2*			*77.0-122*		*03/10/2017 07:04*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	1610		16.6	50.0	50	03/09/2017 09:40	WG957837
Toluene	1410		20.6	50.0	50	03/09/2017 09:40	WG957837
Ethylbenzene	799		19.2	50.0	50	03/09/2017 09:40	WG957837
Total Xylenes	2340		53.0	150	50	03/09/2017 09:40	WG957837
1,2-Dichloroethane	U		18.0	50.0	50	03/09/2017 09:40	WG957837
1,2-Dibromoethane	U		19.0	50.0	50	03/09/2017 09:40	WG957837
Di-isopropyl ether	U		16.0	50.0	50	03/09/2017 09:40	WG957837
Ethanol	U		2100	5000	50	03/09/2017 09:40	WG957837
Ethyl tert-butyl ether	U		13.5	50.0	50	03/09/2017 09:40	WG957837
Methyl tert-butyl ether	U		18.4	50.0	50	03/09/2017 09:40	WG957837
tert-Butyl alcohol	U		120	250	50	03/09/2017 09:40	WG957837
tert-Amyl Methyl Ether	U		13.0	50.0	50	03/09/2017 09:40	WG957837
(S) Toluene-d8	*101*			*80.0-120*		*03/09/2017 09:40*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 09:40*	WG957837
(S) a,a,a-Trifluorotoluene	*105*			*80.0-120*		*03/09/2017 09:40*	WG957837
(S) 4-Bromofluorobenzene	*107*			*80.0-120*		*03/09/2017 09:40*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHG C5 - C12	42.4	J	30.4	100	1	03/05/2017 04:50	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-122*		*03/05/2017 04:50*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	03/09/2017 06:59	WG957837
Toluene	U		0.412	1.00	1	03/09/2017 06:59	WG957837
Ethylbenzene	U		0.384	1.00	1	03/09/2017 06:59	WG957837
Total Xylenes	U		1.06	3.00	1	03/09/2017 06:59	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 06:59	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 06:59	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 06:59	WG957837
Ethanol	U		42.0	100	1	03/09/2017 06:59	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 06:59	WG957837
Methyl tert-butyl ether	U		0.367	1.00	1	03/09/2017 06:59	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 06:59	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 06:59	WG957837
(S) Toluene-d8	*101*			*80.0-120*		*03/09/2017 06:59*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 06:59*	WG957837
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*		*03/09/2017 06:59*	WG957837
(S) 4-Bromofluorobenzene	*108*			*80.0-120*		*03/09/2017 06:59*	WG957837

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	225		30.4	100	1	03/05/2017 05:15	WG957821
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-122*		*03/05/2017 05:15*	WG957821

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/09/2017 07:22	WG957837
Toluene	U		0.412	1.00	1	03/09/2017 07:22	WG957837
Ethylbenzene	U		0.384	1.00	1	03/09/2017 07:22	WG957837
Total Xylenes	U		1.06	3.00	1	03/09/2017 07:22	WG957837
1,2-Dichloroethane	U		0.361	1.00	1	03/09/2017 07:22	WG957837
1,2-Dibromoethane	U		0.381	1.00	1	03/09/2017 07:22	WG957837
Di-isopropyl ether	U		0.320	1.00	1	03/09/2017 07:22	WG957837
Ethanol	U		42.0	100	1	03/09/2017 07:22	WG957837
Ethyl tert-butyl ether	U		0.270	1.00	1	03/09/2017 07:22	WG957837
Methyl tert-butyl ether	U		0.367	1.00	1	03/09/2017 07:22	WG957837
tert-Butyl alcohol	U		2.40	5.00	1	03/09/2017 07:22	WG957837
tert-Amyl Methyl Ether	U		0.260	1.00	1	03/09/2017 07:22	WG957837
(S) Toluene-d8	*102*			*80.0-120*		*03/09/2017 07:22*	WG957837
(S) Dibromofluoromethane	*101*			*76.0-123*		*03/09/2017 07:22*	WG957837
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*		*03/09/2017 07:22*	WG957837
(S) 4-Bromofluorobenzene	*105*			*80.0-120*		*03/09/2017 07:22*	WG957837

Method Blank (MB)

(MB) R3202173-3 03/04/17 19:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPHG C5 - C12	U		30.4	100
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3202173-1 03/04/17 18:21 • (LCSD) R3202173-2 03/04/17 18:45

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPHG C5 - C12	5500	5680	5650	103	103	71.0-130			0.510	20
(S) a,a,a-Trifluorotoluene(FID)				*111*	*110*	*77.0-122*				

L893690-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893690-01 03/04/17 21:58 • (MS) R3202173-4 03/04/17 20:46 • (MSD) R3202173-5 03/04/17 21:10

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPHG C5 - C12	5500	ND	2910	2880	52.8	52.3	1	18.0-158			0.960	20
(S) a,a,a-Trifluorotoluene(FID)					*104*	*104*		*77.0-122*				

Method Blank (MB)

(MB) R3201896-3 03/08/17 15:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichloroethane	U		0.361	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Ethanol	U		42.0	100
Methyl tert-butyl ether	U		0.367	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
tert-Amyl Methyl Ether	U		0.260	1.00
Ethyl tert-butyl ether	U		0.270	1.00
tert-Butyl alcohol	U		2.40	5.00
(S) Toluene-d8	*101*			*80.0-120*
(S) Dibromofluoromethane	*100*			*76.0-123*
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*107*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201896-1 03/08/17 14:42 • (LCSD) R3201896-2 03/08/17 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.5	24.3	94.1	97.1	69.0-123			3.10	20
1,2-Dibromoethane	25.0	29.3	29.5	117	118	77.0-123			0.660	20
1,2-Dichloroethane	25.0	25.3	26.1	101	104	67.0-126			3.00	20
Di-isopropyl ether	25.0	21.4	22.0	85.5	88.1	59.0-133			3.03	20
Ethylbenzene	25.0	27.5	27.4	110	110	77.0-120			0.250	20
Methyl tert-butyl ether	25.0	24.2	24.8	96.7	99.1	64.0-123			2.53	20
Toluene	25.0	24.7	24.8	98.7	99.1	77.0-120			0.450	20
Xylenes, Total	75.0	82.9	82.9	111	111	77.0-120			0.000	20
(S) Toluene-d8				*101*	*100*	*80.0-120*				
(S) Dibromofluoromethane				*102*	*102*	*76.0-123*				
(S) a,a,a-Trifluorotoluene				*103*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*105*	*105*	*80.0-120*				

L893548-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893548-06 03/09/17 07:45 • (MS) R3201896-5 03/09/17 10:03 • (MSD) R3201896-6 03/09/17 10:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	887	1610	1660	115	123	25	34.0-147			3.06	20
1,2-Dibromoethane	25.0	ND	797	791	128	127	25	54.0-140			0.750	20
1,2-Dichloroethane	25.0	ND	695	701	111	112	25	47.0-141			0.900	20
Di-isopropyl ether	25.0	ND	640	640	98.7	98.7	25	44.0-144			0.0800	20
Ethylbenzene	25.0	97.3	882	883	126	126	25	42.0-147			0.0500	20
Methyl tert-butyl ether	25.0	317	1030	1040	113	116	25	42.0-142			1.55	20
Toluene	25.0	35.8	726	719	110	109	25	42.0-141			1.02	20
Xylenes, Total	75.0	182	2490	2510	123	124	25	41.0-148			0.640	20
(S) Toluene-d8					*101*	*100*		*80.0-120*				
(S) Dibromofluoromethane					*102*	*102*		*76.0-123*				
(S) a,a,a-Trifluorotoluene					*103*	*102*		*80.0-120*				
(S) 4-Bromofluorobenzene					*105*	*105*		*80.0-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

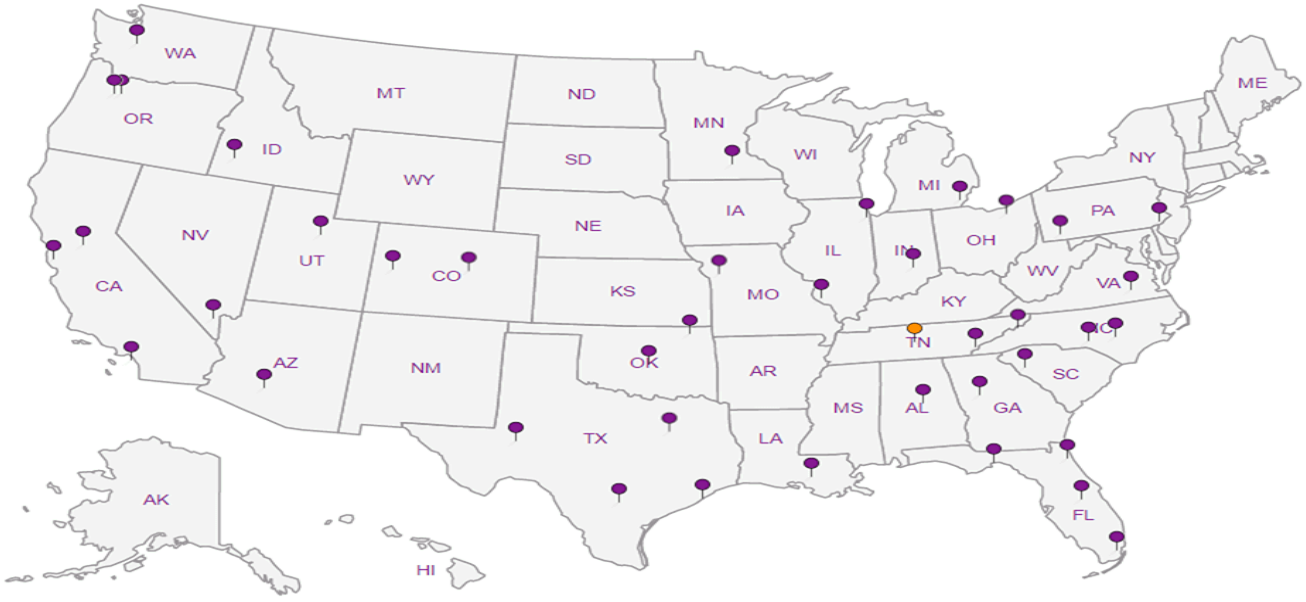
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS Design & Consultancy for natural and built assets

Chain of Custody Record

A178

Page 1 of 2

ARCADIS Project Name: CA 11132

Req Due Date (mm/dd/yy): Standard TAT Rush TAT: Yes ___ No x

Lab Work Order Number:

Lab Name:	ESC Labs	Facility Address:	3201 35th Ave.	Consultant/Contractor:	Blaine Tech Services, Inc.
Lab Address:	12065 Lebanon Rd., Mt. Juliet, TN 37122	City, State, ZIP Code:	Oakland, CA	Blaine Tech Project No:	ARCADIS/BP- 11132
Lab PM:	Jarred Willis	Lead Regulatory Agency:	Alameda County EHS / SF RWQCB	Consultant/Contractor Address:	1680 Rogers Ave., San Jose, CA 95112
Lab Phone:	615.758.5858	California Global ID No.:	T0600100213	Consultant/Contractor PM:	Michael Ninokata
Lab Shipping Accnt:		ARCADIS Project No:	GP09BPNA.C112	Phone:	408.573.0555 x202
Lab Bottle Order No:		ARCADIS PM/ Phone:	Megan Smoley	Email EDD To:	megan.smoley@arcadis.com
Other Info:		Email:	megan.smoley@arcadis.com	Invoice To:	ARCADIS x Contractor ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO 8015M	BTEX, (5) Oxygenates (8260)	1,2-DCA, EDB, Ethanol (8260)	Report Type & QC Level: Comments
	MW-1	3/1/17	1312		X		5				X		X	X	X	L893775-01
	MW-2		1357		X		5				X		X	X	X	02
	MW-4		1012		X		5				X		X	X	X	03
	MW-5		1255		X		5				X		X	X	X	04
	MW-7		1110		X		5				X		X	X	X	05
	MW-8		1230		X		5				X		X	X	X	06
	MW-9		1130		X		5				X		X	X	X	07
	MW-10R		1332		X		5				X		X	X	X	08
	MW-11		1035		X		5				X		X	X	X	09
	RW-1		1055		X		5				X		X	X	X	10

Report Type & QC Level: Standard x Full Data Package ___

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Colin Rowland	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Blaine Tech Services, Inc	(BTS)	3/1/17	1600	(Sample custodian)	3/1/17	1600
Shipment Method: Fed Ex Ship Date: 3/2/17	(Sample Custodian)	3/2/17	1430		3-3-17	0900
Shipment Tracking No:						

Special Instructions: (5) Oxygenates = MTBE, TBA, DIPE, ETBE, TAME

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | 2 Temp Blank: Yes / No | Cooler Temp on Receipt: 1.7 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

MW11 COC5I

ARCADIS Design & Consultancy for natural and built assets

Chain of Custody Record

ARCADIS Project Name: CA 11132

Req Due Date (mm/dd/yy): Standard TAT **Rush TAT:** Yes ___ No x

Lab Work Order Number:

Lab Name:	ESC Labs	Facility Address:	3201 35th Ave.	Consultant/Contractor:	Blaine Tech Services, Inc.
Lab Address:	12065 Lebanon Rd., Mt. Juliet, TN 37122	City, State, ZIP Code:	Oakland, CA	Blaine Tech Project No:	ARCADIS/BP- 11132
Lab PM:	Jarred Willis	Lead Regulatory Agency:	Alameda County EHS / SF RWQCB	Consultant/Contractor Address:	1680 Rogers Ave., San Jose, CA 95112
Lab Phone:	615.758.5858	California Global ID No.:	T0600100213	Consultant/Contractor PM:	Michael Ninokata
Lab Shipping Acont:		ARCADIS Project No:	GP09BPNA.C112	Phone:	408.573.0555 x202
Lab Bottle Order No:		ARCADIS PM/ Phone:	Megan Smoley	Email EDD To:	megan.smoley@arcadis.com
Other Info:		Email:	megan.smoley@arcadis.com	Invoice To:	ARCADIS X Contractor ___

Report Type & QC Level: Standard x; Full Data Package ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO 8015M)	BTEX, (5) Oxygenates (8260)	1,2-DCA, EDB, Ethanol (8260)							Comments
	TB-11132-03012017	3/1/17	0800		X			2				X			X	X	X							On hold L893779

Comments — Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: Colin Rowland

Sampler's Company: Blaine Tech Services, Inc.

Shipment Method: Fed Ex Ship Date: 3/2/17

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature] (BTS)	3/1/17	1600	[signature] (Sample Custodian)	3/1/17	1600
[signature] (Sample Custodian)	3/2/17	1430	[signature]	3-3-17	0900

Special Instructions: (5) Oxygenates = MTBE, TBA, DIPE, ETBE, TAME

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.7 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

ARCADIS COC Rev. 06282012

MW11 COC5I

ESC LAB SCIENCES
Cooler Receipt Form

Client: ARCADISBP	SDG#	L893775	
Cooler Received/Opened On: 3/ 3 /17	Temperature:	1.7	
Received By: jon deboard			
Signature: Jon Deboard			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?		✓	
Preservation Correct / Checked?			

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type:	**GEO_REPORT**
Report Title:	**11132 4Q16-1Q17 GMR**
Report Type:	**Monitoring Report - Semi-Annually**
Report Date:	**4/24/2017**
Facility Global ID:	**T0600100213**
Facility Name:	**BP #11132**
File Name:	**CA 11132 170424 BP 1Q17 GMR.pdf**
Organization Name:	**ARCADIS**
Username:	**ARCADISBP**
IP Address:	**199.19.248.55**
Submittal Date/Time:	**4/24/2017 10:43:20 AM**
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